

- 1 Crocker, W. 1923. The necessity of sulfur carriers in artificial fertilizers. *J. Am. Soc. Agron.* 15:129-141.
- 2 Holmes, F.O. 1924. *Herpetomonas flagellates* in the latex of milkweed in Maryland. *Phytopathology* 14:146-151.
- 3 Reid, M.E. 1924. Quantitative relations of carbohydrates to nitrogen in determining growth responses in tomato cuttings. *Bot. Gaz.* 77:404-418.
- 4 Crocker, W. 1924. Plant physiology. *Am. Soc. Agron.* 16:584-594.
- 5 Whetzel, H.H., & J.M. Arthur. 1925. The gray bulb-rot of tulips caused by *Rhizoctonia tuliparum* (Kleb.) N. Comb. Cornell Univ. Agric. Exp. Sta. Memoir 89.
- 6 Holmes, F.O. 1925. I. Non-pathogenicity of the milkweed flagellate in Maryland. II. Geographical distribution of the milkweed flagellate, *Herpetomonas elmassiani* (Migone). *Phytopathology* 15:294-299.
- 7 Crocker, W. 1925. Seeds: Their tricks and traits. *J. N. Y. Bot. Gard.* 26:178-187.
- 8 Kunkel, L.O. 1925. Mosaic and related diseases. *Am. J. Bot.* 12:517-521.
- 9 Holmes, F.O. 1925. The relation of *Herpetomonas elmassiani* (Migone) to its plant and insect hosts. *Biol. Bull.* 49:323-337.
- 10 Crocker, W. 1925. Points of agronomic interest in the physiology of germination. *J. Am. Soc. Agron.* 17:696-705.
- 11 Zimmerman, P.W. 1925. Vegetative plant propagation with special reference to cuttings. *Proc. Am. Soc. Hort. Sci.*, pp. 223-228.
- 12 Denny, F.E. 1926. Hastening the sprouting of dormant potato tubers. *Am. J. Bot.* 13:118-125.
- 13 Morinaga, T. 1926. Germination of seeds under water. *Am. J. Bot.* 13:126-140. Also in *CBTI* 1:67-81.
- 14 Morinaga, T. 1926. Effect of alternating temperatures upon the germination of seeds. *Am. J. Bot.* 13:141-158. Also in *CBTI* 1:82-99.
- 15 Morinaga, T. 1926. The favorable effect of reduced oxygen supply upon the germination of certain seeds. *Am. J. Bot.* 13:159-166. Also in *CBTI* 1:100-107.
- 16 Orton, C.R. 1926. Seeds as carriers of disease. *J. N. Y. Bot. Gard.* 27:54-63.
- 17 Eckerson, S.H. 1926. An organism of tomato mosaic. *Bot. Gaz.* 81:204-209. Also in *CBTI* 1:109-114.
- 18 Reid, M.E. 1926. Growth of seedling in relation to composition of seed. *Bot. Gaz.* 81:196-203. Also in *CBTI* 1:115-122.
- 19 Pfeiffer, N.E. 1926. Microchemical and morphological studies of effect of light on plants. *Bot. Gaz.* 81:173-195. Also in *CBTI* 1:123-145.

- 20 Purdy, H.A. 1926. Attempt to cultivate an organism from tomato mosaic. *Bot. Gaz.* 81:210-217. Also in CBTI 1:146-153.
- 21 Denny, F.E. 1926. The effect of thiourea upon bud inhibition and apical dominance of potato. *Bot. Gaz.* 81:297-311.
- 22 Denny, F.E. 1926. Second report on the use of chemicals for hastening the sprouting of dormant potato tubers. *Am. J. Bot.* 13:386-396.
- 23 Coulter, J.M. 1926. Boyce Thompson Institute for Plant Research. *Sci. Monthly* 23:97-106.
- 24 Zimmerman, P.W. 1926. Recent investigations regarding seeds, seed germination, and root growth in cuttings. *Flor. Exch.* 62:1243, 1245, 1357, 1360 and 1367.
- 25 Davis, O.H. 1926. Germination of seeds of certain horticultural plants. *Flor. Exch.* 63:917, 922.
- 26 Hartzell, A. 1926. Oriental peach moth and *Aserica castanea* Arrow. *J. Econ. Entomol.* 19:868.
- 27 Kunkel, L.O. 1926. Studies on aster yellows. *Am. J. Bot.* 13:646-705. Also in CBTI 1:181-240.
- 28 Popp, H.W. 1926. A physiological study of the effect of light of various ranges of wave length on the growth of plants. *Am. J. Bot.* 13:706-736. Also in CBTI 1:241-271.
- 29 Weiss, F. 1926. Seed germination in the gray birch, *Betula populifolia*. *Am. J. Bot.* 13:737-742. Also in CBTI 1:272-277.
- 30 Youden, W.J., and F.E. Denny. 1926. Factors influencing the pH equilibrium known as the iso-electric point of plant tissue. *Am. J. Bot.* 13:743-753. Also in CBTI 1:278-288.
- 31 Ohga, I. 1926. The germination of century-old and recently harvested Indian lotus fruits, with special reference to the effect of oxygen supply. *Am. J. Bot.* 13:754-759. Also in CBTI 1:289-294.
- 32 Ohga, I. 1926. A comparison of the life activity of century-old and recently harvested Indian lotus fruits. *Am. J. Bot.* 13:760-765. Also in CBTI 1:295-300.
- 33 Ohga, I. 1926. A double maximum in the rate of absorption of water by Indian lotus seeds. *Am. J. Bot.* 13:766-772. Also in CBTI 1:301-307.
- 34 Coulter, J.M. 1927. The contribution of science to the welfare of the nation. *Sci. Monthly* 24:193-195.
- 35 Arthur, J.M., and J.D. Guthrie. 1927. Effect of light, carbon dioxide and temperature on flower and fruit production. *Memoirs of Hort. Soc. of N.Y.* 3:73-74.
- 36 Denny, F.E., and W.J. Youden. 1927. Acidification of unbuffered salt solutions by plant tissue, in relation to the question of tissue isoelectric points. *Am. J. Bot.* 14:395-414. Also in CBTI 1:309-328.

- 37 Denny, F.E. 1927. The effect of small amounts of chemicals in increasing the life activities of plants. Proc. Nat. Acad. Sci. 13:555-561.
- 38 Vinson, C.G. 1927. Precipitation of the virus of tobacco mosaic. Science 66:357-358.
- 39 Kraybill, H.R., and S.H. Eckerson. 1927. Tomato mosaic. Filtration and inoculation experiments. Am. J. Bot. 14:487-495. Also in CBTI 1:329-337.
- 40 Guthrie, J.D. 1928. A stable colorimetric standard for chlorophyll determinations. Am. J. Bot. 15:86-87.
- 41 Priode, C.N. 1928. Further studies in the ring spot disease of tobacco. Am. J. Bot. 15:88-93. Also in CBTI 1:341-346.
- 42 Purdy, H.A. 1928. Multiplication of the virus of tobacco mosaic in detached leaves. Am. J. Bot. 15:94-99. Also in CBTI 1:347-352.
- 43 Purdy, H.A. 1928. The improbability of tobacco mosaic transmission by slugs. Am. J. Bot. 15:100-101. Also in CBTI 1:353-354.
- 44 Coulter, J.M. 1927. Development of Botany in the United States. Am. Phil. Soc. Proc. 66:309-318.
- 45 Kraybill, H.R., J.T. Sullivan, and L.P. Miller. 1927. Variation in composition of Stayman winesap apple trees. Proc. Am. Soc. Hort. Sci. pp. 191-197.
- 46 Arthur, J.M., and J.D. Guthrie. 1928. Some effects of light and carbon dioxide on the growth and flowering of plants. J. Phys. Therapeutics. 46:130-136.
- 47 Arthur, J.M. 1928. Artificial climate and plant growth. Tech. Engr. News. April 1928.
- 48 Denny, F.E., and E.N. Stanton. 1928. Chemical treatments for shortening the rest period of pot-grown woody plants. Am. J. Bot. 15:327-336. Also in CBTI 1:355-364.
- 49 Denny, F.E., and E.N. Stanton. 1928. Localization of response of woody tissues to chemical treatments that break the rest period. Am. J. Bot. 15:337-344. Also in CBTI 1:365-372.
- 50 Joseph, H.C. 1928. Growing bittersweet (*Celastrus scandens*) from seed. Flor. Exch. 68:499.
- 51 Purdy, H.A. 1928. Immunologic reactions with tobacco mosaic virus. Proc. Soc. Exp. Biol. and Med. 25:702-703.
- 52 Denny, F.E. 1928. The importance of temperature in the use of the sprouting of dormant potato tubers. Am. J. Bot. 15:395-404.
- 53 Bourn, W.S., and B. Jenkins. 1928. *Rhizoctonia* disease on certain aquatic plants. Bot. Gaz. 85:413-426. Also in CBTI 1:383-396.
- 54 Pfeiffer, N.E. 1928. Anatomical study of plants grown under glasses transmitting light of various ranges of wave length. Bot. Gaz. 85:427-436. Also CBTI 1:397-406.

- 55 Holmes, F.O. 1928. Ultraviolet light photography in the study of plant viruses. *Bot. Gaz.* 86:59-65. Also in CBTI 1:407-413.
- 56 Holmes, F.O. 1928. Cytological study of the intracellular body characteristic of *Hippeastrum mosaic*. *Bot. Gaz.* 86:50-58. Also in CBTI 1:414-422.
- 57 Holmes, F.O. 1928. Accuracy in quantitative work with tobacco mosaic virus. *Bot. Gaz.* 86:66-81. Also in CBTI 1:423-438.
- 58 Hitchcock, A.E. 1928. Effect of peat moss and sand on rooting response of cuttings. *Bot. Gaz.* 86:121-148.
- 59 Guterman, C.E.F. 1928. A preliminary report on mechanical transmission of the mosaic of *Lilium auratum*. *Phytopathology.* 18:1025-1026.
- 60 Zimmerman, P.W., and A.E. Hitchcock. 1929. Root formation and flowering of dahlia cuttings when subjected to different day lengths. *Bot. Gaz.* 87:1-13. Also in CBTI 1:467-478.
- 61 Vinson, C.G., and A.W. Petre. 1929. Mosaic disease of tobacco. I. Progress in freeing the virus of accompanying solids. *Bot. Gaz.* 87:14-38. Also in CBTI 1:479-503.
- 62 Holmes, F.O. 1929. Local lesions in tobacco mosaic. *Bot. Gaz.* 87:39-55. Also in CBTI 1:504-520.
- 63 Holmes, F.O. 1929. Inoculation methods in tobacco mosaic studies. *Bot. Gaz.* 87:56-63. Also in CBTI 1:521-528.
- 64 Carlson, M.C. 1929. Microchemical studies of rooting and non-rooting rose cuttings. *Bot. Gaz.* 87:64-80. Also in CBTI 1:529-545.
- 65 Reid, M.E. 1929. Growth of seedlings in light and in darkness in relation to available nitrogen and carbon. *Bot. Gaz.* 87:81-118. Also in CBTI 2:1-38.
- 66 Carlson, M.C. 1929. Origin of adventitious roots in *Coleus* cuttings. *Bot. Gaz.* 87:119-126. Also in CBTI 2:39-46.
- 67 Joseph, H.C. 1929. Germination and vitality of birch seeds. *Bot. Gaz.* 87:127-151. Also in CBTI 2:47-71.
- 68 Shippy, W.B. 1929. An inexpensive and quickly made instrument for testing relative humidity. *Bot. Gaz.* 87:152-156. Also in CBTI 2:72-76.
- 69 Denny, F.E. 1929. Role of mother tuber in growth of potato plant. *Bot. Gaz.* 87:157-194.
- 70 Joseph, H.C. 1929. Germination and keeping quality of parsnip seeds under various conditions. *Bot. Gaz.* 87:195-210. Also in CBTI 2:115-130.
- 71 Purdy, H.A. 1929. Immunologic reactions with tobacco mosaic virus. *J. Exp. Medicine.* 49:919-935.

- 72 Denny, F.E. 1929. Chemical changes induced in potato tubers by treatments that break the rest period. *Am. J. Bot.* 16:326-337.
- 73 Arthur, J.M., and J.M. Newell. 1929. Killing of plant tissue and the inactivation of tobacco mosaic virus by ultra violet radiation. *Am. J. bot.* 16:338-353. Also in *CBTI* 2:143-158.
- 74 Shirley, H.L. 1929. The influence of light intensity and light quality upon the growth of plants. *Am. J. Bot.* 16:354-390. Also in *CBTI* 2:159-195.
- 75 Hitchcock, A.E., and P.W. Zimmerman. 1929. Effect of chemicals, temperature, and humidity on the lasting qualities of cut flowers. *Am. J. Bot.* 16:433-440. Also in *CBTI* 2:196-203.
- 76 Zimmerman, P.W. 1929. The Boyce Thompson Institute for Plant Research, Inc. *J. Chem. Education.* 6:1385-1402.
- 77 Zimmerman, P.W., and A.E. Hitchcock. 1929. Vegetative propagation of Holly. *Am. J. Bot.* 16:556-570. Also in *CBTI* 2:205-219.
- 78 Shirley, H.L. 1929. Light requirements and silvicultural practice. *J. of Forestry.* 27:535-538.
- 79 Guthrie, J.D. 1929. Effect of environmental conditions on the chloroplast pigments. *Am. J. Bot.* 17:716-746.
- 80 Reid, M.E. 1929. Relation of composition of seed and the effects of light to growth of seedling. *Am. J. Bot.* 16:747-769. Also in *CBTI* 2:251-273.
- 81 Reid, M.E. 1929. Effect of variations in the amounts of available carbon and nitrogen on the growth of wheat seedlings. *Am. J. Bot.* 16:770-779. Also in *CBTI* 2:274-283.
- 82 Dobroscky, I.D. 1929. Is the aster yellows virus detectable in its insect vector? *Phytopathology* 19:1009-1015.
- 83 Kunkel, L.O. 1929. The aster yellows disease. *Proc. International Congress of Plant Science.* 2:1249-1253.
- 84 Davis, W.E. 1930. Primary dormancy, after-ripening, and the development of secondary dormancy in embryos of *Ambrosia trifida*. *Am. J. Bot.* 17:58-76. Also in *CBTI* 2:285-303.
- 85 Davis, W.E. 1930. The development of dormancy in seeds of cocklebur (*Xanthium*). *Am. J. Bot.* 17:77-87. Also in *CBTI* 2:304-314.
- 86 Barton, L.V. 1930. Hastening the germination of some coniferous seeds. *Am. J. Bot.* 17:88-115. Also in *CBTI* 2:315-342.
- 87 Shippy, W.B. 1930. Influence of environment on the callusing of apple cuttings and grafts. *Am. J. Bot.* 17:290-327. Also in *CBTI* 2:351-388.

- 88 Wilcoxon, F., and S.E.A. McCallan. 1930. The fungicidal action of sulfur: I. The alleged role of pentathionic acid. *Phytopathology*. 20:391-417. Also in CBTI 2:289-416.
- 89 Denny, F.E., L.P. Miller, and J.D. Guthrie. 1930. Enzyme activities of juices from potatoes treated with chemicals that break the rest period. *Am. J. Bot.* 17:483-509. Also in CBTI 2:417-443.
- 90 Arthur, J.M., J.D. Guthrie, and J.M. Newell. 1930. Some effects of artificial climates on the growth and chemical composition of plants. *Am. J. Bot.* 17:416-482. Also in CBTI 2:445-511.
- 91 Hartzell, A., and F. Wilcoxon. 1930. Naphthalene fumigation at controlled concentrations. *J. Econ. Entomol.* 23:608-618.
- 92 Denny, F.E. 1930. Shortening the rest period of gladiolus by treatment with chemicals. *Am. J. Bot.* 17:602-613. Also in CBTI 2:523-534.
- 93 Thornton, N.C. 1930. The use of carbon dioxide for prolonging the life of cut flowers, with special reference to roses. *Am. J. Bot.* 17:614-626. Also in CBTI 2:535-547.
- 94 Price, W.C. 1930. Local lesions on bean leaves inoculated with tobacco mosaic virus. *Am. J. Bot.* 17:694-702. Also in CBTI 2:549-557.
- 95 Guthrie, J.D. 1930. An idiometric method for determining oxidase activity. *J. Am. Chem. Soc.* 52:3614-3618.
- 96 Holmes, F.O. 1930. Local and systemic increase of tobacco mosaic virus. *Am. J. Bot.* 17:789-805.
- 97 Denny, F.E. 1930. Sucrose and starch changes in potatoes treated with chemicals that break the rest period. *Am. J. Bot.* 17:806-817.
- 98 Denny, F.E. 1930. The twin-leaf method of studying changes in leaves. *Am. J. Bot.* 17:818-841.
- 99 Zimmerman, P.W. 1930. Oxygen requirements for root growth of cuttings in water. *Am. J. Bot.* 17:842-861. Also in CBTI 2:616-635.
- 100 Wilcoxon, F., and A. Hartzell. 1931. Some factors affecting the efficiency of contact insecticides. I. Surface forces as related to wetting and tracheal penetration. *CBTI* 3:1-12.
- 101 Denny, F.E. 1930. The excitation of buds under external stimulus. *Rept. and Proc. 9th Internatl. Hort. Congr. London.* Aug. 7-15:77-82.
- 102 Zimmerman, P.W. 1930. Oxygen requirements for root growth of cuttings in water. *Rept. and Proc. 9th Internatl. Hort. Congr. London.* Aug. 7-15:170-186.
- 103 Zimmerman, P.W. 1931. Sulfur dioxide injury to plants. *Proc. Am. Soc. Hort. Sci.* pp. 51-52.

- 104 Zimmerman, P.W., W. Crocker, and A.E. Hitchcock. 1931. The response of plants to illuminating gas. Proc. Am. Soc. Hort. Sci. 1930:53-56.
- 105 Hitchcock, A.E., and P.W. Zimmerman. 1931. Rooting of greenwood cuttings as influenced by the age of tissue at the base. Proc. Am. Soc. Hort. Sci. 1930:136-138.
- 106 Zimmerman, P.W., W. Crocker, and A.E. Hitchcock. 1931. The relation of the growth of plants and the H-ion concentration of rose soils. Proc. Am. Soc. Hort. Sci. 1930:449-453.
- 107 S.E.A. McCallan, and F. Wilcoxon. 1931. The fungicidal action of sulphur. II. The production of hydrogen sulphide by sulphured leaves and spores and its toxicity to spores. CBTI 3:13-38.
- 108 Dobrosky, I.D. 1931. Morphological and cytological studies on the salivary glands and alimentary tract of *Cicadula sexnotata* (Fallen), the carrier of aster yellows virus. CBTI 3:39-58.
- 109 Dobrosky, I.D. 1931. Studies on cranberry false blossom disease and its insect vector. CBTI 3:59-84.
- 110 Kunkel, L.O. 1931. Studies on aster yellows in some new host plants. CBTI 3:85-123.
- 111 Guthrie, J.D. 1931. The inhibiting effect of oxidase on the reduction of sulphur by potato and gladiolus juice. CBTI 3:125-130.
- 112 Vinson, C.G., and A.W. Petre. 1931. Mosaic disease of tobacco. II. Activity of the virus precipitated by lead acetate. CBTI 3:131-145.
- 113 Lojkin, M., and C.G. Vinson. 1931. Effect of enzymes upon the infectivity of the virus of tobacco mosaic. CBTI 3:147-162.
- 114 Holmes, F.O. 1931. Local lesions of mosaic in *Nicotiana tabacum* L. CBTI 3:163-172.
- 115 Pfeiffer, N.E. 1931. A morphological study of Gladiolus. CBTI 3:173-196.
- 116 Eckerson, S.H. 1931. Influence of phosphorus deficiency on metabolism of the tomato (*Lycopersicum esculentum* Mull). CBTI 3:197-218.
- 117 Thornton, N.C. 1931. The effect of carbon dioxide on fruits and vegetables in storage. CBTI 3:219-244.
- 118 Lojkin, M. 1931. Some effects of ultraviolet rays on the vitamin D content of plants as compared with the direct irradiation of the animal. CBTI 3:245-266.
- 119 McCool, M.M., and W.J. Youden. 1931. The pH and the phosphorus content of the expressed liquids from soils and plant tissues. CBTI 3:267-276.
- 120 Denny, F.E. 1931. The effect of thiocyanates upon amylase activity. I. Potato amylase. CBTI 3:277-286.

- 121 Miller, L.P. 1931. The effect of thiocyanates upon amylase activity. II. Salivary amylase. CBTI 3:287-296.
- 122 Denny, F.E. 1931. The effect of potassium cyanide upon the amylase activity of potato juice. CBTI 3:297-308.
- 123 Miller, L.P. 1931. The influence of sulphur compounds in breaking the dormancy of potato tubers. Preliminary report. CBTI 3:309-312.
- 124 Zimmerman, P.W., A.E. Hitchcock, and W. Crocker. 1931. The movement of gases into and through plants. CBTI 3:313-320.
- 125 Miller, L.P. 1931. The effect of treatments with ethylene chlorhydrin on the pH of the expressed juice of potato tubers. CBTI 3:321-336.
- 126 Connard, M.H., and P.W. Zimmerman. 1931. The origin of adventitious roots in cuttings of *Portulaca oleracea L.* CBTI 3:337-346.
- 127 Youden, W.J., and I.D. Dobrosky. 1931. A capillary glass electrode. CBTI 3:347-362.
- 128 Youden, W.J. 1931. A nomogram for use in connection with Gutzeit arsenic determinations on apples. CBTI 3:363-374.
- 129 Holmes, F.O. 1931. *Herpetomonas bancrofti n. sp.* from the latex of a Ficus in Queensland. CBTI 3:375-384.
- 130 Crocker, W., and L.V. Barton. 1931. After-ripening, germination, and storage of certain Rosaceous seeds. CBTI 3:385-404.
- 131 Eckerson, S.H. 1931. Seasonal distribution of reducase in the various organs of an apple tree. CBTI 3:405-412.
- 132 Flemion, F. 1931. After-ripening, germination, and vitality of seeds of *Sorbus aucuparia L.* CBTI 3:413-440.
- 133 Farr, W.K. 1931. Cotton fibers. I. Origin and early stages of elongation. CBTI 3:441-458.
- 134 Zimmerman, P.W., A.E. Hitchcock, and W. Crocker. 1931. The effect of ethylene and illuminating gas on roses. CBTI 3:459-481.
- 135 Fernald, E.I. 1931. Freezing point depressions of asparagus shoots determined by a thermo-electric method. CBTI 3(4):483-498.
- 136 Guthrie, J.D. 1931. The effect of various chemical treatments of dormant potato tubers on the peroxidase, catalase, pH, and reducing properties of the expressed juice. CBTI 3(4):499-508.
- 137 Wilcoxon, F., and S.E.A. McCallan. 1931. The fungicidal action of sulfur. III. Physical factors affecting the efficiency of dusts. CBTI 3(4):509-528.
- 138 Beale, H.P. 1931. Specificity of the precipitin reaction in tobacco mosaic disease. CBTI 3(4):529-540.

- 139 Arthur, J.M. 1932. Red Pigment production in apples by means of artificial light sources. CBTI 4(1):1-18.
- 140 Barton, L.V. 1932. Germination of bayberry seeds. CBTI 4(1):19-26.
- 141 Giersbach, J., and L.V. Barton. 1932. Germination of seeds of the silver bell, *Halesia carolina*. CBTI 4(1):27-38.
- 142 Giersbach, J., and W. Crocker. 1932. Germination and storage of wild plum seeds. CBTI 4(1):39-51.
- 143 Denny, F.E. 1932. Direct versus indirect effects upon potato amylase by chemicals which induce sprouting of dormant tubers. CBTI 4(1):53-64.
- 144 Denny, F.E. 1932. Changes in leaves during the night. CBTI 4(1):65-84.
- 145 Hitchcock, A.E., and P.W. Zimmerman. 1932. Relation of rooting response to age of tissue at the base of greenwood cuttings. CBTI 4(1):85-98.
- 146 Guthrie, J.D., and F. Wilcoxon. 1932. Estimation of sulphhydryl in tissues. CBTI 4(1):99-106.
- 147 Hartzell, A., and F. Wilcoxon. 1932. Some factors affecting the efficiency of contact insecticides. II. Chemical and toxicological studies of pyrethrum. CBTI 4(1):107-117.
- 148 Crocker, W. 1931. The effect of illuminating gas on trees. Proc. 7th Natl. Shade Tree Conf. pp. 24-31.
- 149 Hartzell, A. 1931. The relation of spreading and tracheal penetration to the efficiency of contact insecticides. Proc. 7th Nat. Shade Tree Conf. pp. 60-66.
- 150 Guthrie, J.D. 1932. Isolation of glutathione from potato tubers treated with ethylene chlorhydrin. J. Am. Chem. Soc. 54:2566.
- 151 Eckerson, S.H. 1932. Conditions affecting nitrate reduction by plants. CBTI 4(2):119-130.
- 152 Guthrie, J.D., F.E. Denny, and L.P. Miller. 1932. Effect of ethylene chlorhydrin treatments on the coatalase, peroxidase, pH, and sulphhydryl content of gladiolus corms. CBTI 4(2):131-140.
- 153 Barton, L.V. 1932. Effect of storage on the vitality of delphinium seeds. CBTI 4(2):141-154.
- 154 Hitchcock, A.E., W. Crocker, and P.W. Zimmerman. 1932. Effect of illuminating gas on the lily, narcissus, tulip, and hyacinth. CBTI 4(2):155-176.
- 155 Crocker, W., P.W. Zimmerman, and A.E. Hitchcock. 1932. Ethylene-induced epinasty of leaves and the relation of gravity to it. CBTI 4(2):177-218.
- 156 Youden, W.J. 1932. Statistical analysis of seed germination data through the use of the Chi-square test. CBTI 4(2):219-232.

- 157 McCallan, S.E.A., and Frank Wilcoxon. 1932. The precision of spore germination tests. CBTI 4(2):233-243.
- 158 McCool, M.M. 1932. Value of peats for mineral soil improvement. CBTI 4(2):245-256.
- 159 McCool, M.M. 1932. Use of peats in composts to increase nitrification and plant growth. CBTI 4(2):257-271.
- 160 Crocker, W. 1932. The effect of ethylene upon living organisms. Proc. Am. Philosoph. Soc. 71:295-298.
- 161 Crocker, W. 1932. Effect of gases upon plants. The Biological Laboratory. 4:19, 25-28.
- 162 Farr, W.K., and G.L. Clark. 1932. Cotton fiber. II. Structural features of the wall suggested by X-ray diffraction analyses and observations in ordinary and plane-polarized light. CBTI 4(3):273-296.
- 163 Holmes, F.O. 1932. Movement of mosaic virus from primary lesions in *Nicotiana tabacum* L. CBTI 4(3):297-322.
- 164 Holmes, F.O. 1932. Symptoms of tobacco mosaic disease. CBTI 4(3):323-358.
- 165 Price, W.C. 1932. Acquired immunity to ring-spot in *Nicotiana*. CBTI 4(3):359-404.
- 166 Kunkel, L.O. 1932. Celery yellows of California not identical with the aster yellows of New York. CBTI 4(3):405-414.
- 167 Wilcoxon, F., and S.E.A. McCallan. 1932. The fungicidal action of sulphur. IV. Comparative toxicity of sulphur, selenium, and tellurium. CBTI 4(3):415-424.
- 168 Bourn, W.S. 1932. Ecological and physiological studies on certain aquatic angiosperms. CBTI 4(4):425-496.
- 169 McCool, M.M. 1932. Effect of various factors on the pH of peats. CBTI 4(4):497-511.
- 170 Denny, F.E., and L.P. Miller. 1932. Effect of ethylene chlorhydrin vapors upon dormant lilac tissues. CBTI 4(4):513-528.
- 171 Zimmerman, P.W., W. Crocker, and A.E. Hitchcock. 1933. Initiation and stimulation of roots from exposure of plants to carbon monoxide gas. CBTI 5(1):1-17.
- 172 Kunkel, L.O. 1933. Insect transmission of peach yellows. CBTI 5(1):19-28.
- 173 Crocker, W. 1933. Feeding the growing population. Scientific Monthly. 36:68-71.
- 174 Miller, L.P. 1933. Effect of sulphur compounds in breaking the dormancy of potato tubers and in inducing changes in the enzyme activities of the treated tubers. CBTI 5(1):29-81.

- 175 Guthrie, J.D. 1933. Effect of chemical treatments of dormant potato tubers on the conductivity of the tissue and on the leaching of electrolytes from the tissue. *CBTI* 5(1):83-94.
- 176 Denny, F.E. 1933. Oxygen requirements of *Neurospora sitophila* for formation of *perithecia* and growth of *mycelium*. *CBTI* 5(1):95-102.
- 177 Denny, F.E. 1933. Eliminating the use of calcium carbonate in preparing plant tissue for analysis. *CBTI* 5(1):103-114.
- 178 Wilcoxon, F., and A. Hartzell. 1933. Some factors affecting the efficiency of contact insecticides. III. Further chemical and toxicological studies of pyrethrum. *CBTI* 5(1):115-127.
- 179 Jensen, J.H. 1933. Leaf enations resulting from tobacco mosaic infection in certain species of *Nicotiana L.* *CBTI* 5(1):129-142.
- 180 Flemion, F. 1933. Physiological and chemical studies of after-ripening of *Rhodotypos kerrioides* seeds. *CBTI* 5(1):143-159.
- 181 Flemion, F. 1933. Dwarf seedlings from non-after-ripened embryos of *Rhodotypos kerrioides*. *CBTI* 5(1):161-165.
- 182 Denny, F.E. 1933. Chemical stimulants and their effect upon the growth and metabolism of dormant plants. *J. Assoc. Off. Agric. Chem.* 16:19-26.
- 183 Farr, W.K. 1933. Cotton fibers. III. Cell divisions in the epidermal layer of the ovule subsequent to fertilization. *CBTI* 5(2):167-172.
- 184 McCallan, S.E.A., and F. Wilcoxon. 1933. The form of the toxicity surface for copper sulphate and for sulphur, in relation to conidia of *Sclerotinia americana*. *CBTI* 5(2):173-180.
- 185 Denny, F.E. 1933. Basis for calculations in measuring changes in leaves during the night. *CBTI* 5(2):181-194.
- 186 Zimmerman, P.W., W. Crocker, and A.E. Hitchcock. 1933. The effect of carbon monoxide on plants. *CBTI* 5(2):195-211.
- 187 Miller, L.P. 1933. Effect of various chemicals on the sugar content, respiratory rate, and dormancy of potato tubers. *CBTI* 5(2):213-234.
- 188 Brierley, P. 1933. Studies on mosaic and related diseases of dahlia. *CBTI* 5(2):235-288.
- 189 Hartzell, A. 1933. A visit to pyrethrum fields of Dalmatia. *Am. Assoc. Econ. Entomology.* 26:583-586.
- 190 McCool, M.M. 1933. Effect of thallium sulphate on the growth of several plants and on nitrification in soils. *CBTI* 5(3):289-296.
- 191 Denny, F.E. 1933. Changes in leaves during the period preceding frost. *CBTI* 5(3):297-312.

- 192 Carlson, M.C. 1933. Comparative anatomical studies of Dorothy Perkins and American Pillar roses. I. Anatomy of canes. II. Origin and development of adventitious roots in cuttings. CBTI 5(3):313-330.
- 193 Guthrie, J.D. 1933. Change in the glutathione content of potato tubers treated with chemicals that break the rest period. CBTI 5:331-350.
- 194 Zimmerman, P.W., and A.E. Hitchcock. 1933. Initiation and stimulation of adventitious roots caused by unsaturated hydrocarbon gases. CBTI 5(3):351-369.
- 195 Thornton, N.C. 1933. Carbon dioxide storage. III. The influence of carbon dioxide on the oxygen uptake by fruits and vegetables. CBTI 5(3):371-402
- 196 Thornton, N.C. 1933. Carbon dioxide storage. IV. The influence of carbon dioxide on the acidity of plant tissue. CBTI 5(3):403-418.
- 197 Woods, M.W. 1933. Intracellular bodies associated with ring-spot. CBTI 5(3):419-434.
- 198 Denny, F.E. 1933. Effect of ethylene chlorhydrin vapors upon the chemical composition of gladiolus corms. CBTI 5(3):435-440.
- 199 Denny, F.E. 1933. Effect of potassium thiocyanate and ethylene chlorhydrin upon amylase activity. CBTI 5(3):441-450.
- 200 Barton, L.V., 1933. Seedling production of tree peony. CBTI 5(4):451 460
- 201 Wilcoxon, F., A. Hartzell, and W.J. Youden. 1933. Greenhouse fumigations with naphthalene solutions. CBTI 5(4):461-469.
- 202 Thornton, N.C. 1933. Carbon dioxide storage. V. Breaking the dormancy of potato tubers. CBTI 5(4):471-481.
- 203 Arthur, J.M., and W.D. Stewart. 1933. Transpiration of tobacco plants in relation to radiant energy in the visible and infra-red. CBTI 5(4):483-501.
- 204 Hitchcock, A.E., W. Crocker, and P.W. Zimmerman. 1933. Toxicity of illuminating gas in soil. Proc. 9th National. Shade Tree Conf.
- 205 Hartzell, A. and F. Wilcoxon. 1933. Experiments on the mode of action of pyrethrum and its effect of insect tissues. Ve Congres Internat. d'Entomol. 289-293.
- 206 Hitchcock, A.E., W. Crocker, and P.W. Zimmerman. 1934. Toxic action in soil of illuminating gas containing hydrocyanic acid. CBTI 6(1):1-30.
- 207 Denny, F.E., and L.P. Miller. 1934. Hastening the germination of dormant gladiolus cormels with vapors of ethylene chlorhydrin. CTBI 6(1):31-38.
- 208 Zimmerman, P.W., and R.O. Berg. 1934. Effects of chlorinated water on land plants, aquatic plants, and goldfish. CBTI 6(1):39-49.
- 209 Woods, M.W. 1934. Cellular changes in ring-spot. CBTI 6(1):51-67.

- 210 Barton, L.V. 1934. Dormancy in *Tilia* seeds. CBTI 6(1):69-89.
- 211 Flemion, F. 1934. Physiological and chemical changes preceding and during the after-ripening of *Symphoricarpos racemosus* seeds. CBTI 6(1):91-102.
- 212 Pfeiffer, E. 1934. Morphology of the seed of *Symphoricarpos racemosus* and the relation of fungal invasion of the coat to germination capacity. CBTI 6(1):103-122.
- 213 Leonard, C.S., and J.M. Arthur. 1934. The reputed influence of ultraviolet light on the yield of *Digitalis glucosides*. Jour. Amer. Pharmaceutical Assoc. 23:224-228.
- 214 Miller, L.P. 1934. Time relations in effect of ethylene chlorhydrin in increasing and of ethyl alcohol in decreasing the respiration of potato tubers. CBTI 6(2):123-128.
- 215 Denny, F.E. 1934. Improvements in methods of determining starch in plant tissues. CBTI 6(2):129-146.
- 216 McCool, M.M. 1934. Effect of various factors on the soluble manganese in soils. CBTI 6(2):147-164.
- 217 Beale, H.P. 1934. A device for uniform lighting in precipitin tests. CBTI 6(2):165-166.
- 218 Zimmerman, P.W., and W. Crocker. 1934. Plant injury caused by vapors of mercury and compounds of mercury. CBTI 6(2):167-187.
- 219 Farr, W.K., and S.H. Eckerson. 1934. Formation of cellulose membranes by microscopic particles of uniform size in linear arrangement. CBTI 6(2):189-203.
- 220 Flemion, F. 1934. Dwarf seedlings from non-after-ripened embryos of peach, apple, and hawthorn. CBTI 6(2):205-209.
- 221 Hartzell, A. 1934. Histrpathology of insect nerve lesions caused by insecticides. CBTI 6(2):211-223.
- 222 Stewart, W.D., and J.M. Arthur. 1934. Some effects of radiation from a quartz mercury vapor lamp upon the mineral composition of plants. CBTI 6(2):225-245.
- 223 Zimmerman, P.W., and A.E. Hitchcock. 1934. Gerberas hardy in New York. Flor. Exch. and Hort. Trade World. 83:18.
- 224 Guthrie, J.D. 1934. Metabolism of citric, sulphuric, and nitric acid in the potato tuber. An explanation for the high pH of the juice of tubers treated with ethylene chlorhydrin. CBTI 6(3):247-268.
- 225 Hartzell A., and F. Wilcoxon. 1934. Organic thiocyanogen compounds as insecticides. CBTI 6(3):269-277.
- 226 Miller, L.P. 1934. The effect of the alkyl halides on the respiration of potato tubers. CBTI 6(3):279-296.

- 227 Zimmerman, P.W., and M.H. Connard. 1934. Reversal of direction of translocation of solutes in stems. CBTI 6(3):297-302.
- 228 Bourn, W.S. 1934. Sea-water tolerance of *Vallisneria spiralis L.* and *Potamogeton foliosus Raf.* CBTI 6(3):303-308.
- 229 Farr, W.K., and S.H. Eckerson. 1934. Separation of cellulose particles in membranes of cotton fibers by treatment with hydrochloric acid. CBTI 6(3):309-313.
- 230 Farr, W.K., and W.A. Sisson. 1934. X-ray diffraction patterns of cellulose particles and interpretations of cellulose diffraction data. CBTI 6(3):315-321.
- 231 Giersback, J. 1934. After-ripening and germination of *Cotoneaster* seeds. CBTI 6(3):323-338.
- 232 Backus, M.P. 1934. Initiation of the ascorcarp and associated phenomena in *Coccomyces hiemalis*. CBTI 6(3):339-379.
- 233 Denny, F.E. 1934. Starch determination methods involving solubility in acids. CBTI 6(3):381-393.
- 234 Thornton, N.C. 1934. Carbon dioxide storage. VI. Lowering the acidity of fungal hyphae by treatment with carbonic acid. CBTI 6(3):395-402.
- 235 Thornton, N.C. 1934. Carbon dioxide storage. VII. Changes in flower color as evidence of the effectiveness of carbon dioxide in reducing the acidity of plant tissue. CBTI 6(3):403-405.
- 236 Beale, H.P. 1934. The serum reactions as an aid in the study of filterable viruses of plants. CBTI 6(3):407-435.
- 237 Youden, W.J., and H.P. Beale. 1934. A statistical study of the local lesion method for estimating tobacco mosaic virus. CBTI 6(3):437-454.
- 238 Zimmerman, P.W., and W. Crocker. 1934. Toxicity of air containing sulphur dioxide gas. CBTI 6(4):455-470.
- 239 Farr, W.K. 1934. Cotton fibers. IV. Fiber abnormalities and density of the fiber mass within the boll. CBTI 6(4):471-478.
- 240 McCallan, S.E.A., and F. Wilcoxon. 1934. Fungicidal action and the periodic system of the elements. CBTI 6(4):479-500.
- 241 Miller, L.P. 1935. Further experiments on the effect of halogenated aliphatic compounds on the respiration of potato tubers. CBTI 7(1):1-17.
- 242 Petre, A.W. 1935. Factors influencing the activity of tobacco mosaic virus preparations. CBTI 7(1):19-28.
- 243 Wilcoxon, F., and A. Hartzell. 1935. Further experiments on organic thiocyanates as insecticides. CBTI 7(1):29-36.
- 244 Youden, W.J., H.P. Beale, and J.D. Guthrie. 1935. Relation of virus concentration to the number of lesions produced. CBTI 7(1):37-53.

- 245 Denny, F.E. 1935. Thiourea prevents browning of plant tissues and juices. *CBTI* 7(1):55-61.
- 246 Dills, L.E., and H. Menusan, Jr. 1935. A study of some fatty acids and their soaps as contact insecticides. *CBTI* 7(1):63-82.
- 247 Gibson, F. 1935. *Agave Murpheyi*, a new species. *CBTI* 7(1):83-85.
- 248 Hitchcock, A.E. 1935. Indole-3-n-propionic acid as a growth hormone and the quantitative measurement of plant response. *CBTI* 7(1):87-95.
- 249 Denny, F.E., and L.P. Miller. 1935. Production of ethylene by plant tissue as indicated by the epinastic response of leaves. *CBTI* 7(2):97-102.
- 250 Way, K., and J.M. Arthur. 1935. Spectrographic determination of calcium in plant ashes. *CBTI* 7(2):103-112.
- 251 Thornton, N.C. 1935. Carbon dioxide storage. VIII. Chemical changes in potato tubers resulting from exposure to carbon dioxide. *CBTI* 7(2):113-118.
- 252 Arthur, J.M., and W.D. Stewart. 1935. Relative growth and dry weight production of plant tissue under Mazda, neon, sodium, and mercury vapor lamps. *CBTI* 7(2):119-130.
- 253 Arthur, J.M., and L.C. Porter. 1935. A new type of insulated greenhouse heated and lighted by Mazda lamps. *CBTI* 7(2):131-146.
- 254 Zimmerman, P.W. 1935. Anaesthetic properties of carbon monoxide and other gases in relation to plants, insects, and centipedes. *CBTI* 7(2):147-155.
- 255 Denny, F.E., and L.P. Miller. 1935. Further experiments on shortening the rest period of potato tubers. *CBTI* 7(2):157-181.
- 256 Hartzell, A. 1935. A study of peach yellows and its insect vector. *CBTI* 7(2):183-207.
- 257 Zimmerman, P.W., and Frank Wilcoxon. 1935. Several chemical growth substances which cause initiation of roots and other responses in plants. *CBTI* 7(3):209-229.
- 258 Crocker, W., A.E. Hitchcock, and P.W. Zimmerman. 1935. Similarities in the effects of ethylene and the plant auxins. *CBTI* 7(3):231-248.
- 259 Bourn, W.S. 1935. Sea-water tolerance of *Ruppia maritima* L. *CBTI* 7(3):249-255.
- 260 Denny, F.E., and L.P. Miller. 1935. Storage temperatures and chemical treatments for shortening the rest period of small corms and cormels of gladiolus. *CBTI* 7(3):257-265.
- 261 Barrows, F.L. 1935. Propagation of *Lycopodium*. I. Spores, cuttings, and bulbils. *CBTI* 7(3):267-294.
- 262 Barrows, F.L. 1935. Propagation of *Lycopodium*. II. Endophytic fungus in gametophyte and sporophyte. *CBTI* 7(3):295-309.

- 263 Pfeiffer, N.E. 1935. Development of the floral axis and new bud in imported Easter lilies. CBTI 7(3):311-321.
- 264 Barton, L.V. 1935. Storage of vegetable seeds. CBTI 7(3):323-332.
- 265 Wilcoxon, F., and S.E.A. McCallan. 1935. Fungicidal action of organic thiocyanates, resorcinol derivatives, and other organic compounds. CBTI 7(3):333-339.
- 266 Denny, F.E. 1935. Testing plant tissue for emanations causing leaf epinasty. CBTI 7(3):341-347.
- 267 Hitchcock, A.E. 1935. Tobacco as a test plant for comparing the effectiveness of preparations containing growth substances. CBTI 7(3):349-364.
- 268 Hartzell, A., and W.J. Youden. 1935. Efficiency of banding for the control of cankerworms. CBTI 7(3):365-377.
- 269 Barton, L.V. 1935. Storage of some coniferous seeds. CBTI 7(4):379-404.
- 270 Barton, L.V. 1935. Germination of delphinium seeds. CBTI 7(4):405-409.
- 271 Schroeder, E.M. 1935. Dormancy in seeds of *Benzoin aestivale* L. CBTI 7(4):411-419.
- 272 Hartzell, A. 1935. Histopathology of nerve lesions of cicada after paralysis by the killer-wasp. CBTI 7(4):421-425.
- 273 McCool, M.M. 1935. Effect of light intensity on the manganese content of plants. CBTI 7(4):427-437.
- 274 Zimmerman, P.W., and A.E. Hitchcock. 1935. The response of roots to "root-forming" substances. CBTI 7(4):439-445.
- 275 Hitchcock, A.E., and P.W. Zimmerman. 1935. Absorption and movement of synthetic growth substances from soil as indicated by the responses of aerial parts. CBTI 7(4):447-476.
- 276 Thornton, N.C. 1935. Factors influencing germination and development of dormancy in cocklebur seeds. CBTI 7(4):477-496.
- 277 Hartzell, A., and F. Wilcoxon. 1935. Chemical and toxicological studies on organic thiocyanates. CBTI 7(4):497-502.
- 278 Kraybill, H.R., W.J. Youden, and J.T. Sullivan. 1936. Notes on the permanganate method of estimating reduced copper in the determination of reducing sugars. Jour. Assoc. Off. Agric. Chem. 19:125-130.
- 279 Barton, L.V. 1936. Seedling production in *Carya ovata* (Mill.) K. Koch, *Juglans cinerea* L., and *Juglans nigra* L. CBTI 8(1):1-5.
- 280 Barton, L.V. 1936. Germination of some desert seeds. CBTI 8(1):7-11.
- 281 McCool, M.M. 1936. Fertilizer value of a new nitrogenous material. CBTI 8(1):13-24.

- 282 Thornton, N.C. 1936. Carbon dioxide storage. IX. Germination of lettuce seeds at high temperatures in both light and darkness. *CBTI* 8(1):25-40.
- 283 Miller, L.P., J.D. Guthrie, and F.E. Denny. 1936. Induced changes in respiration rates and time relations in the changes in internal factors. *CBTI* 8(1):41-61.
- 284 Hitchcock, A.E., and P.W. Zimmerman. 1936. Effect of growth substances on the rooting response of cuttings. *CBTI* 8(1):63-79.
- 285 Barrows, F.L. 1936. Propagation of *Epigaea repens* L. I. Cuttings and seeds. *CBTI* 8(1):81-97.
- 286 Denny, F.E. 1936. Gravity-position of tomato stems and their production of the emanation causing leaf epinasty. *CBTI* 8(1):99-104.
- 287 Zimmerman, P.W., A.E. Hitchcock, and F. Wilcoxon. 1936. Several esters as plant hormones. *CBTI* 8(1):105-112.
- 288 Hartzell, A. 1936. Incubation period of peach yellows in its insect vector. *CBTI* 8(2):113-120.
- 289 Miller, L.P., and F.E. Denny. 1936. Relation between quantity of ethylene chlorhydrin absorbed and growth response in treatments for shortening the rest period of potato tubers. *CBTI* 8(2):121-136.
- 290 Denny, F.E. 1936. Storage temperatures for shortening the rest period of gladiolus corms. *CBTI* 8(2):137-140.
- 291 Pfeiffer, N.E. 1936. Longevity of pollen of *Lilium* and hybrid *Amaryllis*. *CBTI* 8(2):141-150.
- 292 McCallan, S.E.A., and F. Wilcoxon. 1936. The action of fungous spores on Bordeaux mixture. *CBTI* 8(2):151-165.
- 293 Flemion, F., and A. Hartzell. 1936. Effect of low temperature in shortening the hibernation period of insects in the egg stage. *CBTI* 8(2):167-173.
- 294 Wilcoxon, F. 1936. The determination of pyrethrin I. *CBTI* 8(3):175-181.
- 295 Hartzell, A., and F. Wilcoxon. 1936. Relative toxicity of pyrethrins I and II to insects. *CBTI* 8(3):183-188.
- 296 McCallan, S.E.A., A. Hartzell, and F. Wilcoxon. 1936. Hydrogen sulphide injury to plants. *CBTI* 8(3):189-197.
- 297 Stewart, W.D., and J.M. Arthur. 1936. An improved method for ashing of plant material. *CBTI* 8(3):199-215.
- 298 Zimmerman, P.W., and A.E. Hitchcock. 1936. Effect of light and dark on responses of plants to plant hormones. *CBTI* 8(3):217-231.
- 299 Barrows, F.L. 1936. Propagation of *Lycopodium*. III. Spore germination. *CBTI* 8(3):233-236.

- 300 Lojkin, M. 1936. Moisture and temperature requirements for yarovization of winterwheat. CBTI 8(3):237-261.
- 301 McCool, M.M. 1936. Composts. CBTI 8(3):263-281.
- 302 Guthrie, J.D. 1936. Effect of light and of ethylene chlorhydrin on the citric acid content of Bryophyllum leaves. CBTI 8(4):283-288.
- 303 Flemion, F. 1936. A rapid method for determining the germinative power of peach seeds. CBTI 8(4):289-293.
- 304 Guthrie, J.D. 1936. Isolation of citric acid from potato tubers. CBTI 8(4):295-296.
- 305 Barton, L.V. 1936. Germination and seedling production in *Lilium sp.* CBTI 8(4):297-309.
- 306 Zimmerman, P.W., and A.E. Hitchcock. 1936. Tuberization of artichokes regulated by capping stem tips with black cloth. CBTI 8(4):311-315.
- 307 Youden, W.J., and P.W. Zimmerman. 1936. Field trials with fibre pots. CBTI 8(4):317-331.
- 308 Beale, H.P. 1936. Possible relationship of Stanley's crystalline tobacco-mosaic-virus material to intracellular inclusions present in virus infected cells. CBTI 8(4):333.
- 309 Lojkin, M. 1936. Inactivation of tobacco mosaic virus by ascorbic acid. CBTI 8(4):335.
- 310 Zimmerman, P.W., and A.E. Hitchcock. 1937. Comparative effectiveness of acids, esters, and salts as growth substances and methods of evaluating them. CBTI 8(5):337-350.
- 311 Denny, F.E. 1937. Spring-treatment of autumn-harvested gladiolus cormels. CBTI 8(5):351-353.
- 312 Schroeder, E.M. 1937. Germination of fruits of *Ptelea* species. CBTI 8(5):355-359.
- 313 O'Leary, K., and C.E.F. Guterman. 1937. Penicillium rot of lily bulbs and its control by calcium hypochlorite. CBTI 8(5):361-374.
- 314 Hartzell, A. 1937. Movement of intracellular bodies associated with peach yellows. CBTI 8(5):375-388.
- 315 Sisson, W.A. 1937. Identification of crystalline cellulose in young cotton fibers by X-ray diffraction analysis. CBTI 8(5):389-400.
- 316 Rabinowitsch, B. 1937. Observations on the structure of cotton fibers in the dark field. CBTI 8(5):401-403.
- 317 Arthur, J.M., and E.K. Harvill. 1937. Forcing flower buds in gardenia with low temperature and light. CBTI 8(5):405-412.
- 318 Beale, H.P. 1937. Relation of Stanley's crystalline tobacco-virus protein to *intracellular* crystalline deposits. CBTI 8(5):413-431.

- 319 Arthur, J.M., and E.K. Harvill. 1937. Plant growth under continuous illumination from sodium vapor lamps supplemented by mercury arc lamps. CBTI 8(5):433-443.
- 320 Lojkin, M. 1937. A study of ascorbic acid as an inactivating agent of tobacco mosaic virus. CBTI 8(6):445-465.
- 321 Wilcoxon, F. 1937. Preparation of plant growth-promoting substances. I. 1-naphthaleneglyoxalicethylester; 1-naphthaleneglycollicacid; 1-naphthaleneacetic acid. CBTI 8(6):467-472.
- 322 Denny, F.E. 1937. A retrial of the ethylene chlorhydrin method for hastening the germination of freshly-harvested gladiolus corms. CBTI 8(6):473-478.
- 323 Miller, L.P. 1937. Decomposition of ethylene chlorhydrin in potato tubers. CBTI 8(6):479-492.
- 324 Pfeiffer, N.E. 1937. Anatomical study of root production of application of indolebutyric acid to *Cissus* aerial roots. CBTI 8(6):493-506.
- 325 Harris, S.A., and H.J. Thompson. 1937. Pectic acid from the cotton fiber. CBTI 9(1):1-5.
- 326 Flemion, F. 1937. After-ripening at 5 degrees C. favors germination of grape seeds. CBTI 9(1):7-15.
- 327 Guthrie, J.D. 1937. Factors influencing the development of ascorbic acid and glutathione in potato tubers following treatment with ethylene chlorhydrin. CBTI 9(1):17-39.
- 328 Youden, W.J. 1937. Use of incomplete block replications in estimation tobacco-mosaic virus. CBTI 9(1):41-48.
- 329 Youden, W.J. 1937. Dilution curve of tobacco-mosaic virus. CBTI 9(1):49-58.
- 330 Youden, W.J., and A. Mehlich. 1937. Selection of efficient methods for soil sampling. CBTI 9(1):59-70.
- 331 Giersbach, J. 1937. Germination and seedling production of *Arctostaphylos Uva-ursi*. CTBI 9(2):71-78.
- 332 Giersbach, J. 1937. Germination and seedling production of species of *Viburnum*. CBTI 9(2):79-90.
- 333 Giersbach, J. 1937. Some factors affecting germination and growth of *Gentian*. CBTI 9(2):91-103.
- 334 Stewart, W.D., and J.M. Arthur. 1937. Changes in mineral composition of the tomato plant irradiated with a quartz-mercury vapor lamp and its relation to the level and ratio of calcium and phosphorus in the nutritive medium. CBTI 9(2):105-120.
- 335 Hartzell, A. 1937. Bionomics of the pluma dn peach leafhopper, *Macropsis trimaculata*. CBTI 9(2):121-136.

- 336 Thornton, N.C. 1937. Carbon dioxide storage. X. The effect of carbon dioxide on the ascorbic acid content, respiration, and pH of asparagus tissue. *CBTI* 9(2):137-148.
- 337 Wilcoxon, F., and S.E.A. McCallan. 1938. The weathering of Bordeaux mixture. *CBTI* 9(3):149-159.
- 338 Setterstrom, C., and P.W. Zimmerman. 1938. Apparatus for studying effects of low concentrations of gases on plants and animals. *CBTI* 9(3):161-169.
- 339 Setterstrom, C., and P.W. Zimmerman. 1938. Sulphur dioxide content of air at Boyce Thompson Institute. *CBTI* 9(3):171-178.
- 340 Setterstrom, C., P.W. Zimmerman, and W. Crocker. 1938. Effect of low concentrations of sulphur dioxide on yield of alfalfa and Cruciferae. *CBTI* 9(3):179-198.
- 341 Pfeiffer, N. 1938. Viability of stored *Lilium* pollen. *CBTI* 9(3):199-211.
- 342 Miller, L.P. 1938. Evidence that plant tissue forms a chlorine-containing B-glucoside from ethylene chlorhydrin. *CBTI* 9(3):213-221.
- 343 Guthrie, J.D. 1938. A new method for the determination of glutathione in tissues based on its reaction with sulphur to form hydrogen sulphide. *CBTI* 9(3):223-232.
- 344 Guthrie, J.D. 1938. The utilization of sulphate in the synthesis of glutathione by potato tubers following treatment with ethylene chlorhydrin. *CBTI* 9(3):233-238.
- 345 Sisson, W.A. 1938. Orientation in young cotton fibers as indicated by X-ray diffraction studies. *CBTI* 9(3):239-248.
- 346 McCallan, S.E.A., and F. Wilcoxon. 1938. Laboratory comparisons of copper fungicides. *CBTI* 9(3):249-263.
- 347 Guthrie, J.D. 1938. Effect of ethylene thiocyanohydrin, ethyl carbylamine, and indoleacetic acid on the sprouting of potato tubers. *CBTI* 9(3):265-272.
- 348 Mehlich, A. 1937. Use of *Cunninghamella Blakesleeana* and *Aspergillus Niger* for measuring the manurial requirements by plants. *Proc. Soil Sci. Soc. Amer.* 2:279-288.
- 349 Thornton, N.C. 1938. Carbon dioxide storage. XI. The effect of carbon dioxide on the ascorbic acid (Vitamin C) content of some fruits and vegetables. *Proc. Amer. Soc. Hort. Sci.* 35:200-201.
- 350 Crocker, W. 1938. Life-span of seeds. *The Botanical Review* 4:235-274.
- 351 Thornton, N.C. 1938. Extraction and determination of vitamin C in plant tissue. *CBTI* 9(4):273-281.
- 352 Denny, F.E., and L.P. Miller. 1938. Suggestions for standardizing the ethylene chlorhydrin treatment for inducing sprouting of recently-harvested intact potato tubers. *CBTI* 9(4):283-292.

- 353 Guthrie, J.D. 1938. Phosphatase activity of the juice of plant tissue following treatment with ethylene chlorohydrin. CBTI 9(4):293-297.
- 354 Zimmerman, P.W., and A.E. Hitchcock. 1938. Tropic responses of leafy plants induced by application of growth substances. CBTI 9(4):299-328.
- 355 Griffiths, A.E. 1938. Observations on the germination of lettuce seed. CBTI 9(4):329-337.
- 356 Flemion, F. 1938. A rapid method for determining the viability of dormant seeds. CBTI 9(4):339-351.
- 357 McCool, M.M., and A. Mehlich. 1938. Soil characteristics in relation to distance from industrial centers. CBTI 9(4):353-369.
- 358 McCool, M.M., and A.N. Johnson. 1938. Nitrogen and sulphur content of leaves of plants within and at different distances from industrial centers. CBTI 9(4):371-380.
- 359 Guthrie, J.D. 1938. Inducing "dormancy" in potato tubers with potassium naphthaleneacetate and breaking it with ethylene chlorohydrin. Science. 88:86.
- 360 Granger, R.G., and B.T.I. Staff. 1938. Science solving problems of plant life at Boyce Thompson Institute. The Herald Statesman. 4:14-15.
- 361 Sisson, W.A. 1938. X-ray diffraction analysis and its application to the study of plant constituents. CBTI 9(5):381-395.
- 362 Denny, F.E. 1938. Combining treatments for disinfecting potato tubers with treatments for breaking dormancy. CBTI 9(5):397-402.
- 363 Denny, F.E. 1938. Prolonging, then breaking, the rest period of gladiolus corms. CBTI 9(5):403-408.
- 364 Flemion, F. 1938. Breaking the dormancy of seeds of *Crataegus* species. CBTI 9(5):409-423.
- 365 Miller, L.P. 1938. Formation of B-(2-chloroethyl)-d-glucose by *Gladiolus* corms from absorbed ethylene chlorohydrin. CBTI 9(5):425-429.
- 366 Denny, F.E. 1938. Leaf-epinasty tests with volatile products from seedlings. CBTI 9(5):431-438.
- 367 Bloch, R. 1938. Anatomical changes in *Tradescantia fluminensis Vell.* after treatment with growth substances. CBTI 9(5):439-454.
- 368 Zimmerman, P.W., and A.E. Hitchcock. 1938. The combined effect of light and gravity on the response of plants to growth substances. CBTI 9(5):455-461.
- 369 Hitchcock, A.E., and P.W. Zimmerman. 1938. The use of green tissue test objects for determining the physiological activity of growth substances. CBTI 9(5):463-518.
- 370 Crocker, W. 1938. Botany of the future. Science. 88:387-394.

- 371 Zimmerman, P.W., and A.E. Hitchcock. 1938. Modified storage organs in *Helianthus tuberosus*. CBTI 10(1):1-3.
- 372 Zimmerman, P.W., and A.E. Hitchcock. 1938. Response of gladiolus corms to growth substances. CBTI 10(1):5-14.
- 373 Arthur, J.M., and E.K. Harvill. 1938. Heating and lighting greenhouses with intermittent light. CBTI 10(1):15-44.
- 374 Gibson, F. 1938. *Simmondsia californica Nuttall* is dioecious. CBTI 10(1):45-46.
- 375 Wilcoxon, F., and A. Hartzell. 1938. Experiments on greenhouse fumigation with B,B'-dichloroethyl ether. CBTI 10(1):47-56.
- 376 Compton, J. 1938. On the behavior of plant fibers dispersed in cuprammonium hydroxide solution. CBTI 10(1):57-70.
- 377 Farr, W.K. 1938. Behavior of the cell membrane of the cotton fiber in cuprammonium hydroxide solution. CBTI 10(1):71-112.
- 378 Sisson, W.A. 1938. Some observations upon the dispersion, electrokinetic and coagulation behavior of cotton fibers in cuprammonium hydroxide. CBTI 10(1):113-126.
- 379 Hitchcock, A.E., and P.W. Zimmerman. 1938. Root-inducing substances. Flor. Exch. 91:11.
- 380 Crocker, W. 1939. Aging in plants. Pages 1-31 in Problems in Ageing (Cowdry, E.V., ed.). Baltimore.
- 381 ?
- 382 Farr, W.K., and W.A. Sisson. 1939. Observations on the membranes of epidermal cells of the *Avena coleoptile*. CBTI 10(2):127-137.
- 383 Barrows, F.L. 1938. Club mosses form cuttings. Wild Flower. 15:69-70.
- 384 Kirkpatrick, H, Jr. 1939. Propagation of lilacs on own roots. American Nurseryman. 69:3-4.
- 385 Kirkpatrick, H., Jr. The use of root-inducing substances. Flor. Exch. 92:13,18.
- 386 Barton, L.V. 1939. Experiment at Boyce Thompson Institute on germination and dormancy in seeds. Scient. Hort. 7:186-193.
- 387 Miller, L.P. 1939. Synthesis of B-(2-chloroethyl)-d-glucoside by potato tubers treated with ethylene chlorohydrin. CBTI 10(2):139-141.
- 388 Harvill, E.K. 1939. Toxicity of various esters prepared from chrysanthemum monocarboxylic acid, the acidic portion of pyrethrin I. CBTI 10(2):143-153.
- 389 Setterstrom, C., and P.W. Zimmerman. 1939. Factors influencing susceptibility of plants to sulphur dioxide injury. I. CBTI 10(2):155-181.

- 390 Setterstrom, C. 1939. Sulphur dioxide content of air at Boyce Thompson Institute. II. CBTI 10(2):183-187.
- 391 McLean, F.T. 1939. A bigeneric gladiolus hybrid. CBTI 10(2):189-190.
- 392 Denny, F.E. 1939. Leaf-epinasty tests with chemical vapors. CBTI 10(2):191-195.
- 393 Zimmerman, P.W., and A.E. Hitchcock. 1939. Activation of cinnamic acid by ultra-violet light and the physiological activity of its emanations. CBTI 10(2):197-200.
- 394 Thornton, N.C. 1939. Carbon dioxide storage. XIII. Relationship of oxygen to carbon dioxide in breeding dormancy of potato tubers. CBTI 10(2):201-204.
- 395 Barton, L.V. 1939. A further report on the storage of vegetable seeds. CBTI 10(2):205-220.
- 396 Barton, L.V. 1939. Storage of elm seeds. CBTI 10(2):221-233.
- 397 Schroeder, E.M, and L.V. Barton. 1939. Germination and growth of some rock garden plants. CBTI 10(2):235-255.
- 398 Kirkpatrick, H., Jr. 1939. Value of root-inducing substances for carnation cuttings. Flor. Review. 84:30-31.
- 399 Zimmerman, P.W., and A.E. Hitchcock. 1939. Effect of several growth substances on various storage organs. Proc. Amer. Soc. Hort. Sci. 36:796-799.
- 400 McCool, M.M. 1939. Fertilizer value of colloidal phosphate. CBTI 10(3):257-266.
- 401 Hooper, F.E. 1939. Disintegration of the cell membrane of the cotton fiber by a pure culture of bacteria. CBTI 10(3):267-275.
- 402 Imle, E.P., and A. Hartzell. 1939. A cecidomyid larva infesting flowering stems of lilies. CBTI 10(3):277-279.
- 403 Weedon, F.R., A. Hartzell, and C. Setterstrom. 1939. Effects on animals of prolonged exposure to sulphur dioxide. CBTI 10(3):281-324.
- 404 Guthrie, J.D. 1939. Inhibition of the growth of buds of potato tubers with the vapor of the methyl ester of naphthalene-acetic acid. CBTI 10(3):325-328.
- 405 Wilcoxon, F., and S.E.A. McCallan. 1939. Theoretical principles underlying laboratory toxicity tests of fungicides. CBTI 10(3):329-338.
- 406 Thornton, N.C. 1939. Oxygen regulates the dormancy of the potato. CBTI 10(3):339-361.
- 407 Zimmerman, P.W., A.E. Hitchcock, and F. Wilcoxon. 1939. Responses of plants to growth substances applied as solutions and as vapors. CBTI 10(3):363-376.
- 408 McLean, F.T. 1939. A new fragrant gladiolus hybrid. CBTI 10(3):377-380.
- 409 Thornton, N.C. 1939. Development of dormancy in lily bulbs. CBTI 10(4):381-388.

- 410 Hitchcock, A.E., and P.W. Zimmerman. 1939. The use of hormone-like substances in practice. *F.T.D. News.* 38:94.
- 411 Pfeiffer, N.E. 1939. A new variety of *Isoetes virginica*. *Torrey Bot. Club Bull.* 66:411-413.
- 412 Hitchcock, A.E., and P.W. Zimmerman. 1939. Unusual physiological responses induced on intact plants by capping with black cloth. *CBTI* 10(4):389-398.
- 413 Barton, L.V. 1939. Storage of some flower seeds. *CBTI* 10(4):399-427.
- 414 Pfeiffer, N.E. 1939. Life of *Gladiolus* pollen prolonged by controlled conditions of storage. *CBTI* 10(4):429-440.
- 415 Haver, F.E., Jr., and J. Compton. 1939. A method for the quantitative determination of glucose and fructose in the presence of pentoses. *CBTI* 10(4):441-451.
- 416 Denny, F.E. 1939. Respiration of *gladiolus* corms during prolonged dormancy. *CBTI* 10(4):453-460.
- 417 Hitchcock, A.E., and P.W. Zimmerman. 1939. Comparative activity of root-inducing substances and methods for treating cuttings. *CBTI* 10(4):461-480.
- 418 Zimmerman, P.W., and A.E. Hitchcock. 1939. Experiments with vapors and solutions of growth substances. *CBTI* 10(4):481-508.
- 419 Hartzell, A., and F. Wilcoxon. 1939. Experiments on control of Japanese beetle larvae with B,B'-dichloroethyl ether. *CBTI* 10(4):509-513.
- 420 Kirkpatrick, H., Jr. 1939. Root-inducing substances as an aid in propagating dahlias. *Amer. Dahlia Soc. Bull.* 14:9-11.
- 421 Wilcoxon, F., A. Hartzell, and F. Wilcoxon. 1939. Insecticidal properties of extract of male fern (*Aspidium filix-mas* [L.] Sw.). *CBTI* 11(1):1-4.
- 422 McCallan, S.E.A., and F. Wilcoxon. 1939. An analysis of factors causing variation in spore germination tests of fungicides. I. Methods of obtaining spores. *CBTI* 11(1):5-20.
- 423 Compton, J. 1939. Properties of crystalline B-2-chloroethyl-d-glucoside. *CBTI* 11(1):21-23.
- 424 Miller, L.P. 1939. Synthesis of B-o-chlorophenol-d-glucoside. *CBTI* 11(1):25-27.
- 425 Guthrie, J.D. 1939. Control of bud growth and initiation of roots at the cut surface of potato tubers with growth-regulating substances. *CBTI* 11(1):29-53.
- 426 Reeves, R.E., and H.J. Thompson. 1939. Methylation of cotton fiber with ethereal diazomethane. *CBTI* 11(1):55-59.
- 427 Barrows, F.L. 1939. Cellulose membranes from various parts of the plant kingdom. *CBTI* 11(1):61-82.
- 428 Hartzell, A., and F. Wilcoxon. 1939. Tests on certain organic compounds for control of adult Japanese beetle. *CBTI* 11(1):83-83.

- 429 Hartzell, A., and G.F. McKenna. 1939. Vertical migration of Japanese beetle larvae. CBTI 11(1):87-91.
- 430 Thornton, N.C., and E.P. Imle. 1940. Why a dwarf Easter lily? Flor. Exch. 94:8-9.
- 431 Setterstrom, C. 1940. Effects of sulfur dioxide on plants and animals. Indus. and Eng. Chem. Indus. Ed. 32:473-479.
- 432 Arthur, J.M., and E.K. Harvill. 1940. Intermittent light and the flowering of gladiolus and carnation. CBTI 11(2):93-103.
- 433 Compton, J., and F.E. Haver, Jr. 1940. Studies on the developing cotton fiber. I. Relation of development of crude cotton fiber to the other principal boll constituents. CBTI 11(2):105-118.
- 434 McLean, A.C., and F.T. McLean. 1940. A new race of lily hybrids. CBTI 11(2):119-121.
- 435 McLean, F.T. 1940. A loop method of dwarfing plants and inducing flowering. CBTI 11(2):123-125.
- 436 Zimmerman, P.W., and A.E. Hitchcock. 1940. Adventitious shoots and roots induced by natural influences and synthetic growth substances. CBTI 11(2):127-141.
- 437 Hitchcock, A.E., and P.W. Zimmerman. 1940. Effects obtained with mixtures of root-inducing and other substances. CBTI 11(2):143-160.
- 438 Barrows, F.L. 1940. Lamellate structure of cellulose membranes in cotton fibers. CBTI 11(2):161-179.
- 439 Kirkpatrick, H., Jr. 1940. Additional information on the use of root-inducing substances as an aid in propagating dahlias. American Dahlia Soc. Bull. 14:10,19.
- 440 Barton, L.V. 1940. Some effects of treatment of non-dormant seeds with certain growth substances. CBTI 11(3):181-205.
- 441 Youden, W.J. 1940. Seed treatments with talc and root-inducing substances. CBTI 11(3):207-218.
- 442 Youden, W.J. 1940. Experimental designs to increase accuracy of greenhouse studies. CBTI 11(3):219-228.
- 443 Barton, L.V. 1940. Some effects of treatment of seeds with growth substances on dormancy. CBTI 11(3):229-240.
- 444 Miller, L.P. 1940. Induced formation B-gentiobiosides in gladiolus corms and tomato plants treated with chemicals. Science. 92:42-43.
- 445 Flinn, F.B., and J.M. Geary. 1940. Feeding tests with thiourea (thiocarbamide). CBTI 11(4):241-247.
- 446 Hartzell, A. 1940. Preliminary feeding experiments with thiourea (thiocarbamide). CBTI 11(4):249-260.

- 447 Guthrie, J.D. 1940. Role of glutathione in the breaking of the rest period of buds by ethylene chlorohydrin. CBTI 11(4):261-270.
- 448 Miller, L.P. 1940. Formation of B-o-chlorophenyl-gentiobioside in gladiolus corms from absorbed o-chlorophnol. CBTI 11(4):271-279.
- 449 Compton, J., and F.E. Haver, Jr. 1940. Studies on the developing cotton fiber. II. Identification and estimation of the reducing sugars. CBTI 11(4):281-290.
- 450 Denny, F.E., and N.C. Thornton. 1940. Factors for color in the production of potato chips. CBTI 11(4):291-303.
- 451 Pfeiffer, N.E. 1940. Hybrids resulting from controlled pollination of *Lilium sulphureum* with *L. henryi* pollen. CBTI 11(4):305-308.
- 452 McCallan, S.E.A., and F. Wilcoxon. 1940. An analysis of factors causing variation in spore germination tests of fungicides. II. Methods of spraying. CBTI 11(4):309-324.
- 453 Reeves, R.E., and J. Munro. 1940. The quantitative determination of pentoses. Indus. and Eng. Chem. Anal. Ed. 12:551-553.
- 454 McCallan, S.E.A., and C. Setterstrom. 1940. Toxicity of ammonia, chlorine, hydrogen cyanide, hydrogen sulphide, and sulphur dioxide gases. I. General methods and correlations. CBTI 11(5):325-330.
- 455 McCallan, S.E.A., and F.R. Weedon. 1940. Toxicity of ammonia, chlorine, hydrogen cyanide, hydrogen sulphide, and sulphur dioxide gases. II. Fungi and bacteria. CBTI 11(5):331-342.
- 456 Thornton, N.C., and C. Setterstrom. 1940. Toxicity of ammonia, chlorine, hydrogen cyanide, hydrogen sulphide, and sulphur dioxide gases. III. Green plants. CBTI 11(5):343-356.
- 457 Barton, L.V. 1940. Toxicity of ammonia, chlorine, hydrogen cyanide, hydrogen sulphide, and sulphur dioxide gases. IV. Seeds. CBTI 11(5):357-363.
- 458 Weedon, F.R., A. Hartzell, and C. Setterstrom. 1940. Toxicity of ammonia, chlorine, hydrogen cyanide, hydrogen sulphide, and sulphur dioxide gases. V. Animals. CBTI 11(5):365-385.
- 459 Denny, F.E. 1940. Sensitivity of gladiolus corms during an artificially prolonged rest period. Science. 92:415-416.
- 460 Barton, L.V. 1940. Germination of seeds. Scientific Monthly. 51:542-544.
- 461 Zimmerman, P.W. 1941. The present status of Vitamin B1 in horticultural practice. Gladiolus Society [Canada] Yearbook. 1941:43-47.
- 462 Miller, L.P. 1941. Induced formation of a B-gentiobioside in tomato roots. CBTI 11(6):387-391.
- 463 McCool, M.M. 1941. Comparison of agronomic value of the insoluble nitrogen derived from Urea-Ammonia Liquor-37 and other sources. CBTI 11(6):393-401.

- 464 Compton, J. 1941. Studies on the developing cotton fiber. III. The specific viscosity of cuprammonium hydroxide dispersions of developing cotton fibers and an estimation of the calcium pectate. numbers. CBTI 11(6):403-420.
- 465 Thornton, N.C., and F.E. Denny. 1941. Oxygen intake and carbon dioxide output of gladiolus corms after storage under conditions which prolong the rest period. CBTI 11(6):421-430.
- 466 Barrows, F.L. 1941. Propagation of *Epigaea repens* L. II. The endophytic fungus. CBTI 11(6):431-440.
- 467 Beale, H.P., and B.C. Seegal. 1941. Normal-tobacco-plant protein and tobacco-mosaic-virus protein as anaphylactogens and precipitinogens in the guinea pig. CBTI 11(6):441-454.
- 468 Flemion, F. 1941. Further studies on the rapid determination of the germinative capacity of seeds. CBTI 11(6):455-464.
- 469 McKenna, G.F., A. Hartzell. 1941. Effect of wetting agents in increasing the efficiency of sprays used in control of Japanese beetle. CBTI 11(6):465-471.
- 470 Youden, W.J. 1941. Fluctuations of atmospheric sulphur dioxide. CBTI 11(6):473-484.
- 471 Hildebrand, E.M. 1941. Rapid transmission of yellow-red virosis in peach. CBTI 11(6):485-496.
- 472 Zimmerman, P.W., and A.E. Hitchcock. 1941. Formative effects induced with B-naphthoxyacetic acid. CBTI 12(1):1-14.
- 473 Hitchcock, A.E., and P.W. Zimmerman. 1941. The use of naphthaleneacetic acid and its derivatives for preventing fruit drop of apple. Amer. Soc. Hort. Sci. Proc. 38:104-110.
- 474 Zimmerman, P.W. 1941. The present status of Vitamin B1. Amer. Rose Annual. 26:87-94.
- 475 Zimmerman, P.W. 1941. Growth regulation of plants and formative effects induced with B-naphthoxyacetic acid. Science. 93:437.
- 476 Miller, L.P. 1941. Formation of B-2,2,2-trichloroethyl-gentiobioside in tomato plants grown in media containing chloral hydrate, trichloroethyl alcohol, or chloral cyanohydrin. CBTI 12(1):15-23.
- 477 Miller, L.P. 1941. Synthesis of B-2-chloroethyl-d-glucoside by wheat plants grown with ethylene chlorohydrin added to the nutrient medium. CBTI 12(1):25-28.
- 478 Miller, L.P. 1941. synthesis of B-2,2,2-trichloroethyl-gentiobioside by gladiolus corms treated with trichloroethyl alcohol. CBTI 12(1):29-30.
- 479 Sisson, W.A. 1941. Some X-ray observations regarding the membrane structure of Halicystis. CBTI 12(1):31-44.

- 480 Guthrie, J.D. 1941. Sprays that break the rest period of peach buds. CBTI 12(1):45-47.
- 481 McCallan, S.E.A., R.H. Wellman, and F. Wilcoxon. 1941. An analysis of factors causing variation in spore germination tests of fungicides. III. Slope of toxicity curves, replicate tests, and fungi. CBTI 12(1):49-77.
- 482 Denny, F.E., and N.C. Thornton. 1941. Carbon dioxide prevents the rapid increase in the reucin sugar content of potato tubers stored at low temperatures. CBTI 12(1):79-84.
- 483 Flemion, F. 1941. Rapid method for testing white pine germination. Fox Forest Notes No. 30.
- 484 Barton, L.V. 1941. Relation of certain air temperatures and humidities to viability of seeds. CBTI 12(2):85-102.
- 485 Guthrie, J.D., and J. Allerton. 1941. Use of sulphur as a reagent for the estimation of the sulphhydryl groups of egg albumin. CBTI 12(2):103-109.
- 486 Arthur, J.M., and E.K. Harvill. 1941. Flowering in *Digitalis purpurea* initiated by low temperature and light. CBTI 12(2):111-117.
- 487 Hartzell, A. and G.F. McKenna. 1941. Preliminary experiments on the control of the holly leaf miner. CBTI 12(2):119-126.
- 488 Hartzell, A., and F. Wilcoxon. 1941. A survey of plant products for insecticidal properties. CBTI 12(2):127-141.
- 489 Hitchcock, A.E., and P.W. Zimmerman. 1941. Further tests with vitamin B1 on established plants and on cuttings. CBTI 12(2):143-156.
- 490 Flemion, F., and E. Waterbury. 1941. Embryoless dill seeds. CBTI 12(2):157-161.
- 491 Miller, L.P. 1941. Simultaneous formation of a B-gentiobioside and a B-glucoside in gladiolus corms treated with chemicals. CBTI 12(2):163-166.
- 492 Miller, L.P. 1941. Fate of chloral hydrate absorbed by growing plants of *Lagenaria leucantha*. CBTI 12(2):167-169.
- 493 Zimmerman, P.W. 1941. Growth regulators of plants and formative effects induced with B-naphthoxy compounds. Proc. Nat. Acad. Sci. 27:381-388.
- 494 Sisson, W.A. 1941. X-ray studies regarding the formation and orientation of crystalline cellulose in the cell wall of *Valonia*. CBTI 12(3):171-180.
- 495 Farr, W.K. 1941. Formation of microscopic cellulose particles in colorless plastids of the cotton fiber. CBTI 12(3):181-194.
- 496 Guthrie, J.D. 1941. A preparation from yeast that is active in breaking the rest period of buds. CBTI 12(3):195-201.
- 497 Kroeger, G.S. 1941. Dormancy in seeds of *Impatiens balsamina L.* CBTI 12(3):203-212.

- 498 McCool, M.M. 1941. Effect of temperature on the availability of insoluble nitrogen. CBTI 12(3):213-216.
- 499 Denny, F.E., and N.C. Thornton. 1941. Potato varieties: sugar-forming characteristics of tubers in cold storage, and suitability for production of potato chips. CBTI 12(3):217-252.
- 500 Barrows, F.L. 1941. Seed production in trailing arbutus. Wild Flower 18:30-32.
- 501 Miller, L.P. 1941. Synthesis of B-2-chloroethylgentiobioside and B-2-chloroethylprimeveroside acetates. Jour. Amer. Chem. Soc. 63:3342-3343.
- 502 Denny, F.E., J.D. Guthrie, and N.C. Thornton. 1942. Effect of the vapor of the methyl ester of α -naphthaleneacetic acid on the sprouting and the sugar content of potato tubers. CBTI 12(4):253-268.
- 503 McCool, M.M. 1942. Some conditions which affect rate of decomposition of kitchen waste. CBTI 12(4):269-276.
- 504 Barton, L.V., and E.M. Schroeder. 1942. Dormancy in seeds of *Convallaria majalis* L. and *Smilacina racemosa* (L.) Desf. CBTI 12(4):277-300.
- 505 Flemion, F., and E. Parker. 1942. Germination studies of seeds of *Symphoricarpos orbiculatus*. CBTI 12(4):301-307.
- 506 Denny, F.E. 1942. Inactivation of the browning system in frozen stored fruit tissue. CBTI 12(4):309-320.
- 507 Zimmerman, P.W., and A.E. Hitchcock. 1942. Substituted phenoxy and benzoic acid growth substances and the relation of structure to physiological activity. CBTI 12(5):321-343.
- 508 Denny, F.E. 1942. Treatment of gladiolus bulblets to stimulate germination. Flor. Exch. 98:10-11.
- 509 McCool, M.M. 1942. Agronomic value of kitchen waste. CBTI 12(5):3456-358.
- 510 Miller, L.P. 1942. Induced formation of a B-glucoside in the radish. CBTI 12(5):359-360.
- 511 Denny, F.E., and N.C. Thornton. 1942. Interrelationship of storage temperature, concentration, and time in the effect of carbon dioxide upon the sugar content of potato tubers. CBTI 12(5):361-373.
- 512 Hitchcock, A.E., and P.W. Zimmerman. 1942. Root-inducing substances effective on apple cuttings taken in May. Amer. Soc. Hort. Sco. Proc. 40:292-297.
- 513 Hartzell, A., and H. Scudder. 1942. Histological effects of pyrethrum and an activator on the central nervous system of the housefly. Jour. of Econ. Entomol. 35:428-433.
- 514 Denny, F.E. 1942. Effect of a few hours of chilling upon the germination of gladiolus corms subjected to an artificially prolonged rest period. CBTI 12(6):375-386.

- 515 Denny, F.E. 1942. The use of methyl ester of a-naphthaleneacetic acid for inhibiting sprouting of potato tubers, and an estimate of the amount of chemical retained by tubers. CBTI 12(6):387-403.
- 516 Denny, F.E., And N.C. Thornton. 1942. The third year's results on storage of potato tubers in relation to sugar content and color of potato chips. CBTI 12(6):405-429.
- 517 Wellman, R.H., and S.E.A. McCallan. 1942. An analysis of factors causing variation in spore germination test of fungicides. IV. Time and temperature. CBTI 12(6):431-449.
- 518 McCallan, S.E.A., and R.H. Wellman. 1942. Fungicidal versus fungistatic. CBTI 12(6):451-463.
- 519 Zimmerman, P.W. 1942. Studies at Boyce Thompson Institute involving the effects of gases on growth of plants. *Chronica Botanica* 7:206-207.
- 520 Imle, E.P. 1942. Bulb rot diseases of lilies. *Amer. Lily Yearbook* 1942:30-41.
- 521 Imle, E.P., and A. Hartzell. 1942. Some insect pests of lilies. *Amer. Lily Yearbook*. 1942:42-47.
- 522 Miller, L.P. 1942. Synthesis of B-2-trichloroethyl-D-glucoside and its isolation from corn and dandelion plants treated with chloral hydrate. CBTI 12(7):465-470.
- 523 Hartzell, A. 1942. Adult life span animal feeding experiments with thiourea (thiocarbamide). CBTI 12(7):471-480.
- 524 Hartzell, A. 1942. Vegetative propagation of red squill. CBTI 12(7):481-483.
- 525 Flemion, F. 1942. Effect of the addition of nitrogen upon germination of seeds of *Symphoricarpos racemosus*. CBTI 12(7):485-489.
- 526 Zimmerman, P.W., and A.E. Hitchcock. 1942. Flowering habit and correlation of organs modified by triiodobenzoic acid. CBTI 12(7):491-496.
- 527 Hitchcock, A.E., and P.W. Zimmerman. 1942. Root-inducing activity of phenoxy compounds in relation to their structure. CBTI 12(7):497-507.
- 528 Zimmerman, P.W. 1942. Formative influences of growth substances on plants. *Cold Spring Harbor Symposia on Quantitative Biology*. 10:152-157.
- 529 Reeves, R.E. 1943. Protecting cotton fiber from periodate oxidation. CBTI 13(1):1-9.
- 530 Reeves, R.E., and W.A. Sisson. 1943. Chemical reactivity of cotton fiber as related to type of X-ray diffraction pattern. CBTI 13(1):11-15.
- 531 Hartzell, A. 1943. Biology of the holly leaf miner. CBTI 13(1):17-27.
- 532 Hartzell, A., D.L. Collins, and W.E. Blauvelt. 1943. Control of the holly leaf *miner*. CBTI 13(1):29-33.

- 533 Barton, L.V. 1943. Effect of moisture fluctuations on the viability of seeds in storage. *CBTI* 13(2):35-45.
- 534 Barton, L.V. 1943. The storage of citrus seeds. *CBTI* 13(2):47-55.
- 535 Denny, F.E. 1943. Inactivation of the browning system in dried apples. *CBTI* 13(2):57-63.
- 536 Denny, F.E., and N.C. Thornton. 1943. Effect of post-harvest pre-storage conditions on the rate of development of sugar in potato tubers during subsequent cold storage. *CBTI* 13(2):65-71.
- 537 Denny, F.E., and N.C. Thornton. 1943. The effect of low concentrations of carbon dioxide upon the sugar content of potato tubers in cold storage. *CBTI* 13(2):73-78.
- 538 Harvill, E.K., and J.M. Arthur. 1943. Toxicity of organic compounds to houseflies. *CBTI* 13(2):79-86.
- 539 Harvill, E.K., A. Hartzell, and J.M. Arthur. 1943. Toxicity of piperine solutions to houseflies. *CBTI* 13(2):87-92.
- 540 Troy, Z. 1943. Streamlining production and distribution of current periodical articles. *Special Libraries* 34:287-292.
- 541 Hitchcock, A.E., and P.W. Zimmerman. 1943. Summer sprays with potassium naphthaleneacetate retard opening of buds on fruit trees. *Proc. Amer. Soc. Hort. Sci.* 42:141-145.
- 542 McCallan, S.E.A., and R.H. Wellman. 1943. A greenhouse method of evaluating fungicides by means of tomato foliage diseases. *CBTI* 13(3):93-134.
- 543 McCallan, S.E.A., and R.H. Wellman. 1943. Cumulative error terms for comparing fungicides by established laboratory and greenhouse methods. *CBTI* 13(3):135-141.
- 544 Wellman, R.H., and S.E.A. McCallan. 1943. Correlations within and between laboratory slide-germination, greenhouse tomato foliage disease, and wheat smut methods of testing fungicides. *CBTI* 13(3):143-169.
- 545 Wellman, R.H., and S.E.A. McCallan. 1943. A system for classifying effectiveness of fungicides in exploratory tests. *CBTI* 13(3):171-176.
- 546 McCallan, S.E.A. 1943. Empirical probit weights for dosage-response curves of greenhouse tomato foliage diseases. *CBTI* 13(4):177-183.
- 547 Miller, L.P. 1943. High yields of B-2-trichloroethyl-D-glucoside and B-2-trichloroethylgentiobioside from tobacco plants treated with chloral hydrate. *CBTI* 13(4):185-200.
- 548 Thornton, N.C. 1943. Carbon dioxide storage. XIV. The influence of carbon dioxide, oxygen, and ethylene on the vitamin C content of ripening bananas. *CBTI* 13(4):201-220.

- 549 Colored inserts for Allen article on hydrangea. To appear in Vol. 13 #4 of CBTI.
- 550 Hartzell, A. 1944. Further tests on plant products for insecticidal properties. CBTI 13(5):243-252.
- 551 Hartzell, A., and M. Strong. 1944. Histological effects of piperine on the central nervous system of the housefly. CBTI 13(5):253-257.
- 552 Barton, L.V. 1944. Some seeds showing special dormancy. CBTI 13(5):259-271.
- 553 Zimmerman, P.W., A.E. Hitchcock, and E.K. Harvill. 1944. Xylenoxy growth substances. CBTI 13(5):273-280.
- 554 Zimmerman, P.W. 1943. The formative influences and comparative effectiveness of various plant hormone-like compounds. *Torreya*. 43:98-115.
- 555 Pfeiffer, N.E. 1944. Prolonging the life of *Cinchona* plooen by storage under controlled conditions of temperature and humidity. CBTI 13(6):281-293.
- 556 Denny, F.E., N.C. Thornton, and E.N. Schroeder. 1944. The effect of carbon dioxide upon the changes in the sugar content of certain vegetables in cold storage. CBTI 13(6):295-311.
- 557 Zimmerman, P.W., and A.E. Hitchcock. 1944. The aerosol method of treating plants with growth substances. CBTI 13(7):313-322.
- 558 McCallan, S.E.A., and S.Y. Chan. 1944. Inducing sporulation of *Alternaria solani* in culture. CBTI 13(7):323-335.
- 559 Lojkin, M.E., and H.P. Beale. 1944. A colorimetric method for the quantitative determination of minute amounts of tobacco-mosaic virus and for the differentiation between some of its strains. CBTI 13(7):337-354.
- 560 Thornton, N.C. 1944. Carbon dioxide storage. XII. Germination of seeds in the presence of carbon dioxide. CBTI 13(7):355-360.
- 561 Hitchcock, A.E., and P.W. Zimmerman. 1944. Comparative root-inducing activity of phenoxy acids. *Proc. Amer. Soc. Hort. Sci.* 45:187-189.
- 562 Thornton, N.C. 1944. Dormancy, bud growth, and apical dominance regulated by oxygen in freshly-harvested potato tubers. CBTI 13(8):361-366.
- 563 McCallan, S.E.A. 1944. Evaluating fungicides by means of greenhouse Snapdragon Rust. CBTI 13(8):367-383.
- 564 Beale, H.P., and M.E. Lojkin. 1944. Quantitative studies on the precipitin reaction of the tobacco-mosaic virus-antiserum system. CBTI 13(8):385-410.
- 565 Crocker, W. 1945. Longevity of seeds. *Jour. N.Y. Bot. Gard.* 46:25-35,48.
- 566 Hitchcock, A.E. 1945. Retarding bud growth with delayed action sprays. *American Fruit Grower.* 65:10,28,29.

- 567 Crocker, W. 1945. Will buffalo grass be useful in eastern United States? CBTI 13(9):411-414.
- 568 Flemion, F., and E. Waterbury. 1945. Further studies with dwarf seedlings of non-after-ripened peach seeds. CBTI 13(9):415-422.
- 569 Barton, L.V. 1945. A note on the viability of seeds of maga, *Montezuma speciosissima*. CBTI 13(9):423-426.
- 570 Barton, L.V. 1945. Viability of seeds of *Fraxinus* after storage. CBTI 13(9):427-432.
- 571 Synerholm, M.E., A. Hartzell, and J.M. Arthur. 1945. Derivatives of piperic acid and their toxicities toward houseflies. CBTI 13(9):433-442.
- 572 Hartzell, A. 1945. Histological effects of certain sprays and activators on the nerves and muscles of the housefly. CBTI 13(9):443-454.
- 573 Synerholm, M.E. 1945. Condensation of chloromaleic anhydride with substituted propenyl benzenes. Jour. Amer. Chem. Soc. 67:345.
- 574 Prill, E.A., A. Hartzell, and J.M. Arthur. 1945. Insecticidal activity of some alkoxy analogs of DDT. Science. 101:464-465.
- 575 McCool, M.M. 1945. Agronomic relationships of sodium cyanide. CBTI 13(10):455-461.
- 576 McCool, M.M. 1945. Effect of sodium cyanide on number of fungi, bacteria, and *Actinomyces* in soil and its value in the control of damping off of seedlings, nematodes, and cabbage root worm. CBTI 13(10):463-472.
- 577 McCool, M.M. 1945. Use of sodium cyanide for the eradication of undesirable plants. CBTI 13(10):473-477.
- 578 McCool, M.M. 1945. Fertilizer value of sodium cyanide. CBTI 13(10):479-485.
- 579 Thornton, N.C. 1945. Importance of oxygen supply in secondary dormancy and its relation to the inhibiting mechanism regulating. CBTI 13(10):487-500.
- 580 Hartzell, A. 1945. Thiourea (thiocarbamide): adult life span feeding experiments with rats. CBTI 13(10):501-513.
- 581 Synerholm, M.E. 1945. Chloromaleic anhydride in the diene synthesis. Jour. Amer. Chem. Soc. 67:1229.
- 582 Barton, L.V. 1945. Respiration and germination studies of seeds in moist storage. Annals New York Acad. Sci. 46:185-208.
- 583 Denny, F.E. 1945. Synergistic effects of three chemicals in the treatment of dormant potato tubers to hasten germination. CBTI 14(1):1-14.
- 584 Denny, F.E. 1945. Further tests of the use of the methyl ester of alpha-naphthaleneacetic acid for inhibiting the sprouting of potato tubers. CBTI 14(1):15-20.

- 585 Hitchcock, A.E., and P.W. Zimmerman. 1945. Methods of rating the root-inducing activity of phenoxy acids and other growth substances. *CBTI* 14(1):21-38.
- 586 Synerholm, M.E., and P.W. Zimmerman. 1945. A note on the preparation of 2-chloro-3, 5-diiodobenzoic acid and 2-chloro-3, 5-dibromobenzoic acid and their effects on tomato plants. *CBTI* 14(1):39-42.
- 587 Denny, F.E. 1945. Favorable conditions for the treatment of dormant gladiolus cormels to increase germination. *CBTI* 14(2):43-49.
- 588 Ferri, M.G. 1945. Preliminary observations on the translocation of synthetic growth substances. *CBTI* 14(2):51-68.
- 589 Finch, N. and A. Hartzell. 1945. Effects on mice of a diet containing methyl ester of α -naphthaleneacetic acid. *CBTI* 14(2):69-78.
- 590 Synerholm, M.E., A. Hartzell. 1945. Some compounds containing the 3, 4-methylenedioxyphenyl group and their toxicities toward houseflies. *CBTI* 14(2):79-89.
- 591 Synerholm, M.E., and P.W. Zimmerman. 1945. The preparation of some substituted phenoxy alkyl carboxylic acids and their properties as growth substances. *CBTI* 14(2):91-103.
- 592 Crocker, W. 1945. Sulfur deficiency in soils. *Soil Science* 60:149-155.
- 593 McCallan, S.E.A. 1946. Outstanding diseases of agricultural crops and uses of fungicides in the United States. *CBTI* 14(3):105-115.
- 594 Garman, H.R., and L.V. Barton. 1946. Germination of seeds of *Panicum anceps* Michx. *CBTI* 14(3):117-122.
- 595 Hartzell, A., and E. Wexler. 1946. Histological effects of sesamin on the brain and muscles of the housefly. *CBTI* 14(3):123-126.
- 596 Prill, E.A., A. Hartzell, and J.M. Arthur. 1946. Insecticidal thio ethers derived from safrole, isosafrole, and other aryl olefins. *CBTI* 14(3):127-150.
- 597 Wellman, R.H., and S.E.A. McCallan. 1946. Glyoxalidene derivatives as foliage fungicides. I. Laboratory studies. *CBTI* 14(3):151-160.
- 598 Thurston, H.W., Jr., J.B. Harry, F.H. Lewis, A.B. Groves, and C.F. Taylor. 1946. Glyoxalidine derivatives as foliage fungicides. II. Field studies. *CBTI* 14(3):161-171.
- 599 Crocker, W., N.C. Thornton, and E.M. Schroeder. 1946. Internal pressure necessary to break shells of nuts and the role of the shells in delayed germination. *CBTI* 14(3):173-201.
- 600 Stewart, W.D., and J.H. Standen. 1946. Polymeric organic polysulphides as fungicides and spray adjuvants. *CBTI* 14(3):203-220.
- 601 Zimmerman, P.W., and A.E. Hitchcock. 1946. The relation between age of stem tissue and its capacity to form roots. *Jour. of Gerontology*. 1:27-31.

- 602 Prill, E.A., and M.E. Synerholm. 1946. Report on some miscellaneous methylenedioxyphenyl compounds tested for synergism with pyrethrum in fly spray.
- 603 Garman, H.R., and L.V. Barton. 1946. Response of lettuce seeds to thiourea treatments as affected by variety and age. CBTI 14(4):229-241.
- 604 Barton, L.V., and H.R. Garman. 1946. Effect of age and storage condition of seeds on the yields of certain plants. CBTI 14(4):243-255.
- 605 Denny, F.E. 1946. Gas content of plant tissue and respiration measurements. CBTI 14(4):257-276.
- 606 Standen, J.H. 1946. A toxic substance occurring in certain maize cobs. CBTI 14(4):277-281.
- 607 Flemion, F., and G. Uhlmann. 1946. Further studies of embryoless seeds in the Umbelliferae. CBTI 14(4):283-293.
- 608 Thornton, N.C. 1946. Factors influencing vitamin C content of asparagus, banana, and seedlings of garden pea during growth or in storage. CBTI 14(4):295-304.
- 609 Denny, F.E. 1946. Non-transference of virus disease in treatments of potato tubers to break dormancy. CBTI 14(5):305-313.
- 610 Denny, F.E. 1946. Accumulation of carbon dioxide in potato tuber tissue under conditions for the continuous removal of the exhaled gas. CBTI 14(5):315-322.
- 611 McCallan, S.E.A. 1946. The identity of *Alternaria* and *Macrosporium* cultures used for slide germination tests of fungicides. CBTI 14(5):323-324.
- 612 Miller, L.P. 1946. Particle size distribution in cocoa powders. CBTI 14(6):325-334.
- 613 Miller, L.P. 1946. A rapid method for the evaluation of the larger particles present in cocoa powders. CBTI 14(6):335-340.
- 614 Prill, E.A., M.E. Synerholm, and A. Hartzell. 1946. Some compounds related to the insecticide "DDT" and their effectiveness against mosquito larvae and houseflies. CBTI 14(6):341-353.
- 615 Crocker, W. 1947. Developments in plant research. Anglo-American Industrial Newsletter pp. 23-26.
- 616 Barton, L.V. 1947. Special studies on seed coat impermeability. CBTI 14(7):355-362.
- 617 McCool, M.M. 1947. Nitrogen availability in soils as measured by growth response of rye grass and *Cunninghamella bladesleeana*. CBTI 14(7):363-368.
- 618 Synerholm, M.E., and P.W. Zimmerman. 1947. Preparation of a series of W-(2,4-dichlorophenoxy) aliphatic acids and some related compounds with a consideration of their biochemical role as plant-growth regulators. CBTI 14(7):369-382.
- 619 Zimmerman, P.W. 1947. Plant hormones. Torrey Bot. Club Bull. 74(2):180-184.

- 620 Barton, L.V. 1947. Storage and germination of delphinium seeds. Amer. Delphinium Soc. Year Book. 9:27-31.
- 621 Prill, E.A. 1947. Diels-Alder syntheses with hexachlorocyclopentadiene. Amer. Chem. Soc. Jour. 69:62.
- 622 Denny, F.E. 1947. Changes in oxygen, carbon dioxide, and pressure caused by plant tissue in a closed space. CBTI 14(8):383-396.
- 623 Prill, E.A., A. Hartzell, and J.M. Arthur. 1947. Some cyclic acetals containing the 3,4-methylenedioxyphenyl radical and their insecticidal effectiveness against house flies. CBTI 14(8):397-403.
- 624 Barton, L.V., and N.C. Thornton. 1947. Germination and sex population studies of *Ilex opaca* Ait. CBTI 14(9):405-410.
- 625 McCool, M.M. 1947. Availability of phosphorus and potassium of some soil types devoted to pastures in New York. CBTI 14(9):411-417.
- 626 Denny, F.E. 1947. Respiration rate of plant tissue under conditions for the progressive partial depletion of the oxygen supply. CBTI 14(9):419-442.
- 627 Miller, L.P. 1947. Utilization of DL-methionine as a source of sulphur by growing plants. CBTI 14(9):443-456.
- 628 Beale, H.P., and M.E. Lojkin. 1947. A comparison of the infectivity of different preparations of tobacco-mosaic virus with their ability to precipitate specific serum antibody. CBTI 14(9):457-469.
- 629 Hitchcock, A.E., and P.W. Zimmerman. 1947. Response and recovery of dandelion and plantain after treatment with 2,4-D. CBTI 14(9):471-492.
- 630 Synerholm, M.E. 1947. The cleavage of tetrahydropyran of acid chlorides in the presence of zinc chloride. The preparation of 5-diethylaminopentanol-1. Jour. Amer. Chem. Soc. 69:2581-2582.
- 631 Barton, L.V. 1947. Effect of different storage conditions on the germination of seeds of *Cinchona ledgeriana* Moens. CBTI 15(1):1-10.
- 632 Zimmerman, P.W., and A. Hartzell. 1947. Hexaethyl tetraphosphate: I. Their effects on plants. II. Their toxicities to insects and mites. CBTI 15(1):11-19.
- 633 Hartzell, A. 1947. Additional tests of plant products for insecticidal properties and summary of results to date. CBTI 15(1):21-34.
- 634 Synerholm, M.E., A. Hartzell, and V. Cullmann. 1947. Pyrethrin extenders. CBTI 15(1):35-45.
- 635 Denny, F.E. 1947. Semi-micro method for measuring the amount of oxygen consumed and carbon dioxide produced in plant respiration.. CBTI 15(1):47-60.
- 636 Youden, W.J. 1947. A new technique for testing the accuracy of analytical data. Anal. Chem. 19:946-950.

- 637 Denny, F.E. 1948. Effect upon plant respiration caused by changes in the oxygen concentration in the range immediately below that of normal air. *CBTI* 15(2):61-70.
- 638 McCallan, S.E.A. 1948. Some improvements in equipment for evaluating fungicides by the foliage disease method. *CBTI* 15(2):71-75.
- 639 McCallan, S.E.A. 1948. Characteristic curve for the action of copper sulfate on the germination of spores of *Sclerotinia fructicola* and *Alternaria oleracea*. *CBTI* 15(2):77-90.
- 640 McCallan, S.E.A. 1948. Evaluation of chemicals as seed protectants by greenhouse tests with peas and other seeds. *CBTI* 15(2):91-117.
- 641 Zimmerman, P.W. 1948. Hardiness of Camellias. *Amer. Camellia Soc. Yearbook*. 1947:106-107,109.
- 642 Zimmerman, P.W., and A.E. Hitchcock. 1948. Plant Hormones. *Ann. Rev. Biochem.* 17:601-626.
- 643 Hitchcock, A.E., and P.W. Zimmerman. 1948. Effect of concentration of 2,4-D, rate of application, and respraying on killing Japanese honeysuckle. *Proc. Amer. Soc. Hort. Sci.* 51:668-669.
- 644 Pfeiffer, N.E. 1948. Effectiveness of certain apple pollen dilutents in hand pollination tests. *CBTI* 15(3):119-125.
- 645 Standen, J.H. 1948. A simple apparatus for assay of fumigant insecticides. *CBTI* 15(3):127-129.
- 646 Hartzell, A., H.L. Haynes, and D.P. Connola. 1948. Apparatus used in laboratory insecticide tests at Boyce Thompson Institute. *CBTI* 15(3):131-140.
- 647 Denny, F.E. 1948. Suggested methods for measuring the carbon dioxide production of a large number of simultaneous samples. *CBTI* 15(3):141-151.
- 648 Wellman, R.H., H.W. Thurston, Jr., and F.R. Whaley. 1948. A method for correcting for geographic variation in field experiments. *CBTI* 15(3):153-163.
- 649 King, L.J. 1948. A leaf immersion technique for studying the absorption and translocation of chemicals in plants. *CBTI* 15(3):165-171.
- 650 Hitchcock, A.E., and P.W. Zimmerman. 1948. Activation of 2,4-D by various adjuvants. *CBTI* 15(4):173-193.
- 651 Harry, J.B., R.H. Wellman, F.R. Whaley, H.W. Thurston, Jr., and W.A. Chandler. Development of copper-zinc-chromate complexes as potato fungicides. *CBTI* 15(4):195-210.
- 652 Denny, F.E. 1948. The role of the surface micro-flora in measurements of the respiration rate of germinating seeds. *CBTI* 15(4):211-227.
- 653 Flemion, F. 1948. Reliability of the excised embryo method as a rapid test for determining the germinative capacity of dormant seeds. *CBTI* 15(4):229-241.

- 654 Flemion, F., and H. Poole. 1948. Seed viability tests with 2,3-triphenyltetrazolium chloride. *CBTI* 15(4):243-258.
- 655 Barton, L.V., and M.L. Solt. 1948. Growth inhibitors in seeds. *CBTI* 15(5):259-278.
- 656 McCool, M.M. 1948. Studies on pH values of sawdusts and soil sawdust mixtures. *CBTI* 15(5):279-282.
- 657 Ferri, M.G., and A. Lex. 1948. Stomatal behavior as influenced by treatment with B-naphthoxyacetic acid. *CBTI* 15(5):283-290.
- 658 Youden, W.J. 1948. Multiple factor experiments in analytical chemistry. *Analytical Chemistry* 20:1136-1140.
- 659 Flemion, F., and E.T. Henrickson. 1949. Further studies on the occurrence of embryoless seeds and immature embryos in the Umbelliferae. *CBTI* 15(6):291-297.
- 660 Flemion, F., H. Poole, and J. Olson. 1949. Relation of Lygus bugs to embryoless seeds in dill. *CBTI* 15(6):299-310.
- 661 Prill, E.A., L.V. Barton, and M.L. Solt. 1949. Effects of some surface-active agents on the growth of wheat roots in solutions. *CBTI* 15(6):311-318.
- 662 Dresner, E. 1949. Culture and use of entomogenous fungi for the control of insect pests. *CBTI* 15(6):319-335.
- 663 Arthur, J.M. 1949. Growing plants in artificial climates. *Southern Chemist*. 8:266-270.
- 664 Zimmerman, P.W. 1949. 2,4-D, injury on roses. *Amer. Rose Annual*. 1949:71-72.
- 665 Flemion, F. 1949. Lygus bugs in relation to the occurrence of embryoless seeds in the Umbelliferae. (Abstract) *Science* 109(2832):364-365.
- 666 Hartzell, A. 1949. Effectiveness of N-(2-ethylhexyl) bicyclo {2.2.1}-5-heptene-2,3-dicarboximide on houseflies. *CBTI* 15(7):337-339.
- 667 Barton, L.V. 1949. Seed packets and onion seed viability. *CBTI* 15(7):341-352.
- 668 Zimmerman, P.W., and A.E. Hitchcock. 1949. Triiodobenzoic acid influences flower formation of tomatoes. *CBTI* 15(7):353-361.
- 669 Zimmerman, P.W., A.E. Hitchcock, H. Kirkpatrick, Jr., and T.T. Earle. Water hyacinth: its growth, reproduction, and practical control by 2,4-D. *CBTI* 15(7):363-401.
- 670 Baumgartner, L.L., and B. Wolf. 1949. Sodium isopropylxanthate as a new selective herbicide. *CBTI* 15(7):403-409.
- 671 Baumgartner, L.L., and S.E. Powell. 1949. Zinc dimethyldithiocarbamate-cyclohexylaminecomplex as a deer repellent applicable to agricultural crops. *CBTI* 15(7):411-420.

- 672 Zimmerman, P.W., and A.E. Hitchcock. 1949. Formative effects of several substituted Phenoxy acids applied to Kalanchoe. CBTI 15(8):421-427.
- 673 Prill, E.A., L.V. Barton, and M.L. Solt. 1949. Effects of some organic acids on the growth of wheat roots in solutions. CBTI 15(8):429-435.
- 674 Miller, L.P. 1950. Rapid formation of high concentrations of hydrogen sulfide by sulfat-reducing bacteria. CBTI 15(9):437-465.
- 675 Miller, L.P. 1950. Stimulation of hydrogen sulfide production by sulfat-reducing bacteria. CBTI 15(9):467-474.
- 676 Zimmerman, P.W. 1949. More about hardy camellias. Amer. Camellia Yearbook. pp. 212-213.
- 677 Zimmerman, P.W. 1950. Impurities in the air and their influence on plant life. Proc. of 1st Nat'l. Air Pollution Symp. Pasadena, CA. Nov. 10-11, 1949. pp. 135-141.
- 678 Hartzell, A. 1950. Toxicity of spray residue of fresh and processed fruits and vegetables. Advances in Chemistry Ser. 1:99-101.
- 679 McCallan, S.E.A. 1950. Some chromate complexes and organic compounds as seed protectants. CBTI 16(1):5-20.
- 680 McCallan, S.E.A. 1950. Factors influencing spray injury by glyoxalidine derivatives to potted apple trees. CBTI 16(1):21-26.
- 681 McCallan, S.E.A. 1950. Factors influencing deposition in the vacuum bell jar duster. CBTI 16(1):27-37.
- 682 McNew, G.L. 1950. The natural and synthetic quinones in relation to the functions of plants. Bull. Torrey Bot. Club. 77(4):294-297.
- 683 Flemion, F., and J. Olson. 1950. Lygus bugs in relation to seed production and occurrence of embryoless seeds in various umbelliferous species. CBTI 16(2):39-46.
- 684 Hartzell, A., and E.E. Storrs. 1950. Bioassay of insecticide spray residues in processed food. CBTI 16(2):47-53.
- 685 Barton, L.V. 1950. Relation of different gases to the soaking injury of seeds. CBTI 16(2):55-71.
- 686 Miller, L.P. 1950. Tolerance of sulfate-reducing bacteria to hydrogen sulfide. CBTI 16(3):73-83.
- 687 Miller, L.P. 1950. Formation of metal sulfides through the activities of sulfate-reducing bacteria. CBTI 16(3):85-89.
- 688 Hitchcock, A.E., P.W. Zimmerman, H. Kirkpatrick, Jr., and T.T. Earle. 1950. Growth and reproduction of water hyacinth and alligator weed and their control by means of 2,4-D. CBTI 16(3):91-130.
- 689 Burchfield, H.P., and G.L. McNew. 1950. Mechanism of particle size effects of fungicides on plant protection. CBTI 16(3):131-161.

- 690 McNew, G.L., and H.P. Burchfield. 1950. Particle size in relation to the fungitoxicity of dichloronaphthoquinone. *CBTI* 16(3):163-176.
- 691 Zimmerman, P.W. 1951. Hormone plant growth regulators. *Jour. Chem. Educ.* 28(2):113-115.
- 692 Zimmerman, P.W. 1950. Flowering and other responses induced in *Piqueria trinervia* with photoperiodic treatment. *CBTI* 16(4):177-189.
- 693 King, L.J., J.A. Lambrech, and T.P. Finn. 1951. Herbicidal properties of sodium 2,4-dichlorophenoxyethyl sulfate. *CBTI* 16(4):191-208.
- 694 McNew, G.L., S.E.A. McCallan, and P.R. Miller. 1951. The control of fruit and vegetable diseases. *The canning trade.*73(20):7-10.
- 695 Zimmerman, P.W., and A.E. Hitchcock. 1951. Growth-regulating effects of chlorosubstituted derivatives of benzoic acid. *CBTI* 16(5):209-213.
- 696 Barton, L.V., and J.E. Hotchkiss. 1951. Germination of seeds of *Eichhornia crassipes Solms.* *CBTI* 16(5):215-220.
- 697 Zimmerman, P.W. and A.E. Hitchcock. 1951. Rose "sports" from adventitious buds. *CBTI* 16(5):221-224.
- 698 Hitchcock, A.E., and P.W. Zimmerman. 1951. A quantitative method of measuring response of plants to growth regulators. *CBTI* 16(5):225-248.
- 699 Chandler, C. 1951. Flowering habits and fertility of some *Cinchona* species in Guatemala. *CBTI* 16(6):249-259.
- 700 Schmitt, C.G. 1951. Comparison of a series of derivatives of 4,5-dimethyl-2-mercaptothiazole for fungicidal efficacy. *CBTI* 16(6):261-265.
- 701 King, L.J., and J.A. Kramer, Jr. 1951. Studies on the herbicidal properties and volatility of some polyethylene and propylene glycol esters of 2,4-D and 2,4,5-T. *CBTI* 16(6):267-278.
- 702 Flemion, F., and B.T. MacNear. 1951. Reduction of vegetative growth and seed yield in umbelliferous plants by *Lygus oblineatus*. *CBTI* 16(6):279-283.
- 703 Flemion, F., R.M. Weed, and L.P. Miller. 1951. Deposition of P32 into host tissue through the oral secretions of *Lygus oblineatus*. *CBTI* 16(6):285-294.
- 704 Barton, L.V. 1951. Germination of seed of *Juniperus virginiana L.* *CBTI* 16(7):387-393.
- 705 Beale, H.P., and C.R. Jones. 1951. Virus diseases of tobacco mosaic and potato yellow dwarf not controlled by certain purified antibiotics. *CBTI* 16(7):395-407.
- 706 Hitchcock, A.E. 1952. Additive and inhibitive effects resulting from treatment of tomato seedlings with indoleacetic acid in combination with 2,4-dichlorophenoxyacetic acid. *Bull. Torrey Bot. Club* 79(3):260-261.

- 707 Carroll, R.B. 1952. Activation of sodium 2-(2,4-dichlorophenoxy)ethyl sulfate. CBTI 16(9):409-417.
- 708 Zimmerman, P.W., A.E. Hitchcock, and E.A. Prill. 1952. Substituted benzoic acids as growth regulators. CBTI 16(9):419-427.
- 709 Flemion, F., L.P. Miller, and R.M. Weed. 1952. An estimate of the quantity of oral secretion deposited by *Lygus* when feeding on bean tissue. CBTI 16(9):429-435.
- 710 Vlitos, A.J. 1952. Biological activation of sodium 2-(2,4-dichlorophenoxy)ethyl sulfate by *Bacillus cereus var. mycoides*. CBTI 16(9):435-438.
- 711 Zimmerman, P.W., A.E. Hitchcock, and H. Kirkpatrick, Jr. 1952. Detection and determination of 2,4-D as a contaminant by biological methods. CBTI 16(10):439-449.
- 712 Back, R.C. 1952. The insecticidal activity of the eta isomer of 1,2,3,4,5,6-hexachlorocyclohexane. CBTI 16(10):451-454.
- 713 Hilchey, J.D., and R.L. Patton. 1952. Effects of irregular sex ratios on growth response data from nutritional assays upon *Blattella germanica* (L.). CBTI 16(10):455-459.
- 714 Barton, L.V., and A. Goenaga. 1952. An electrical moisture meter for the determination of moisture in coffee beans. CBTI 16(11):461-468.
- 715 King, L.J. 1952. Germination and chemical control of the giant foxtail grass. CBTI 16(11):469-487.
- 716 Miller, L.P., and S.E.A. McCallan. 1952. Studies on fungicidal action using radioactive tracers. N.Y. Acad. Sci. Trans. 14(8):329-331.
- 717 Beale, J.H., and H.P. Beale. 1952. Transmission of a ringspot-virus disease of *Syringa vulgaris* by grafting. CBTI 17(1):1-6.
- 718 Barton, L.V. 1952. Relation of different gases to the soaking injury of seeds. II. CBTI 17(1):7-34.
- 719 Hitchcock, A.E., and P.W. Zimmerman. 1952. Response of tomato plants to treatment with 2,4-dichlorophenoxyacetic acid in combination with indoleacetic acid and certain other compounds. CBTI 17(1):35-55.
- 720 Burchfield, H.P., J.D. Hilchey, and E.E. Storrs. 1952. An objective method for insecticide bioassay based on photomigration of mosquito larvae. CBTI 17(1):57-86.
- 721 Barton, L.V. 1953. Seed storage and viability. CBTI 17(2):87-103.
- 722 Norton, R.J. 1953. Inheritance of DDT tolerance in the house fly. CBTI 17(2):105-126.
- 723 Vlitos, A.J. 1953. Biological activation of sodium 2-(2,4-dichlorophenoxy)ethyl sulfate. CBTI 17(2):127-149.

- 724 Miller, L.P., S.E.A. McCallan, and R.M. Weed. 1953. Quantitative studies on the role of hydrogen sulfide formation in the toxic action of sulfur to fungus spores. *CBTI* 17(2):151-171.
- 725 Miller, L.P., S.E.A. McCallan, and R.M. Weed. 1953. Rate of uptake and toxic dose on a spore weight basis of various fungicides. *CBTI* 17(2):173-195.
- 726 Hartzell, A. 1952. The status of the spray residue situation in the United States. *Trans. 9th Internat. Congr. Entom.* 1:1047-1051.
- 727 Vlitos, A.J., and W. Meudt. 1953. The role of auxin in plant flowering. I. A quantitative method based on paper chromatography for the determination of indole compounds and of 3-indole-acetic acid in plant tissues. *CBTI* 17(3):197-202.
- 728 Hilchey, J.D. 1953. Studies on the qualitative requirements of *Blattella germanica* (L.) for amino acids under aseptic conditions. *CBTI* 17(3):203-219.
- 729 Owens, R.G. 1953. Studies on the nature of fungicidal action. I. Inhibition of sulfhydryl-, amino-, iron-, and copper-dependent enzymes in vitro by fungicides and related compounds. *CBTI* 17(3):221-242.
- 730 Hitchcock, A.E., P.W. Zimmerman, and H. Kirkpatrick, Jr. 1953. A simple, rapid biological method for determining the relative volatility of esters of 2,4-D and 2,4,5-T. *CBTI* 17(3):243-263.
- 731 McNew, G.L. 1953. Research brings results in agricultural chemicals. *Jour. Agric. and Food Chem.* 1(1):29-30.
- 732 Zimmerman, P.W. 1953. Plant growth substances. *Encyclopedia of Chemical Tech.* 10:723-736.
- 733 Chandler, C. 1953. Seed germination for some species of *Plantago*. *CBTI* 17(4):265-271.
- 734 Owens, R.G. 1953. Studies on the nature of fungicidal action. II. Chemical constitution of benzenoid and quinonoid compounds in relation to fungitoxicity and inhibition of amino- and sulfhydryl-dependent enzymes. *CBTI* 17(4):273-282.
- 735 Miller, L.P., S.E.A. McCallan, and R.M. Weed. 1953. Accumulation of 2-heptadecyl-2-imidazoline, silver, and cerium by fungus spores in mixed and consecutive treatments. *CBTI* 17(5):283-298.
- 736 Weed, R.M., S.E.A. McCallan, and L.P. Miller. 1953. Factors associated with the fungitoxicity of ferbam and nabam. *CBTI* 17(5):299-315.
- 737 Burchfield, H.P., A.M. Redder, E.E. Stors, and J.D. Hilchey. 1953. Improved methods for rearing larvae of *Aedes aegypti* (L.) for use in insecticide bioassay. *CBTI* 17(5):317-331.
- 738 Barton, L.V. 1953. Dormancy in seeds. *13th Internat. Hort. Congr. Rept.* 2:1001-1012.

- 739 McCallan, S.E.A., and L.P. Miller. 1954. Isotopes, their use in fungicidal research. *Agric. Chemicals* 9(2):52-53,119-121.
- 740 Zimmerman, P.W. 1954. The effect of plant hormones on American horticulture. *Amer. Hort. Congress, 8th Ann. Meet, Phila. Amer. Hort. Counc. Proc.* pp. 24-27.
- 741 Henderson, R., F.E. Horvat, and R.J. Block. 1954. A simplified procedure for measuring cellulose digestion by rumen microorganisms. *CBTI* 17(6):337-341.
- 742 Ledbetter, M.C., and F. Flemion. 1954. A method for obtaining piercing-sucking mouth parts in host tissue from the tarnished plant bug by high voltage shock. *CBTI* 17(6):343-346.
- 743 Flemion, F., M.C. Ledbetter, and E.S. Kelley. Penetration and damage of plant tissues during feeding by the tarnished plant bug (*Lygus lineolaris*). *CBTI* 17(6):347-357.
- 744 Torgeson, D.C. 1954. Root rot of Lawson cypress and other ornamentals caused by *Phytophthora cinnamomi*. *CBTI* 17(6):359-373.
- 745 Hartzell, A. 1954. Periodical cicada. *CBTI* 17(6):375-377.
- 746 Hartzell, A. 1954. Notes on the leafhoppers of Bermuda. *CBTI* 17(6):378-380.
- 747 Hilchey, J.D., and R.J. Block. 1954. Quantitative amino acid composition of the German cockroach, *Blattella germanica* (L.). *CBTI* 17(6):380-382.
- 748 McNew, G.L. 1954. Damage to crops from parastic fungi and insects. *Food Technology*. 8:75.
- 749 Hartzell, A., E.E. Storrs, and H.P. Burchfield. 1954. Comparison of chemical and bioassay methods for the determination of traces of chlordane and heptachlor in food crops. *CBTI* 17(7):383-396.
- 750 Miller, L.P., R.M. Weed, and A.E. Hitchcock. 1954. Comparative volatility of the *n*-butyl, 2-ethylhexyl, and 2-(2-ethoxyethoxy)propyl esters of 2,4-D. *CBTI* 17(7):397-400.
- 751 Vlitos, A.J., and W. Meudt. 1954. The role of auxin in plant flowering. II. Methods for the extraction and quantitative chemical determination of free 3-indoleacetic acid and other indole compounds from plant tissues. *CBTI* 17(7):401-411.
- 752 Vlitos, A.J., and W. Meudt. 1954. The role of auxin in plant flowering. III. Free indole acids in short-day plants grown under photoinductive and nonphotoinductive daylengths. *CBTI* 17(7):413-417.
- 753 Barton, L.V., and J. MacNab. 1954. Effect of antibiotics on plant growth. *CBTI* 17(7):419-434.
- 754 Barton, L.V. 1954. Effect of presoaking on dormancy in seeds. *CBTI* 17(7):435-438.

- 755 Zimmerman, P.W., A.E. Hitchcock, and H. Kirkpatrick, Jr. 1953. Methods for determining relative volatility of esters of 2,4-D and other growth regulants based on response of tomato plants. *Weeds* 2(4):254-261.
- 756 McNew, G.L. 1953. The effects of soil fertility. *Plant Diseases, the 1953 Yearbook of Agriculture*, p. 100-114.
- 757 Burchfield, H.P., E.E. Storrs. 1954. Kinetics of insecticidal action based on the photomigration of larvae of *Aedes aegypti* (L.). *CBTI* 17(8):439-452.
- 758 Porter, C.A. 1954. Histological and cytological changes induced in plants by cucumber mosaic virus (*marmor cucumeris* H.). *CBTI* 17(8):453-471.
- 759 Owens, R.G. 1954. Studies on the nature of fungicidal action. III. Effects of fungicides on polyphenol oxidase in vitro. *CBTI* 17(8):473-487.
- 760 Mavrodineanu, R., and J. Gwirtsman. 1954. Improved apparatus for the distillation of fluorine as hydrofluosilicic acid. *CBTI* 17(8):489-494.
- 761 Chandler, C. 1954. Improvement of *Plantago* for mucilage production and growth in the United States. *CBTI* 17(8):495-504.
- 762 Haynes, H.L., H.R. Guest, H.A. Stansbury, A.A. Sousa, and A.J. Borash. 1954. Cyclothrin, a new insecticide of the pyrethrins-type. *CBTI* 18(1):1-16.
- 763 Mavrodineanu, R. 1954. A method of fumigating plants with hydrofluoric or hydrofluosilicic acid using atomization and thermal action. *CBTI* 18(1):17-20.
- 764 Barton, L.V. 1954. Effect of subfreezing temperatures on viability of conifer seeds in storage. *CBTI* 18(1):21-24.
- 765 Barton, L.V. 1954. Storage and packeting of seeds of Douglas fir and Western hemlock. *CBTI* 18(1):25-37.
- 766 McCallan, S.E.A., L.P. Miller, and R.M. Weed. 1954. Comparative effect of fungicides on oxygen uptake and germination of spores. *CBTI* 18(1):39-68.
- 767 Storrs, E.E., and H.P. Burchfield. 1954. Joint action of binary mixtures of insecticides. *CBTI* 18(1):69-78.
- 768 Burchfield, H.P., and F. Wilcoxon. 1954. Comparison of dosage-response and time-response methods for assessing the joint action of antimetabolites. *CBTI* 18(1):79-82.
- 769 Mavrodineanu, R. 1954. A simple method for the detection of volatile fluorides in air. *CBTI* 18(1):82-84.
- 770 Miller, L.P., S.E.A., McCallan, and R.M. Weed. 1954. The use of radioisotopes in studying the affinity of various toxicants for fungus spores. *Second Radioisotope Conf.* 1:381-389.
- 771 Schuldt, P.H. 1955. Comparison of anthracnose fungi on oak, sycamore, and other trees. *CBTI* 18(2):85-107.

- 772 Hilchey, J.D., R.J. Block, L.P. Miller, and R.M. Weed. 1955. The sulfur metabolism of insects. I. The utilization of sulfate for the formation of cystine and methionine by the German cockroach, *Blattella germanica* (L.). CBTI 18(2):109-123.
- 773 Owens, R.G. 1955. Metabolism of fungus spores. I. Oxidation and accumulation of organic acids by conidia of *Neurospora sitophila*. CBTI 18(2):125-144.
- 774 Owens, R.G. 1955. Metabolism of fungus spores. II. Cytochrome oxidase, succinoxidase and pyruvate carboxylase systems in homogenates of conidia of *Nurospora sitophila*. CBTI 18(2):145-152.
- 775 McCallan, S.E.A., L.P. Miller, and M.A. Magill. 1955. Chemical names for active ingredients of fungicides. *Phytopath.* 45:295-302.
- 776 Pfeiffer, N.E. 1955. Effect of lyophilization on the viability of *Lilium* pollen. CBTI 18(3):153-158.
- 777 Vlitos, A.J., and W. Meudt. 1955. Interactions between vernalization and photoperiod in spinach. CBTI 18(3):159-166.
- 778 Mavrodineanu, R., W.W. Sanford, and A.E. Hitchcock. 1955. Use of fluorescence for the estimation of substances separated on paper by partition chromatography. CBTI 18(3):167-172.
- 779 Mavrodineanu, R., and R.R. Coe. 1955. Improved apparatus and procedures for sampling and analyzing air for fluorides. CBTI 18(3):173-180.
- 780 Mavrodineanu, R., and J. Gwirtsman. 1955. Photoelectric end-point determination in the titration of fluorides with thorium nitrate. CBTI 18(3):181-186.
- 781 Prill, E.A., and W.R. Smith. 1955. Comparison of ethylenedioxyphenyl and methylenedioxyphenyl compounds as extenders for pyrethrins. CBTI 18(4):187-192.
- 782 Chandler, C., and L.V. Barton. 1955. Morphological and physiological studies of diploid and tetraploid *Plantago ovata* Forsk. CBTI 18(4):193-214.
- 783 Burchfield, H.P., and J. Schechtman. 1955. Method for measuring the crystallization rate of Bordeaux mixture. CBTI 18(4):215-223.
- 784 Owens, R.G. 1955. Improved method for isolation of adenosine di- and triphosphates. *Science.* 122(3166):415.
- 785 Miller, L.P., and S.E.A. McCallan. 1955. Use of radioisotopes in tracing fungicidal action. International Conference on the Peaceful Uses of Atomic Energy. A/CONF.8/P/100 USA 8 June 1955.
- 786 Weinstein, L., and W.R. Robbins. 1955. Effect of light on the catalase and cytochrome oxidase activities of leaf tissues of green and albino sunflower. CBTI 18(5):225-230.
- 787 Plaisted, P.H. 1955. Suppression of tomato plant terminal growth by α -cyanocinnamic acids and related compounds. CBTI 18(5):231-242.

- 788 Zimmerman, P.W. 1955. Camellias in New York. American Camellia Society Yearbook 1955:225-321.
- 789 Chandler, C. 1956. Induced polyploidy in horticultural varieties of Verbena. CBTI 18(6):243-252.
- 790 Cotty, V.F. 1956. Respiratory metabolism of prepupae and pupae of the house fly, *Musca domestica* L., and of their homogenates. CBTI 18(6):253-262.
- 791 Zimmerman, P.W., and A.E. Hitchcock. 1956. Susceptibility of plants to hydrofluoric acid and sulfur dioxide gases. CBTI 18(6):263-279.
- 792 Hartzell, A. 1956. Two new hosts of Matsucoccus bark scale. CBTI 18(6):281-282.
- 793 Vlitos, A.J., W. Meudt, and R. Beimler. 1956. The role of auxin in plant flowering. IV. A new unidentified naturally occurring indole hormone in normal and gamma irradiated Maryland Mammoth tobacco. CBTI 18(7):283-293.
- 794 Zimmerman, P.W., and A.E. Hitchcock. 1956. Plant growth-regulating effect of 1,1-difluoroethylene (Genetron 150) applied to plants. CBTI 18(7):295-297.
- 795 Prill, E.A., and D. Fisher. 1956. Paper chromatography of aromatic aldehydes as their semicarbazones. CBTI 18(7):299-301.
- 796 Burchfield, H.P. 1956. Studies on the relationship between chemical structure and biological activity of the \bar{s} -triazines. Trans. N.Y. Acad. Sci. Ser. II. 18(6):550-554.
- 797 McNew, G.L. 1956. Basic concepts behind the Boyce Thompson Institute for Plant Research. AIBS Bulletin 6(36):5-7.
- 798 McNew, G.L., and P.J. Leyendecker. 1956. Raymond Frank Crawford 1891-1955. Phytopath. 46:187.
- 799 Porter, C.A. 1956. Evaluation of a fluorocarbon technique for the isolation of plant viruses. TRANSACTIONS of the New York Academy of Sciences, Ser. II. 18(8):704-706.
- 800 Moorefield, H.H. 1956. Purification of DDT-dehydrochlorinase from resistant house flies. CBTI 18(8):303-310.
- 801 Barton, L.V. 1956. Growth response of physiologic dwarfs of *Malus Arnoldiana* Sarg. to gibberellic acid. CBTI 18(8):311-317.
- 802 Burchfield, H.P., and E.E. Storrs. 1956. A colorimetric method for the determination of 2,4-dichloro-6-(\bar{o} -chloroanilino)- \bar{s} -triazine, and related compounds. CBTI 18(8):319-330.
- 803 Mavrodineanu, R. 1956. Glass flowmeter with interchangeable capillaries. CBTI 18(8):331-332.
- 804 Palm, E.T., and G.L. McNew. 1956. A method for determining the incidence of clubroot infection in nutrient cultures. CBTI 18(9):333-337.

- 805 Barton, L.V., and J. MacNab. 1956. Relation of different gases to the soaking injury of seeds. III. Some chemical aspects. CBTI 18(9):339-356.
- 806 Weinstein, L.H., A.N. Meiss, R.L. Uhler, and E.R. Purvis. 1956. Effect of ethylenediaminetetraacetic acid on nitrogen metabolism and enzyme patterns in soybean plants. CBTI 18(9):357-370.
- 807 Magdoff, B.S., R.J. Block, and D.B. Montie. 1956. Amino acid composition of southern bean mosaic virus. CBTI 18(9):371-375.
- 808 Schuldt, P.H., and C.N. Wolf. 1956. Fungitoxicity of substituted \bar{s} -triazines. CBTI 18(9):337-393.
- 809 Burchfield, H.P., and E.E. Storrs. 1956. Chemical structures and dissociation constants of amino acids, peptides, and proteins in relation to their reaction rates with 2,4-dichloro-6-(\bar{o} -chloroanilino)- \bar{s} -triazine. CBTI 18(9):395-418.
- 810 Mavrodineanu, R., and J. Gwirtsman. 1956. Use of sodium peroxide fusion for the determination of fluorides in vegetation. CBTI 18(9):419-420.
- 811 McCallan, S.E.A. 1956. Rediscovery of sulfur as a fungicide. Phytopath. 46(10):582.
- 812 Weinstein, L.H., A.N. Meiss, R.L. Uhler, and E.R. Purvis. 1956. Growth-promoting effects of ethylenediamine tetra-acetic acid. Nature 178:1188.
- 813 Hartzell, A. 1957. Red pine scale with special reference to its host plants and coldhardiness. CBTI 18(10):421-428.
- 814 Burchfield, H.P., and E.E. Storrs. 1957. Effects of chlorine substitution and isomerism on the interactions of \bar{s} -triazine derivatives with conidia of *Neurospora sitophila*. CBTI 18(10):429-452.
- 815 Zimmerman, P.W., W.R. Smith, E.A. Prill, and A.E. Hitchcock. 1957. The preparation and plant physiological activity of 1,3-benzodioxole-2-carboxylic acids. CBTI 18(10):453-462.
- 816 Moorefield, H.H. 1957. Improved method of harvesting house fly heads for use in cholinesterase studies. CBTI 18(10):463.
- 817 Miller, L.P., and S.E.A. McCallan. 1957. Toxic action of metal ions to fungus spores. Jour. Agr. and Food Chem. 5:116-122.
- 818 Miller, L.P. 1956. Use of radioactive tracers in studying fungicidal action. A Conference on Radioactive Isotopes in Agriculture. pp. 223-233.
- 819 Burchfield, H.P. 1957. Potentiation of chemical reactivities at protein surfaces. Nature 179:630.
- 820 McCallan, S.E.A. 1956. Mechanisms of Toxicity with Special Reference to Fungicides. Proc. 2nd Internat. Pl. Prot. Conf. pp 77-95.
- 821 McNew, G.L. 1957. Plant Research in the Atomic age. Proc. Fla. State Hort. Soc. 69:4-12.

- 822 Porter, C.A., D. Margolis, and P. Sharp. 1957. Quantitative determination of amino acids by paper chromatography. CBTI 18(11):465-476.
- 823 Block, R.J., and R.H. Mandl. 1957. A comparative study of the amino acid composition of commercial samples of a high-protein and a low-protein wheat flour. CBTI 18(11):477-482.
- 824 McCallan, S.E.A., and L.P. Miller. 1957. Effect of fungicides on oxygen consumption and viability of mycelial pellets. CBTI 18(11):483-495.
- 825 McCallan, S.E.A., and L.P. Miller. 1957. Equimolar formation of carbon dioxide and hydrogen sulfide when fungus tissue reduces sulfur. CBTI 18(11):497-506.
- 826 Haynes, H.L., J.A. Lambrech, and H.H. Moorefield. 1957. Insecticidal properties and characteristics of 1-naphthyl N-methylcarbamate. CBTI 18(11):507-513.
- 827 Flemion, F. 1957. Penetration and destruction of plant tissues during feeding by *Lygus lineolaris*. Rept. of the XIVth Internat. Hort. Congr. pp. 1003-1007.
- 828 Flemion, F. 1957. Physiological and chemical changes occurring prior to, during and subsequent to germination of some rosaceous seeds. Rept. of the XIVth Internat. Hort. Congr. pp. 1197-1200.
- 829 Miller, L., and S.E.A. McCallan. 1957. Some examples of the use of radioisotopes in studies of pesticide action. Rept. of the XIVth Internat. Hort. Congr. pp. 546-555.
- 830 Hitchcock, A.E., and P.W. Zimmerman. 1957. Toxic effects of vapors of mercury and of compounds of mercury on plants. Ann. N.Y. Acad. Sciences. 65(5):474-497.
- 831 King, L.J. 1957. Some early forms of the weed concept. Nature. 179:1366.
- 832 Gwirtzman, J., R. Mavrodineanu, and R.R. Coe. 1957. Determination of fluorides in plant tissue, air and water. Analytical Chemistry. 29(6):887-892.
- 833 Vlitos, A.J., and W. Meudt. 1957. Relationship between shoot apex and effect of gibberellic acid on elongation of pea stems. Nature 180:284.
- 834 Vite, J.P., and J.A. Rudinsky. 1957. Contribution toward a study of Douglas fir beetle development. Forest Science 3(2):156-167.
- 835 Staples, R.C. 1957. Changes in the organic acid composition of wheat leaves infected with the leaf rust fungus. CBTI 19(1):1-18.
- 836 Staples, R.C. 1957. The organic acid composition and succinoxidase activity of the uredospore of the leaf and stem rust fungi. CBTI 19(1):19-31.
- 837 Weinstein, L.H. 1957. Senescence of roses. I. Chemical changes associated with senescence of cut Better Times roses. CBTI 19(1):33-48.
- 838 Zimmerman, P.W., A.E. Hitchcock, and J. Gwirtzman. 1957. Fluorine in food with special reference to tea. CBTI 19(1):49-53.

- 839 Vlitos, A.J., and W. Meudt. 1957. The effect of light and of the shoot apex on the action of gibberellic acid. CBTI 19(1):55-62.
- 840 Schuldt, P.H., and H. Bluestone. 1957. Nematocidal properties of 3,4-dichlorotetrahydrothiophene-1,1-dioxide (PRD). CBTI 19(1):63-75.
- 841 Burchfield, H.P., and P.H. Schuldt. 1957. Colorimetric method for the determination of 3,4-dichlorotetrahydrothiophene-1,1-dioxide (PRD). CBTI 19(1):77-86.
- 842 Porter, C.A., and L.H. Weinstein. 1957. Biochemical changes induced by thiouracil in cucumber mosaic virus-infected and noninfected tobacco plants. CBTI 19(1):87-106.
- 843 Mavrodineanu, R., and M.C. Ledbetter. 1957. Apparatus for photographing fluorescent chromatograms. CBTI 19(1):107-111.
- 844 Miller, L.P. 1957. Monosaccharide components of an induced glycoside of trichloroethyl alcohol from dandelion tops. CBTI 19(1):113-115.
- 845 Vite, J.P. 1957. Zur Kenntnis der xestamerikanischen Larche, *Larix occidentalis* Nuttall. Forstw. Cbl.76(9/10):257-320.
- 846 Mavrodineanu, R. and R.R. Coe. 1957. Atmospheric pollution -- Method of dispensing volatile fluorides in portable greenhouses. Agric. And Food Chem. 5(11):852-854.
- 847 Burchfield, H.P., J. Schechtman, and B.S. Magdoff. 1957. Effects of temperature and composition on crystallite growth in Bordeaux mixtures. CBTI 19(2):117-132.
- 848 Burchfield, H.P., and A. Goenaga. 1957. Equipment for producing simulated rain for measuring the tenacity of spray deposits to foliage. CBTI 19(2):133-140.
- 849 Burchfield, H.P., and A. Goenaga. 1957. Some factors governing the deposition and tenacity of copper fungicide sprays. CBTI 19(2):141-156.
- 850 McCallan, S.E.A. 1957. Effectiveness of various formulations of Bordeaux mixture in controlling early and late blights of tomato in greenhouse tests. CBTI 19(2):157-167.
- 851 Burchfield, H.P., and E.E. Storrs. 1957. Relative reactivities of 1-fluoro-2,4-dinitrobenzene and 2,4-dichloro-6-(*o*-chloranilino)-*s*-triazine with metabolites containing various functional groups. CBTI 19(2):169-176.
- 852 Owens, R.G., and L.P. Miller. 1957. Intracellular distribution of metal ions and organic fungicides in fungus spores. CBTI 19(2):177-188.
- 853 Hilchey, J.D., V.F. Cotty, and S.M. Henry. 1957. the sulfur metabolism of insects. II. The metabolism of cystine-S35 by the house fly, *Musca domestica* L. CBTI 19(2):189-200.
- 854 Barton, L.V., and C.C. Chandler. 1958. Physiological and morphological effects of gibberellic acid on epicotyl dormancy of tree peony. CBTI 19(2):201-214.
- 855 Chandler, C. 1957. The effect of gibberellic acid on germination and pollen-tube growth. CBTI 19(2):215-223.

- 856 Cotty, V.F., and L.H. Weinstein. 1957. A simple method for the recrystallization of BaS₃O₄. CBTI 19(2):225-226.
- 857 Henry, S.M., and V.F. Cotty. 1957. The rearing of aseptic adult house flies for physiological studies. CBTI 19(2):227-229.
- 858 Burchfield, H.P. 1958. Molecular rearrangement in the reaction of cysteine with 1-fluoro-2,4-dinitrobenzene. Nature 181:49-50.
- 859 Plaisted, P.H. 1957. Growth of the potato tuber. Plant Physiology. 32(5):445-453.
- 860 Burchfield, P.H., and P.H. Schuldt. 1958. Pyridine-alkali reactions in the analysis of pesticides containing active halogen atoms. Agric. and Food Chem. 6(2):106-111.
- 861 Plaisted, P.H. 1958. Clearing free amino acid solutions of plant extracts for paper chromatography. CBTI 19(3):231-244.
- 862 Plaisted, P.H. 1958. Some biochemical changes during development and aging of *Acer platanoides* L. leaves. CBTI 19(3):245-254.
- 863 Vlitos, A.J., and T.S. Hitchcock. 1958. Plant growth regulating activity of 3-indolemethanesulfonic acid. CBTI 19(3):255-265.
- 864 Magdoff, B.S., H.P. Burchfield, and J. Schechtman. 1958. Chemistry and crystallography of some polybasic cupric calcium sulfates (Bordeaux mixtures). CBTI 19(3):267-288.
- 865 Mavrodineanu, R., and J. Gwirtsman. 1958. Effect of voltage variation of the photometric titration of fluorides with thorium nitrate. CBTI 19(3):289-290.
- 866 Barton, L.V., and J.M. Fine. 1958. Noninterference between effects of gibberellic acid and fungicides. CBTI 19(3):291-294.
- 867 Moorefield, H.H., and E.R. Tefft. 1958. Application of cholinesterase assay to residue analysis of 1-naphthyl N-methylcarbamate (Sevin). CBTI 19(4):295-301.
- 868 McCallan, S.E.A. 1958. Determination of individual fungus spore volumes and their size distribution. CBTI 19(4):303-320.
- 869 Hartzell, A., H.P. Burchfield, and V.F. Cotty. 1958. Improvements in culturing larvae of *Aedes aegypti* (L.) for use in insecticide bioassay. CBTI 19(4):321-325.
- 870 Weinstein, L.H., and H.J. Laurencot, Jr. 1958. Senescence of roses. II. Dark fixation of CO₂ by cut Better Times roses at different stages of senescence. CBTI 19(4):327-340.
- 871 Weinstein, L.H., W.R. Smith, and H.J. Laurencot, Jr. 1958. Senescence of roses. III. Isolation and identification of 1-quinic acid from Better Times roses. CBTI 19(4):341-348.
- 872 Staples, R.C., and M.C. Ledbetter. 1958. A study of microautoradiography of the distribution of tritium-labeled glycine in rested Pinto bean leaves. CBTI 19(4):349-354.

- 873 Owens, R.G., H.M. Novotny, and M. Michels. 1958. Composition of conidia of *Neurospora sitophila*. CBTI 19(4):355-374.
- 874 King, L.J. 1958. Growth responses of a *Cyphomandra-Lycopersicon* graft. CBTI 19(4):375-378.
- 875 Cotty, V.F., S.M. Henry, and J.D. Hilchey. 1958. The sulfur metabolism of insects. III. The metabolism of cystine, methionine, taurine, and sulfate by the house fly, *Musca domestica* L. CBTI 19(5):379-392.
- 876 Cotty, V.F., and S.M. Henry. 1958. Glutathione metabolism in DDT resistant and susceptible house flies. CBTI 19(5):393-401.
- 877 Moorefield, H.H. 1958. The origin of DDT resistance in the house fly. CBTI 19(5):403-409.
- 878 Burchfield, H.P., and Joan Schechtman. 1958. Absorptiometric analysis of *N*-(trichloromethylthio)-4-cyclohexene-1,2-dicarboximide(captan). CBTI 19(5):411-416.
- 879 Burchfield, H.P., and E.E. Storrs. 1958. Influence of pH and group interactions on the reactivities of metabolites and related compounds containing sulfhydryl groups. CBTI 19(5):417-436.
- 880 Margolis, D., and R.J. Block. 1958. The sulfur metabolism of yeast. I. A study of relative growth of five yeasts on a sulfur-free medium supplemented with small quantities of sulfur compounds. CBTI 19(5):437-443.
- 881 Keller, S., and R.J. Block. 1958. Amino acid composition of the serum proteins. I. The fractionation of bovine serum proteins by ammonium sulfate and the comparative amino acid composition of the fractions. CBTI 19(5):445-450.
- 882 Keller, S., and R.J. Block. 1958. Amino acid composition of the serum proteins. II. The fractionation of human serum proteins by cellulose ion-exchange chromatography and the comparative amino acid composition of the fractions. CBTI 19(5):451-460.
- 883 Mandl, R.H. 1958. Brom cresol purple as an aid in the location of amino acids on descending paper chromatograms. CBTI 19(5):461.
- 884 Vite, J.P. 1958. Über die transpirationsphysiologische Bedeutung des Drehwuchses bei Nadelholzern. Forstwiss. Centralbl. 77(7/8):193-203.
- 885 Barton, L.V. 1958. The Gibberellins: Powerful plant growth regulators. Transactions of the New York Academy of Sciences. Ser. II. 20(8):717-732.
- 886 Owens, R.G., and H.M. Novotny. 1958. Mechanism of action of the fungicide dichlone (2,3-dichloro-1,4-naphthoquinone). CBTI 19:463-482.
- 887 Fine, J.M., and L.V. Barton. 1958. Biochemical studies of dormancy and after-ripening in seeds. I. Changes in free amino acid content. CBTI 19:483-500.
- 888 Moorefield, H.H. 1958. Synergism of the carbamate insecticides. CBTI 19:501-507.

- 889 Margolis, D., and R.H. Mandl. 1958. A system for separating sulfur and nonsulfur amino compounds by two-dimensional paper chromatography (note). *CBTI* 19:509-512.
- 890 Hartzell, A. 1958. Insect tissue culture. *proc. 10th Intern. Congr. Ent. Aug. 17-25, 1956, Montreal, Canada* 2:319-325.
- 891 Weinstein, L.H., C.A. Porter, and H.J. Laurencot, Jr. 1959. Evidence for the conversion of quinic acid to shikimic acid in roses. *Nature* 183:326.
- 892 Vite, J.P. 1959. Observations on the movement of injected dyes in *Pinus ponderosa* and *Abies concolor*. *CBTI* 19:7-26.
- 893 Vite, J.P., and J.A. Rudinsky. 1959. The water-conducting systems in conifers and their importance to the distribution of trunk injected chemicals. *CBTI* 19:27-38.
- 894 Borner, H. 1959. The apple replant problem. I. The excretion of phlorizin from apple root residues. *CBTI* 19:39-56.
- 895 Flemion, F. 1959. Effect of temperature, light and gibberellic acid on stem elongation and leaf development in physiologically dwarfed seedlings of peach and *Rhodotypos*. *CBTI* 19:57-70.
- 896 Staples, R.C, and L.H. Weinstein. 1959. Dark carbon dioxide fixation by uredospores of rust fungi. *CBTI* 19:71-82.
- 897 Plaisted, P.H. 1959. The effect of 2,4-dithiobiuret on some of the biochemical components of cotton and coeus plants. *CBTI* 19:83-101.
- 898 Block, R.J. 1959. The approximate amino acid composition of wild and hatchery trout (*Salvelinus fontinalis*) and some of their principal foods (*Gammarus* and *Hexagenia bilineata*). (Note) *CBTI* 19:103-105.
- 899 Chandler, C. 1959. Bisporangiate cones in larch. (Note) *CBTI* 19:107-110.
- 900 Block, R.J., H.W. Howard, W.J. Monson, and C.D. Bauer. 1959. Nutritive value of commercial breads. *Jour. Amer. Dietetics Assoc.* 35(3):245-246.
- 901 Block, R.J. 1958. Nitrogen requirements of animals and man: comments on the Folin and Schoenheimer hypotheses. *Proc. Internat. Symp. on Enzyme Chem., Tokyo and Kyoto* 1957:444-449.
- 902 McCallan, S.E.A. 1959. What should the dealer know about fungicides? *Agricultural Chemicals* 14(3):38-40.
- 903 Vite, J.P., and W.H. Hendrickson. 1959. Die Orientierung der holzfasern im Douglasiesntamm. *Allgemeine Forstzeitschrift.* 14(8):166-168.
- 904 Phillips, I.D.J., A.J. Vlitos, and H. Cutler. 1959. The influence of gibberellic acid upon the endogenous growth substances of the Alaska pea. *CBTI* 20:111-120.
- 905 Weinstein, L.H., C.A. Poeter, and H.J. Laurencot, Jr. 1959. Quinic acid as a precursor in aromatic biosynthesis in the rose. *CBTI* 20:121-134.

- 906 Burchfield, H.P., and E.A. Prill. 1959. Isolation of resins from vanilla by chloroformamine extraction. CBTI 20:135-139.
- 907 Owens, R.G. 1959. Plant disease control by 5-nitrofurans derivatives in relation to chemical structure. CBTI 20:141-149.
- 908 Owens, R.G., and H.M. Novotny. 1959. Influence of chemical structure of 5-nitrofurans derivatives on absorption by fungus spores and on inherent toxicity. CBTI 20:151-165.
- 909 Burchfield, H.P., and E.E. Storrs. 1959. Group intersections in the reactions of piperazine and piperidine with 1-fluoro-2,4-dinitrobenzene. (note) CBTI 20:167-169.
- 910 Miller, L.P. 1959. Factors influencing the uptake and toxicity of fungicides. Trans. N.Y. Acad. Sci. Ser. II. 21(5):442-445.
- 911 Owens, R.G., and H.M. Novotny. 1959. Mechanism of action of the fungicide captan [N-(trichloromethylthio)-4-cyclohexene-1,2-dicarboximide]. CBTI 20(3):171-190.
- 912 Takeda, A. 1959. *m*-Nitro- and *m*-trifluoromethyl-aryl acids as plant growth regulators. CBTI 20(3):191-196.
- 913 Takeda, A. 1959. *a*-Substituted aryl-acetic acids as plant growth regulators. CBTI 20(3):197-203.
- 914 Burchfield, H.P. 1959. Comparative stabilities of dyrene, 1-fluoro-2,4-dinitrobenzene, dichlone and captan in a silt loam soil. CBTI 20(3):205-215.
- 915 Burchfield, H.P., and E.A. Prill. 1959. Characterization of the noncarbonyl volatiles of vanilla by gas chromatography. CBTI 20(3):217-229.
- 916 Chandler, C. 1959. The propagation of *Larix* from soft-wood cuttings. CBTI 20(3):231-238.
- 917 Weinstein, L.H., L.G. Nickell, H.J. Laurencot, Jr., and W. Tulecke. Biochemical and physiological studies of tissue cultures and the plant parts from which they are derived. I. *Agave toumeyana* Trel. CBTI 20(3):239-250.
- 918 Block, R.J., S. Keller, and D.W. Miller. 1959. A chemical relationship between the protein fractions obtained from fowl serum by cellulose ion-exchange chromatography. Evidence for an amino acid "anlage." Arch. Biochem. and Biophys. 83(2):426-435.
- 919 Rudinsky, J.A., and J.P. Vite. 1959. Certain ecological and phylogenetic of the pattern of water conduction in conifers. Forest Science 5(3):259-266.
- 920 Burchfield, H.P., and E.A. Prill. 1959. Characterization of vanilla and other plant extracts by paper chromatography. CBTI 20(4):251-263.
- 921 Owens, R.G., G. Blaak, and A. Doran. 1959. Effects of 5-nitrofurans derivatives on organic acid metabolism of conidia of *Neurospora sitophila* and on acetylation of sulfanilamide in vitro. CBTI20(4):265-273.

- 922 Ledbetter, M.C., P.W. Zimmerman, and A.E. Hitchcock. 1959. The histopathological effects of ozone on plant foliage. *CBTI* 20(4):275-282.
- 923 Crosby, D.G., and A.J. Vlitos. 1959. Growth substances from Maryland Mammoth tobacco: long chain alcohols. *CBTI* 20(4):283-292.
- 924 Moorefield, H.H., and E.R. Tefft. 1959. Evaluation of 2-(3,5-dichloro-2-biphenyloxy)triethylamine as an insecticide adjuvant. *CBTI* 20(4):293-298.
- 925 King, L.J. 1959. Substituted aryloxy-alkanol derivatives for use as biologically activated pre-emergence herbicides. Proceedings of the IVth International Congress of Crop Protection, Hamburg, Germany, 1957. 1:557-564.
- 926 Miller, L.P. 1959. Factors affecting the uptake of toxicants by conidia. *Proc. IX Internat. Bot. Congr. Montreal.* 2:264.
- 927 Keller, S., and R.J. Block. 1959. Amino acid composition of the serum proteins. III. The chromatographic isolation of human and bovine serum albumins, and the amino composition of the fractions. *Arch. Biochem. and Biophys.* 85:366-373.
- 928 Keller, S., and R.J. Block. 1960. Separation of proteins. Pages 1-30 in "A laboratory manual of analytical methods of protein chemistry (including polypeptides). P. Alexander and R.J. Block, eds.
- 929 Keller, S., and R.J. Block. 1960. Fractionation of proteins by absorption and ion exchange. Pages 65-87 in "A laboratory manual of analytical methods of protein chemistry (including polypeptides). Alexander, P., and R.J. Block, eds.
- 930 Torgeson, D.C., J.A. Lambrech, and W.H. Hensley. 1960. Fungicidal effectiveness of S,S'-dimethyl xanthogenethylenebis[dithiocarbamate] and related compounds. *CBTI* 20(5):299-305.
- 931 Porter, C.A., and L.H. Weinstein. 1960. Altered biochemical patterns induced in tobacco by cucumber mosaic virus infection, by thiouracil, and by their interaction. *CBTI* 20(5):307-315.
- 932 Henry, S.M., and R.J. Block. 1960. The sulfur metabolism of insects. IV. The conversion of inorganic sulfate to organic sulfur compounds in cockroaches. The role of intracellular symbionts. *CBTI* 20(5):317-329.
- 933 Ledbetter, M.C., R. Mavrodineanu, and A.J. Weiss. 1960. Distribution studies of radioactive fluorine-18 and stable fluorine-19 in tomato plants. *CBTI* 20(5):331-348.
- 934 Staples, R.C., and M.C. Ledbetter. 1960. Incorporation of tritium-labeled thymidine into nuclei of rusted bean leaves. *CBTI* 20(5):349-351.
- 935 Prill, E.A., C.A. Porter, R.C. Staples, and H.P. Burchfield. 1960. Methods for the analysis of vanilla extracts for resins, carbonyl compounds, amino acids, and other organic acids. *Jour. Assoc. Off. Agr. Chem.* 43(1):96-107.
- 936 Miller, L.P. 1960. Fungitoxicity of metal ions. *Nature* 185(4712):545-546.

- 937 Magdoff, B.S. 1960. Sub-units in southern bean mosaic virus. *Nature* 185(4714):673-674.
- 938 Hendrickson, W.H., and J.P. Vite. 1960. The pattern of water conduction and tracheidal alignment in Douglas-fir. *CBTI* 20(6):353-361.
- 939 Haines, T.H., S.M. Henry, and R.J. Block. 1960. The sulfur metabolism of insects. V. The ability of insects to use sulfate in the synthesis of methionine. *CBTI* 20(6):363-364.
- 940 Flemion, F., and D.S. de Silva. 1960. Bioassay and biochemical studies of extracts of peach seeds in various stages of dormancy. *CBTI* 20(6):365-379.
- 941 Row, V.V. 1960. Growth regulants in maple bark and flowers. *CBTI* 20(6):381-383.
- 942 Block, R.J., S.C. Werner, R.H. Mandl, V.V. Row, and I. Radichevich. 1960. The probable presence of diiodotyrosine and of monoiodotyrosine in human serum. A discrepancy between the distribution of iodo compounds when estimated by I-131 and by I127. *Arch. Biochem. Biophys.* 88(1):98-104.
- 943 McNew, G.L. 1960. Fungicides and bactericides for controlling plant diseases. Pages 49-71 in "Biological and Chemical control of plant and animal pests." Reitz, L.P., ed.
- 944 Vite, J.P., and J.A. Rudinsky. 1960. Untersuchungen uber die Anwendbarkeit von Harzdruckmessungen zur Bestimmung des physiologischen Zustandes von Coniferen im Rahmen der Borkenkaferforschung. *Forstwissen. Centralbl.* 79(5/6):162-169.
- 945 Magdoff, B.S. 1960. The structure of small "Spherical" viruses. *Trans. New York Acad. of Sciences* 22(7):522-527.
- 946 McNew, G.L. 1960. The training of students for research in plant pathology. *Phytopath.* 50(7):511-516.
- 947 Miller, L.P., and S.E.A. McCallan. 1960. Mechanism of action studies on the effect of fungitoxicants in destroying fungus conidia. *Proc. IVth Internat. Congress of Crop Protection* 2:1379-1384.
- 948 Block, R.J., and S. Keller. 1960. Interrelationships between serum protein fractions isolated by various techniques. Evidence for amino acid anlagen. *CBTI* 20(7):385-394.
- 949 Barton, L.V. 1960. Storage of seeds of *Lobelia cardinalis* L. *CBTI* 20(7):395-401.
- 950 Barton, L.V. 1960. Life-span of frost-damaged corn seeds. *CBTI* 20(7):403-408.
- 951 Flemion, F., and P.L. Prober. 1960. Production of peach seedlings from unchilled seeds. I. Effect of nutrients in the absence of cotyledonary tissue. *CBTI* 20(7):409-419.
- 952 Hartzell, A., and F. Wilcoxon. 1960. The importance of wetting agents as affecting the toxicity of certain insecticides. *CBTI* 20(7):421-424.

- 953 Novotny, H.M., and R.G. Owens. 1960. Localization of amino-acids for histochemical estimation. *Nature* 186(4730):1057-1058.
- 954 Burchfield, H.P., and E.E. Storrs. 1960. An ortho effect influencing fungitoxicity, electronic absorption spectra, and chemical reactivity with mercapatalbumin. *Nature* 187(4737):593-594.
- 955 Margolis, D. 1960. The range of free amino acids and amides in tomato plants and the effects of nitrate of ammonium as nutrients. *CBTI* 20(8):425-436.
- 956 Ledbetter, M.C. 1960. Anatomical and morphological comparisons of normal and physiologically dwarfed seedlings of *Rhodotypos tetrapetala* and *Prunus persica*. *CBTI* 20(8):437-458.
- 957 Owens, R.G., and G. Blaak. 1960. Site of action of captan and dichlone in the pathway between acetate and citrate in fungus spores. *CBTI* 20(8):459-474.
- 958 Owens, R.G., and G. Blaak. 1960. Chemistry of the reactions of dichlone and captan with thiols. *CBTI* 20(8):475-497.
- 959 Row, V.V., W.W. Sanford, and A.E. Hitchcock. 1961. Indole-3-acetyl-D, L-aspartic acid as a naturally-occurring indole compound in tomato seedlings. *CBTI* 21(1):1-10.
- 960 Torgeson, D.C., and H.L. Haynes. 1961. Nematocidal properties of diphenyl sulfide. *CBTI* 21(1):11-19.
- 961 Torgeson, D.C. 1961. The fungicidal activity of (aminoalkyl) pyrenes. *CBTI* 21(1):21-26.
- 962 Torgeson, D.C., W.H. Hensley, and J.A. Lambrech. 1961. Polyaracyclic methylmercaptoimidazolines as foliage fungicides. *CBTI* 21(1):27-31.
- 963 Torgeson, D.C., and C.G. Lindberg. 1961. A greenhouse method for evaluation of chemicals to control apple powdery mildew. *CBTI* 21(1):33-34.
- 964 Plaisted, P.H. 1961. The presence of sedoheptulose in *Coleus blumei Benth.* *CBTI* 21(1):35-36.
- 965 Vite, J.P. 1961. The influence of water supply on oleoresin exudation pressure and resistance to bark beetle attack in *Pinus ponderosa*. *CBTI* 21(1):37-66.
- 966 Vite, J.P., and D.L. Wood. 1961. A study on the applicability of the measurement of oleoresin exudation pressure in determining susceptibility of second growth ponderosa pine to bark beetle infestation. *CBTI* 21(2):67-78.
- 967 Wood, D.L, and J.P. Vite. 1961. Studies on the host selection behavior of *Ips confusus* (LeConte) (Coleoptera: Scolytidae) attacking *Pinus ponderosa*. *CBTI* 21(2):79-95.
- 968 Staples, R.C., H.P. Burchfield, and J.G. Baker. 1961. comparative biochemistry of obligately parasitic and saprophytic fungi. I. Assimilation of C14-labeled substrates by nongerminating spores. *CBTI* 21(2):97-114.

- 969 Tulecke, W., L.H. Weinstein, A. Rutner, and H.J. Laurencot, Jr. 1961. The biochemical composition of coconut water (coconut milk) as related to its use in plant tissue culture. *CBTI* 21(2):115-128.
- 970 Henry, S.M., and R.J. Block. 1961. The sulfur metabolism of insects. VI. Metabolism of the sulfur amino acids and related compounds in the German cockroach, *Blattella germanica* (L.). *CBTI* 21(2):129-144.
- 971 Block, R.J., R.H. Mandl, H.W. Howard, C.D. Bauer, and D.W. Anderson. 1961. The curative action of iodine on soybean goiter and the changes in the distribution of iodoamino acids in the serum and in thyroid gland digests. *Arch. Biochem. and Biophysics.* 93:15-24.
- 972 Barton, L.V. 1961. Biochemical studies of dormancy and after-ripening of seeds. II. Changes in oligobasic organic acids and carbohydrates. *CBTI* 21:147-161.
- 973 Schuldt, P.H., H.P. Burchfield, D.E. Stallard, W.E. Priddle, and S. Klein. 1961. Colorimetric determination of micro amounts of dimethyl tetrachloroterephthalate. *CBTI* 21:163-173.
- 974 Vite, J.P., and R.I. Gara. 1961. A field method for observation on olfactory responses of bark beetles (Scolytidae) to volatile materials. *CBTI* 21:175-182.
- 975 Block, R.J., and S.M. Henry. 1961. Metabolism of the sulphur amino-acids and of sulphate in *Blattella germanica*. *Nature.* 191:392-393.
- 976 Miller, L.P. 1961. Use of radioisotopes in plant pathological research. *Proc. Southeastern Seminar on Atomic Progress in Agric., Clemson College, S.C.* pp. 180-194.
- 977 Block, R.J. 1961. The amino acid interrelationships between the various serum proteins obtained by salting out, electrophoresis, and column chromatography. *Ann. New York Acad. Sciences.* 94(1):31-43.
- 978 Buckley, E.H. 1961. Some relations between the organic acid content and the response of spinach to different photoperiods. *CBTI* 21(4):183-199.
- 979 Weinstein, L.H., C.A. Porter, and H.J. Laurencot, Jr. 1961. Role of quinic acid in aromatic biosynthesis in higher plants. *CBTI* 21(4):201-214.
- 980 Weinstein, L.H. 1961. Effects of atmospheric fluoride on metabolic constituents of tomato and bean leaves. *CBTI* 21(4):215-231.
- 981 Flemion, F., and C. Topping. 1961. Cytochemical studies of the shoot apices of normal and physiologically dwarfed peach seedlings. I. Cell wall components. *CBTI* 21(4):233-245.
- 982 Tulecke, W. 1961. Recent progress and the goals of plant tissue culture. *Bull. Torrey Bot. Club.* 88(5):350-360.
- 983 Barton, L.V. 1961. Anatomy of seeds. *Internat. Atomic Energy Agc., Vienna.* pp. 655.
- 984 Block, R.J., and R.H. Mandl. 1961. Automatic analysis of iodoamino acids in digests of iodinated proteins. *The biochem. Jour.* 81(3):37-38.

- 985 Porter, C.A., and L.H. Weinstein. 1961. Incorporation of 2-thiouracil-S35 into RNA and acid-soluble nucleotides of Vamorr 48 tobacco. *Virology*. 15(4):504-506.
- 986 Vite, J.P., and R.I. Gara. 1962. Volatile attractants from ponderosa pine attacked by bark beetles (Coleopters: Scolytidae). *CBTI* 21:251-273.
- 987 Gara, R.I., and J.P. Vite. 1962. Studies on the flight patterns of bark beetles (Coleopter: Scolytidae) in second growth ponderosa pine forests. *CBTI* 21:275-289.
- 988 Tulecke, W, L.H. Weinstein, A. Rutner, and H.J. Laurencot, Jr. 1962. Biochemical and physiological studies of tissue cultures and the plant part from which they were derived. II. *Ginkgo biloba* L. *CBTI* 21:291-301.
- 989 Hitchcock, A.E., P.W. Zimmerman, and R.R. Coe. 1962. Results of ten years' work (1951-1960.) on the effect of fluorides on gladiolus. *CBTI* 21:303-344.
- 990 Plaisted, P.H., and R.B. Reggio. 1962. An adenine glucose compund from cotton. *Nature*. 193:685-686.
- 991 Hartzell, A. 1961. Insect tissue culture of ovarian sheath of *Samia cynthia* (Drury) pupae. *Verhandlung-XI Internat. Ent.* 1:350-352.
- 992 Barton, L.V. 1961. Experimental seed physiology at Boyce Thompson Institute for Plant Research, Inc. *Proc. Internat. Seed Testing Assoc.* 26(4):561-596.
- 993 Haines, T.H., and R.J. Block. 1962. Sulfur metabolism in algae. I. Synthesis of metabolically inert chloroform-soluble sulfate esters by two chyrsomonads and *Chlorella pyrenoidosa*. *Jour. Protozoology* 9(1):33-38.
- 994 Weinstein, L.H., C.A. Porter, and H.J. Laurncot, Jr. 1962. Role of the shikimic acid pathway in the formation of tryptophan in higher plants: Evidence for an alternative pathway in the bean. *Nature*. 194:205-206.
- 995 Staples, R.C., R. Syamananda, V. Kao, and R.J. Block. 1962. Comparative biochemistry of obligately parasitic and saprophytic fungi. II. Assimilation of C14-labeled substrates by germinating spores. *CBTI* 345-362.
- 996 Syamananda, R., R.C. Staples, and R.J. Block. 1962. Automatic analysis of sugars, separated by column chromatography. *CBTI* 21:363-369.
- 997 Weinstein, L.H., W. Tulecke, L.G. Nickell, and H.J. Laurencot, Jr. 1962. Biochemical and physiological studies of tissue cultures and the plant parts from which the are derived. III. Paul's Scarlet rose. *CBTI* 21:371-386.
- 998 Weinstein, L.H., and C.A. Porter. 1962. Changes in free amino acid and amide levels of leaf pieces, detached leaves, detached plants, and intact plants of tobacco at different times. *CBTI* 21:387-391.
- 999 Steward, F.C., and D. Margolis. 1962. The effects of manganes upon the free amino acids and amides of the tomato plant. *CBTI* 21:393-409.
- 1000 Steward, F.C., and D. Margolis. 1962. The effects of molybdenum upon the free amino acids and amides of the tomato plant. *CBTI* 21:411-421.

- 1001 Mandl, R.H. 1962. Automation in protein analysis. *Protides Biol. Fluids.* 1961:81-85.
- 1002 Flemion, F. 1962. Insect damage as a factor affecting fruit set. *Proc. Campbell Soup Co., Plant Science Symposium, Mar. 5-6, 1962.* pp. 163-171.
- 1003 Henry, S.M., and R.J. Block. 1962. Amino acid synthesis, a ruminant-like effect of the intracellular symbionts of the German cockroach. *Federation Proceedings* 21:9.
- 1004 Mandl, R.H., and R.J. Block. 1962. 1127 amino acids in thyroid proteins and human thyroid glands. *Federation Proceedings.* 21:215.
- 1005 Barton, L.V. 1962. The germination of weed seeds. *Weeds* 10:174-182.
- 1006 Storrs, E.E., and H.P. Burchfield. 1962. Internal standards in the analysis of chlorine-containing herbicides by gas chromatography. *CBTI* 21:423-437.
- 1007 Weinstein, L.H., C.A. Porter, and H.J. Laurencot, Jr. 1962. Biosynthesis of uniformly-labeled shikimic and quinic acids in leaves of *Ginkgo biloba L.* *CBTI* 21:439-445.
- 1008 Henry, M.S., and R.J. Block. 1962. The sulfur metabolism of insects. VII. The metabolism of the sulfur amino acids and of sulfate in the blowfly, *Phormia regina (Meig.)* *CBTI* 21:447-452.
- 1009 Mavrodineanu, R., J. Gwirtzman, D.C. McCune, and C.A. Porter. 1962. Summary of procedures used in the controlled fumigation of plants with volatile fluorides and in the determination of fluorides in air, water, and plant tissues. *CBTI* 21:453-464.
- 1010 Barton, L.V., and J.L. Bray. 1962. Biochemical studies of dormancy and after-ripening of seeds. III. Nitrogen metabolism. *CBTI* 21:465-472.
- 1011 Vite, J.P., and J.A. Rudinsky. 1962. Investigations on the resistance of conifers to bark beetle infestation. *Verhandl. XI Internat. Congr. Entomol., Vienna* 2:219-225.
- 1012 Vite, J.P. 1962. The host factor in the population dynamics of bark beetles attacking ponderosa pine. XIII congr. Internat. Union of For. Res. Organizations. Sept. 9-15, 1961.
- 1013 Haines, T.H., S. Aaronson, J.L. Gellerman. 1962. Occurrence of anachidonic and related acids in the protozoan *Ochromonas danica*. *Nature.* 194(4835):1282-1283.
- 1014 Maramorosch, K. 1962. Present status of insect tissue culture. *Verhandl. XI Internat. congr. Entomol.,* 2:801-807.
- 1015 Henry, M.S. 1962. The significance of microorganisms in the nutrition of insects. *Trans. N.Y. Acad. Sci.* 24(6):676-683.
- 1016 McCallan, S.E.A., and R.C. Zingerman. 1962. The bean rust method of evaluating fungicides in greenhouse tests. *CBTI* 21:473-480.

- 1017 Moorefield, H.H., M.H.J. Weiden, and D.J. Hennessy. 1962. Relationship of the insecticidal and the free radical activities of DDT. CBTI 21:481-486.
- 1018 Staples, R.C. 1962. Initial products of acetate utilization by bean rust uredospores. CBTI 21:487-497.
- 1019 Block, R.J., and R.H. Mandl. 1962. Automatic analysis of iodoamino acids and of iodide in digests of iodinated proteins. Annals New York Acad. of Sciences. 102:87-95.
- 1020 Porter, C.A., and L.H. Weinstein. 1962. Biochemical studies of plant virus tumors. Trans. New York Acad. Sci. 24(7):747-749.
- 1021 Tulecke, W. 1963. Plant tissue and organ culture. Amer. Biol. Teacher. 25(2):90-91.
- 1022 Syamanamda, R., and R.C. Staples. 1963. The carbohydrate content of rusted corn leaves. CBTI 22:1-8.
- 1023 Tweedy, B.G., and D. Powell. 1963. The role of pectin-polygalacturonase in expression of disease symptoms of cork rot. CBTI 22:9-16.
- 1024 Flemion, F., and C. Topping. 1963. Cytochemical studies of the shoot apices of normal and physiologically dwarfed peach seedlings. II. Starch distribution. CBTI 22:17-22.
- 1025 Rudinsky, J.A. 1963. Response of *Dendroctonus pseudotsugae* Hopkins to volatile attractants. CBTI 22:23-38.
- 1026 Vite, J.P., R.I. Gara, and R.A. Kliefoth. 1963. Collection and bioassay of a volatile fraction attractive to *Ips confusus* (Lec.) (Coleoptera: Scolytidae). CBTI 22:39-50.
- 1027 Gara, R.I. 1963. Studies on the flight behavior of *Ips confusus* (Lec.) (Coleoptera: Scolytidae) in response to attractive material. CBTI 22:51-66.
- 1028 Torgeson, D.C., W.H. Hensley, and J.A. Lambrech. 1963. N-phenylmaleimides and related compounds as soil fungicides. CBTI 22:67-70.
- 1029 Plaisted, P.H., and R.B. Reggio. 1963. A rapid column chromatographic separation of acid soluble nucleotides. CBTI 22:71-80.
- 1030 Maramorosch, K. 1963. Arthropod transmission of plant viruses. Ann. Rev. of Entomol. 8:369-414.
- 1031 Weinstein, L.H., and H.J. Laurencot, Jr. 1963. Studies on the preservation of cut flowers. CBTI 22(2):81-90.
- 1032 Palm, E.T. 1963. Effect of mineral nutrition on the invasion and response of turnip tissue to *Plasmodiophora brassicae* Wor. CBTI 22(2):91-112.
- 1033 Hirumi, H. 1963. An improved device for cultivating cells in vitro and for observations under high power phase magnification. (note) CBTI 22(2):113-115.

- 1034 Streissle, G., and K. Maramorosch. 1963. Reovirus and wound-tumor virus: Serological cross reactivity. *Science*. 140:996-997.
- 1035 Flemion, F., and J. Beardow. 1963. Histological studies of physiologically dwarfed peach seedlings. I. Structure of anomalous leaves. *CBTI* 22(3):117-131.
- 1036 Henry, S.M., and T.W. Cook. 1963. Amino acids in protein of the black blow fly, *Phormia regina* (Meigen), at various stages of development. *CBTI* 22(3):133-139.
- 1037 Hirumi, H., and K. Maramorosch. 1963. Recovery of aster yellows virus from various organs of the insect vector, *Macrosteles fascifrons*. *CBTI* 22(3):141-151.
- 1038 Tulecke, W., and N. Sehgal. 1963. Cell proliferation from the pollen of *Torreya nucifera*. *CBTI* 22(3):153-163.
- 1039 Mitsuhaschi, J., and K. Maramorosch. 1963. Aseptic cultivation of four virus transmitting species of leafhoppers (Cicadellidae). *CBTI* 22(4):165-173.
- 1040 Gershon, H., and R. Parmegiani. 1963. Sporicidal effects of vapors of ring polychlorinated pyrimidines. Study of physical factors affecting toxicity. *Trans. N.Y. Acad. Sci.* 25(6):638-345.
- 1041 Tulecke, W. 1963. Review of papers presented at International Conference on Plant Tissue Culture. *AIBS Bull.* 13(4):72-73.
- 1042 Mitsuhashi, J., and K. Maramorosch. 1963. A successful method for rearing leafhopper vectors of plant viruses under aseptic conditions. XVI Internat. Zool. Congress 1:3.
- 1043 Maramorosch, K. 1963. The occurrence in Arizona of corn stunt disease and of the leafhopper vector *Dalbulus maidis*. *Plant Disease Reporter*. 47(10):858.
- 1044 Hitchcock, A.E., P.W. Zimmerman, and R.R. Coe. 1963. The effect of fluorides on Milo maize (*Sorghum* sp.). *CBTI* 22(4):175-206.
- 1045 Weinstein, L.H., R.H. Mandl, D.C. McCune, J.S. Jacobson, and A.E. Hitchcock. 1963. A semi-automated method for the determination of fluorine in air and plant tissues. *CBTI* 22(4):207-220.
- 1046 Pitman, G.B., and J.P. Vite. 1963. Studies on the pheromone of *Ips confusus* (Lec.). I. Secondary sexual dimorphism in the hindgut epithelium. *CBTI* 22(4):221-226.
- 1047 Maramorosch, K., and D.D. Jensen. 1963. Harmful and beneficial effects of plant viruses in insects. *Ann. Rev. Microbiology* 17:495-530.
- 1048 Owens, R.G. 1963. Chemistry and physiology of fungicidal action. *Ann. Rev. Phytopathol.* I: 77-100.
- 1049 Miller, L.P. 1962. Natural membranes. Pages 345-367 in " Diffusion and membrane technology." Tuwiner, Sydney B.

- 1050 Owens, R.G., and A.D. Hayes. 1964. Biochemical action of thiram and some dialkyl dithiocarbamates. *CBTI* 22(5):227-240.
- 1051 Owens, R.G., and J.H. Rubinstein. 1964. Chemistry of the fungicidal action of tetramethylthiuram disulfide (thiram) and ferbam. *CBTI* 22(5):241-257.
- 1052 Hirumi, H., and K. Maramorosch. 1964. Tissue culture of the Monarch butterfly, *Anosia plexippus*. *CBTI* 22(5):259-268.
- 1053 ?
- 1054 Williams, P.H., and R.C. Staples. 1964. Acid phosphatases from healthy and rust infected Pinto bean leaves. *CBTI* 22(6):269-282.
- 1055 Kliefoth, R.A., J.P. Vite, and G.B. Pitman. 1964. A laboratory technique for testing bark beetle attractants. *CBTI* 22(6):283-290.
- 1056 Crisan, E.V. 1964. Isolation and culture of thermophilic fungi. *CBTI* 22(6):291-301.
- 1057 Henry, S.M., R.J. Block, and T.W. Cook. 1964. Methionine sulfoxide and other combined amino acids in the German cockroach. *Adv. in Chem.* 44:85-95.
- 1058 Jacobson, J.S., L.H. Weinstein, R.H. Mandl, and D.C. McCune. 1964. The determination of fluorine in plants. (Abstr.) *Abstrs. Sixth Internat. Congr. Biochem.* N.Y.C. 1964 5:455.
- 1059 Hirumi, H., and K. Maramorosch. 1964. Insect tissue culture: Use of blastokinetic stage of leafhopper embryo. *Science.* 144(3625):1465-1467.
- 1060 Mitsuhashi, J., and K. Maramorosch. 1964. Inoculation of plant tissue cultures with aster yellows virus. *Virology* 23(2):277-279.
- 1061 Tulecke, W. 1964. Advantages of plant tissue cultures for working at the cellular level. *Phytomorphology* 14(1):148-154.
- 1062 Shikata, E., S.W. Orenski, H. Hirumi, J. Mitsuhashi, and K. Maramorosch. 1964. Electron micrographs of wound-tumor virus in an animal host and in a plant tumor. *Virology* 23(3):441-444.
- 1063 Tulecke, W. 1964. A haploid tissue culture from the female gametophyte of *Ginkgo biloba* L. *Nature* 203(4940):94-95.
- 1064 Turner, N.J., L.E. Lempel, R.D. Battershell, H. Bluestone, and D. Lamont. 1964. A new foliage protectant fungicide, tetrachloroisophthalonitrile. *CBTI* 22(7):303-310.
- 1065 Jack, R.C.M. 1964. Lipid metabolism in fungi. I. Lipids of the Conidia of *Glomerella cingulata*. *CBTI* 22(7):311-333.
- 1066 Jack, R.C.M. 1964. Lipid metabolism in fungi. II. Characterization of conidial lipids of *Glomerella cingulata* by infrared solution spectra. *CBTI* 22(7):335-342.
- 1067 Hirumi, H., and K. Maramorosch. 1964. Insect tissue culture: Further studies on the cultivation of embryonic leafhopper tissues in vitro. *CBTI* 22(7):343-352.

- 1068 Mathre, D.E. 1964. Survey of *Ceratocystis spp.* associated with bark beetles in California. CBTI 22(7):353-362.
- 1069 Mathre, D.E. 1964. Pathogenicity of *Ceratocystis ips* and *Ceratocystis minor* to *Pinus ponderosa*. CBTI 22(7):363-338.
- 1070 Weinstein, L.H., R.F. Bozarth, C.A. Porter, R.H. Mandl, and B.G. Tweedy. 1964. Automated analysis of phosphorus containing compounds in biological materials. I. A quantitative procedure. CBTI 22(7):389-397.
- 1071 Plaisted, P.H., and M.L. Thorton. 1964. A method for separating some triazine degradation products from plants. CBTI 22(7):399-403.
- 1072 Mandl, R.H. 1964. An automatic recording flow monitor for beta radiation. CBTI 22(7):405-407.
- 1073 Flemion, F., and J. Beardow. 1964. Histological studies of physiologically dwarfed peach seedlings. II. Structure of anomalous areas in the shoot tip. CBTI 22(8):413-423.
- 1074 Moorefield, H.H., and M.H.J. Weiden. 1964. Influence of the methylenedioxyphenyl structure in synergism of a carbamate insecticide for house flies. CBTI 22(8):425-433.
- 1075 Mitsuhashi, J., and K. Maramorosch. 1964. Leafhopper tissue culture: Embryonic, nymphal, and imaginal tissues from aseptic insects. CBTI 22(8):435-460.
- 1076 Vite, J.P., R.I. Gara, and H.D. von Scheller. 1964. Field observations on the response to attractants of bark beetles infesting southern pines. CBTI 22(8):461-470.
- 1077 Owens, R.G., and H.N. Specht. 1964. Root-knot histogenesis. CBTI 22(8):471-489.
- 1078 Rubinstein, J.H., and R.G. Owens. 1964. Thymidine and uridine incorporation in relation to the ontogeny of root-knot syncytia. CBTI 22(8):491-502.
- 1079 Flemion, F., and J. Beardow. 1964. Physiologically dwarfed seedlings of Flory dwarf peach. Note. CBTI 22(8):503-505.
- 1080 Henry, S.M., and T.W. Cook. 1964. Amino acid supplementation by symbiotic bacteria in the cockroach. Note. CBTI 22(8):507.
- 1081 Mathre, D.E. 1964. Effect of *Ceratocystis ips* and *Ceratocystis minor* on the free sugar pool in ponderosa pine sapwood. CBTI 22(8):509-511.
- 1082 Maramorosch, K. 1964. Interrelationships between plant pathogenic virus and insects. Ann. N.Y. Acad. Sci. 118:363-370.
- 1083 Orenski, S.W. 1964. Effects of a plant virus on survival, food acceptability, and digestive enzymes of corn leafhoppers. Ann. N.Y. Acad. Sci. 118:374-383.
- 1084 McCune, Weinstein, Jacobson, and Hitchcock. 1964. Some effects of atmospheric fluoride on plant metabolism. Jour. Air Pollution Control Assoc. 14(11):465-468.

- 1085 McCallan, S.E.A. 1964. The nature of the action of sulfur fungicides. *Agrochimica* IX(1):15-44.
- 1086 Hitchcock, A.E., L.H. Weinstein, D.C. McCune, and J.S. Jacobson. 1964. Effects of fluorine compounds on vegetation, with special reference to sweet corn. *Air Pollution Control Assoc. Jour.* 14(12):503-508.
- 1087 Hirumi, H., and K. Maramorosch. 1965. The *in vitro* cultivation of embryonic leafhopper tissues. *Exp. Cell Res.* 36:625-631.
- 1088 McCune, D.C., A.E. Hitchcock, J.S. Jacobson, and L.H. Weinstein. 1965. Fluoride accumulation and growth of plants exposed to particulate cryolite in the atmosphere. *CBTI* 23(1):1-11.
- 1089 Pitman, G.B., R.A. Kliefoth, and J.P. Vite. 1965. Studies of the pheromone of *Ips confusus* (*Le Conte*). II. Further observations of the site of production. *CBTI* 23(14):13-17.
- 1090 Turner, N.J. 1965. A simple laboratory technique for determining the diffusion rates and patterns of lethal concentrations of nematocides in soil. (Note). *CBTI* 23(1):19-20.
- 1091 Turner, N.J. 1965. A small plot logarithmic dosage sprayer with an internally located concentrate container. (Note). *CBTI* 23(1):21-22.
- 1092 Tulecke, W., S.W. Orenski, R. Taggart, and L. Colavito. 1965. Isolation of an organism resembling *Achromobacter liquefaciens*. *Jour. Bacteriology* 89(3):905-906.
- 1093 Bozarth, R.F., and C.C. Chow. 1965. Pea enation mosaic virus: A new local lesion host. *Phytopathology* 55(4):492-493.
- 1094 Weinstein, L.H., R.F. Bozarth, R.H. Mandl, S. Gross, and J.F. Goldman. 1965. Automated analysis of phosphorus-containing compounds in biological materials. II. Acid-soluble nucleotides. *Anal. Biochem.* 11(1):155-158.
- 1095 Weinstein, L.H., R.H. Mandl, D.C. McCune, J.S. Jacobson, and A.E. Hitchcock. 1965. Semi-automated analysis of fluoride in biological materials. *J. Air Pollution Control Assoc.* 15(5):222-225.
- 1096 McNew, G.L. 1965. The ever-expanding horizons for plant research. *Proc. Fla. State Hort. Soc.* 77:XVIII-XL.
- 1097 Maramorosch, K., J. Mitsuhashi, G. Streissle, and H. Hirumi. 1965. Animal and plant viruses in insect tissues *in vitro*. (Abstr.) *Bacteriological Proc.* 1965:V138.
- 1098 De Hertogh, A.A., D.C. McCune, J. Brown, and D. Antoine. 1965. The effect of antagonists of RNA and protein biosynthesis on IAA and 2,4-D induced growth of green pea stem sections. *CBTI* 23(3):23-31.
- 1099 Tulecke, W., R. Taggart and L. Colavito. 1965. Continuous cultures of higher plant cells in liquid media. *CBTI* 23 (2): 33-46.

Reprint numbers 1100-1999 were not used. Next reprint number is 2000.

- 2000 Vite, J.P. 1965. Die wirkung pflanzen-und insektenrigener lockstoffe auf pityophthorus and pityogenes (coleoptera:scolytidae). *Naturwissenschaften* 52 (10): 267.
- 2001 Orenski, Murray and Maramorosch. 1965. Further studies on the feeding habits of aster yellows virus-carrying corn leafhoppers. *CBTI* 23(3):47-50.
- 2002 Turner and Lamont. 1965. Control of fungal diseases in the greenhouse with thermally induced dusts of tetrachloroisophthalonitrile. *CBTI* 23 (3) 51-54.
- 2003 Gara, Vite and Cramer. 1965. Manipulation of *Dendroctonus frontalis* by use of a population aggregating pheromone. *CBTI* 23 (3): 55-66.
- 2004 Maramorosch, K. 1965. New techniques for the study of insect-transmitted plant virus. *Proc. Intern. Congr. Entomol.* 12: 712-713.
- 2005 Maramorosch, K. 1965. New applications of tissue culture in the study of leafhopper-borne virus. *Proc. Inter. Conf. on Plant Tissue* pgs 541-546.
- 2006 Tulecke, W. and A. Rutner. 1965. Changes in the amino acid composition of medium and cells of a plant tissue culture during growth in a liquid medium containing arginine. *Proc. Inter. Conf.* pgs.541-546
- 2007 McNew, G. 1965. Control by regulating the interaction of host and pest. *Research in Pesticides.* pg. 380.
- 2008 Chandler, C. and S. Mavrodineanu. 1965. Meiosis in *Larix laricina koch*. *CBTI* 23 (4): 67-75.
- 2009 Bedard, W. D. 1965. The biology of *Tomicobia tibialis* (Hymenoptera: Pteromalidae) parasiting *Ips confusus* (Coleoptera: scolytidae) in California. *CBTI* 23(4): 77-81.
- 2010 Staples, R.C. 1965. Acid phosphatases from healthy and rust infected pinto bean leaves. II. Effect of removing apical meristem. *CBTI* 23(4): 83-91.
- 2011 Wang, D. and D.Mancini. 1965. Anion exchange chromatography of organic acids and nucleotides. An improved gradient elution system. *CBTI* 23(4): 93-100.
- 2012 Flemion, F. and J. Beardow. 1965. Production of peach seedlings from nonchilled seeds. II. Effect of subsequent cold periods on growth. *CBTI.* 23(4): 101-107.
- 2013 Barton, L.V. 1965. Viability of seeds of *Theobroma cacao L.* *CBTI.* 23(4): 109-122.
- 2014 Orenski, S.W., J.Mitsubishi, S.M. Ringel, J.F. Martin and K. Maramorosch. 1965. A presumptive bacterial symbiont from the eggs of the six-spotted leafhopper, *Macrostelus fascifrons stal.* *CBTI.* 23(4): 123-126.
- 2015 App, A.A. and L.V. Barton. 1965. Effect of streptomycin on in vitro amino acid incorporation by rice embryo ribosomes. *CBTI.* 23(4): 127-134.
- 2016 Flemion, F., J. Beardow and H. Mee. 1965. A virus in physiologically dwarfed peach seedlings. A preliminary report. *CBTI.* 23(4): 135-138.

- 2017 Jack, R.C.M. and J.H. Mack. 1965. Storage of paper chromatograms sprayed with diphenylamine-urea. *CBTI*. 23(4): 139-140.
- 2018 Bozarth, R.F., R.E. Browning and S. Gross. 1965. A simple device for the preparation of linear and complex linear sucrose density gradients. *CBTI*. 23(4): 141-142.
- 2019 Staples, R.C. and W.K. Wynn. 1965. The physiology of uredospores of the rust fungi. *Botan. Rev.* 31(4): 537-564.
- 2020 Shikata, E. and M. Maramorosch. 1965. Plant tumor virus in arthropod host: Microcrystal formation. *Nature* 208(5009): 507-508.
- 2021 Shikata, E. and K. Maramorosch. 1966. An electron microscope study of plant neoplasia induced by wound tumor virus. *J. Nat. Cancer Inst.* 36(1): 97-116.
- 2022 Gershon, H. and J.A.A. Renwick. 1965. Gas chromatography of fluorinated fatty acids. 1. Separation and identification of lower 2- fluorofatty acids. *J. Chromatography* 20: 134-137.
- 2023 Shikata, E. and K. Maramorosch. 1965. Electron microscopic evidence for the systemic invasion of an insect host by a plant pathogenic virus. *Virology* 27(4): 461-475.
- 2024 Cecil, R. and M. Jack. 1965. Relation of triglycerides to phosphoglycerides in fungi. *J. Amer. Oil Chemist Soc.* 42: 1051-1053.
- 2025 Pitman, G.B., J. P. Vite and J.A.A. Renwick. 1966. Variation in olfactory behavior of *Ips confusus* (LeC.) (*Coleoptera: Scolytidae*) between laboratory and field bioassays. *Naturwissenschaften* 53: 46-47.
- 2026 Pitman, G.B. 1966. Studies on the pheromone of *Ips confusus* (LeConte) III. The influence of host material on pheromone production. *CBTI* 23(5): 147-157.
- 2027 Staples, R.C., A.A.App, W. J. McCarthy and M.M. Gerosa. 1966. Some properties of ribosomes from uredospores of the bean rust fungus. *CBTI*. 23(5):159-164.
- 2028 Roberts, D.W. 1966. Life history and parasites of *Evora hemidesma* (Zeller) (*Lepidoptera: Olethreutidae*). *CBTI*. 23(5): 165-170.
- 2029 Owens, R.G. and R.F. Bottino. 1966. Changes in host cell wall composition induced by root-knot nematodes. *CBTI*. 23(5): 171-180.
- 2030 Owens, R.C. and H.N. Specht. 1966. Biochemical alterations induced in host tissues by root-knot nematodes. *CBTI*. 23(5): 181-198.
- 2031 Owens, R.G. and J.H. Rubinstein. 1966. Metabolic changes induced by root-knot nematodes in host tissues. *CBTI*. 23(5): 199-213.
- 2032 Cecil, R., M. Jack and W.G. Smith Jr. 1966. Autoradiography of radioactive thin-layer chromatograms. *CBTI*. 23(5): 215-217.
- 2033 Tulecke, W. 1965. Haploidy versus diploidy in the reproduction of cell type. *Symp. Soc. Develop. Biol.* 24: 217-241.

- 2034 Gershon, H., J.A.A. Renwick, W.K. Wynn and R. D'Ascoli. 1966. Organic fluorine compounds.I. Reinvestigation of the action of perchloryl fluoride on diethylmalonate. *J. Organic Chem.* 31: 916-918.
- 2035 Renwick, J.A.A., G.B. Pitman and J.P. Vite. 1966. Detection of a volatile compound in hindguts of male *Ips confusus* (*Le conte*) (*Coleoptera: Scolytidae*). *Naturwissenschaften* 53: 83-84.
- 2036 Gershon, H., R. Parmegiani, A. Weiner and R. D'Ascoli. 1966. Fungal spore wall as a possible barrier against potential antifungal agents of the group, copper (II) complexes of 5-halogeno-and 5-nitro-8-quinolinols. *CBTI.* 23(6): 219-228.
- 2037 Wynn, W.K., R.C. Staples, B. Strouse and C. Gajdusek. 1966. Physiology of uredospores during storage. *CBTI.* 23(6): 229-242.
- 2038 Pitman, G.B., J.A.A. Renwick and J.P. Vite. 1966. Studies on the pheromone of *Ips confusus* (*LeConte*). IV. Isolation of the attractive substance by gas-liquid chromatography. *CBTI.* 23(6): 243-250.
- 2039 Goenaga, A. and P.H. Plaisted. 1966. Production of diammonium oxalate monohydrate by *Sclerotium rolfsii* sac. *CBTI.* 23(6): 251-252.
- 2040 Cecil, R. and M. Jack. 1966. Lipid patterns in the major classes of fungi. *J. Bacteriology* 91(5): 2101-2102.
- 2041 Orenski, Bystricky and Maramorosch. 1966. 'Polyspheroids' from American soils. *Nature* 210(5032): 221.
- 2042 Torgeson, D.C. 1966. Mode of action and relation of chemical structure to activity of paint fungicides. *J. Paint Techn.* 38(498): 368-370.
- 2043 Roberts, D. 1966. Toxins from the entomogenous fungus *Metarrhizium anisopliae*. I. Production in submerged and surface cultures and in inorganic and organic nitrogen media. *J. Invertebrate Path.* 8(2): 212-221.
- 2044 Roberts, D. 1966. Toxins from the entomogenous fungus *Metarrhizium anisopliae*. II Symptoms and detection in moribund hosts. *J. Invert. Path.* 8(2): 222-227.
- 2045 McNew, G.L. 1966. The role of chemicals in controlling plant diseases. In *Pest Control by Chemical, Biological, Genetic and Physical Means Symp.* USDA, ARS 33-110 pgs. 41-52.
- 2046 Jacobson, J.S., D.C. McCune, L.H. Weinstein, R.H. Mandl and A.E. Hitchcock. 1966. Studies on the measurement of fluoride in air and plant tissues by the Willard-Winter and semiautomated methods. *J. Air Poll. Control Assoc.* 16: 367-371.
- 2047 Jacobson, J.S., L.H. Weinstein, D.C. McCune and A.E. Hitchcock. 1966. The accumulation of fluorine by plants. *J. Air Pollution Assoc.* 16(8): 412-417.
- 2048 Shikata, E., K. Maramorosch and R.R. Granados. 1966. Electron microscopy of pea enation mosaic virus in plants and aphid vectors. *Virology* 29(3): 426-436.
- 2049 Tweedy, B.G. and N. Turner. 1966. The mechanism of sulfur reduction by conidia of *Monilinia fructicola*. *CBTI* 23(7): 255-265.

- 2050 Barton, L.V. 1966. Viability of pyrethrum seeds. CBTI 23(7): 267-268.
- 2051 Wang, D. 1966. Carbon metabolism of ¹⁴C-labeled amino acids in wheat leaves. IV. Effect of glyoxylate acetate or pyruvate on alanine metabolism. CBTI. 23(7): 269-273.
- 2052 Granados, R.R., K. Maramorosch, T. Everett and T.P. Pirone. 1966. Transmission of corn stunt virus by a new leaf-hopper vector, *Graminella nigrifrons*. CBTI. 23(7): 275-280
- 2053 McNew, G.L. 1966. Progress in the battle against plant disease. Nat. Acad. Sci. Publ. no. 1402: 73-101.
- 2054 McNew, G.L. 1966. The place of plant pathology in a general biology curriculum. Am. Biol. Teacher 28(6): 439-444.
- 2055 McNew, G.L. 1966. The nature and cause of disease in plants. Am. Biol. Teacher 28(6): 445-461.
- 2056 Tulecke, W. and L. Colavito. 1966. Fruit-tree leaf rollers on plant tissue cultures and on leaves of *Ginkgo biloba*. J. Econ. Entomol. 59(5): 1277-1278.
- 2057 Maramorosch, K. and P. Oman. 1966. U.S.- Japan joint conference on arthropod-borne plant viruses. BioScience 16(9): 608-610.
- 2058 Barton, L.V. 1966. The effect of storage conditions on the viability of bean seeds. CBTI. 23(8): 281-284.
- 2059 Barton, L.V. 1966. Effects of temperature and moisture on viability of stored lettuce, onion and tomato seeds. CBTI. 23(8): 285-290.
- 2060 Gershon, H. and G.W. McClure Jr. 1966. Approach to the study of the degradation of dimethyl tetrachloroterephthalate. CBTI. 23(8):291-294.
- 2061 McCune, D.C., A.E. Hitchcock and L.H. Weinstein. 1966. Effects of mineral nutrition on the growth and sensitivity of gladiolus to hydrogen fluoride. CBTI. 23(8): 295-299.
- 2062 Bozarth, R.F. and C.C. Chow. 1966. Pea enation mosaic virus: Purification and properties. CBTI 23(8): 301-309.
- 2063 Miller, L.P. 1966. Studies on the binding and release of toxicants by fungus conidia. Rev. Roum. Biol. Ser. Botan. 11: 143-149.
- 2064 App, A.A. and M.M. Gerosa. 1966. A soluble fraction requirement in the transfer reaction of protein synthesis by rice embryo ribosomes. Plant Physiol. 41: 1420-1424.
- 2065 Shikata, E. and K. Maramorosch. 1966. Electron microscopy of pea enation mosaic virus in plant cell nuclei. Virology 30: 439-454.
- 2066 Wang, D. and D. Mancini. 1966. Studies on ribonucleic acid-polyphosphate in plants. Biochem. Biophys. Acta 129: 231-239.

- 2067 Turner, N.J. 1966. Industrial fungicides. *Encyc. Chem. Techn.* 2(10): 228-236.
- 2068 Gershon, H., R. Parmegiani and R. D'Ascoli. 1967. Pyrimidines. V. Some higher 5-substituted 2,4,6-trichloropyrimidines. *J. Medicinal Chem.* 10: 113-115.
- 2069 Orenski, S.W., V. Bystricky and K. Maramorosch. 1966. The occurrence of microbial forms of unusual morphology in European and Asian soils. *Canadian J. Microbiology.* 12: 1291-1292.
- 2070 Tokumitsu, T. and K. Maramorosch. 1966. Survival of aphid cells in vitro. *Experimental Cell Research* 44: 652-655.
- 2071 Barton, L.V. and J. L. Bray. 1967. Biochemical studies of dormancy and after-ripening of seeds. IV. Further studies on changes in contents of some amino acids and organic acids. *CBTI.* 23 (9): 311-318.
- 2072 Chandler, C. 1967. A progress report on the larch improvement program at Boyce Thompson Institute. *CBTI.* 23 (9): 319-326.
- 2073 Szabo, S. and L.E. Limpel. 1967. A portable step-logarithmic sprayer for field research work. *CBTI.* 23 (9): 327-329.
- 2074 Flemion, F., R.E. Dengler, N.G. Dengler and K.D. Stewart. 1967. Ultrastructure of the shoot apices and leaves of normal and physiologically dwarfed peach seedlings I. Plastid development. *CBTI.* 23 (9): 331-344.
- 2075 Staples, R.C. and D. Bedigian. 1967. Preparation of an amino acid incorporation system from uredospores of the bean rust fungus. *CBTI.* 23 (9): 345-347.
- 2076 Gershon, H. and R. Parmegiani. 1967. Organic fluorine compounds. II. Synthesis and antigunal properties of 2-fluoro fatty acids. *J. Med. Chem.* 10: 186-188.
- 2077 Parmegiani, R. and H. Gershon. 1967. Effect of substituents in the 5- and 5,7-positions of 8-quinolinol on antifungal activity. *Bacteriological Proc.* 1967:34.
- 2078 Vite, J.P. 1967. Sex attractants in frass from bark beetles. *Science* 156 (3771): 105.
- 2079 Hirumi, R. Granados and Maramorosch. 1967. Electron microscopy of a plant-pathogenic virus in the nervous system of its insect vector. *J. Virology* 1(2): 430-444.
- 2080 Tulecke, W. 1966. Continuous cultures of higher plant cells in liquid media: The advantages and potential use of a phytostat. *Ann. N.Y. Acad. Sci.* 139: 162-175.
- 2081 Wang, D. 1967. Biosynthesis of nucleotides in wheat. IV. Metabolism of specifically ¹⁴C-labeled orotic acid. *Canadian J. Biochem.* 45: 721-728.
- 2082 Gara, R.I. 1967. Studies on the attack behavior of the southern pine beetle. I. The spreading and collapse of outbreaks. *CBTI* 23(10): 349-354.
- 2083 Renwick, J.A.A. 1967. Identification of two oxygenated terpenes from the bark beetle *Dendroctonus frontalis* and *Dendroctonus brevicomis*. *CBTI.* 23(10): 355-360.

- 2084 Gershon, H. and J.A.A. Renwick. 1967. Gas chromatography of fluorinated fatty acids. II. Separation and identification of the methyl esters of 2-fluorofatty acids to 18 carbons. *J. Chromatography* 28: 399-403.
- 2085 Gershon, H., S.G. Schulman and A.D. Spevack. 1967. Organic fluorine compounds. III. Action of perchloryl fluoride on substituted ethyl cyanoacetates and animal toxicities of the fluorinated products. *J. Med. Chem.* 10: 536-541.
- 2086 Granados, R.R., H. Hirumi and K. Maramorosch. 1967. Electron microscopic evidence for wound-tumor virus accumulation in various organs of an inefficient leafhopper vector, *Agalliopsis novella*. *J. Invertebrate Pathology* 9: 147-159.
- 2087 Shikata, E. and K. Maramorosch. 1967. Electron microscopy of wound virus assembly sites in insect vectors and plants. *Virology* 32: 363-377.
- 2088 Tulecke, W. 1967. Plastid function in plant tissue cultures. I. Porphyrin synthesis by dark-grown haploid and diploid albino cultures. *Am. J. Botany* 54: 797-804.
- 2089 Tokumitsu, T. and K. Maramorosch. 1967. Cytoplasmic protrusions in insect cells during mitosis in vitro. *J. Cell Biology* 34: 677-883.
- 2090 Crisan, E.V. and E. Mazzucca. 1967. Separation of aflatoxin on selectively deactivated silicic acid. *CBTI* 23(11): 361-365.
- 2091 Dekhuijzen, H., H. Singh and R.C. Staples. 1967. Some properties of hyphae isolated from bean leaves infected with the bean rust fungus. *CBTI*. 23(11): 367-372.
- 2092 Gaumer, G.C. and R.I. Gara. 1967. Effects of phloem temperature and moisture content on development of the southern pine beetle. *CBTI* 23(11): 373-377.
- 2093 Crisan, E.V. 1967. A temperature controlled shaker for microbial cultures. *CBTI*. 23(11): 379-380.
- 2094 Mack, J.H., R.C.M. Jack, S.H. Harkness and L.P. Miller. 1967. Increased conidial production of *Glomerella cingulata* by L- asparagine. *CBTI*. 23(11): 381
- 2095 Shikata, E. and K. Maramorosch. 1967. Electron microscopy of the formation of wound tumor virus in abdominally inoculated insect vectors. *J. Virology* 1(5): 1052-1073.
- 2096 Roberts, D.W. 1967. Some effects of *Metarrhizium anisopliae* and its toxins on mosquito larvae. *Proc. Internat. Cllq. on Insect Path. & Microbial Control* pgs. 243-246.
- 2097 Crisan, E.V. and A.T. Grefig. 1967. The formation of aflatoxin derivatives. *CBTI*. 24(1): 3-8.
- 2098 Maclean, D.C., L.H. Weinstein and R.H. Mandl. 1967. Continuous monitoring of high concentrations of atmospheric fluoride. *CBTI*. 24(1): 9-10.
- 2099 Szabo, S.S. and L.E. Limpel. 1967. A seeder for greenhouse use. *CBTI*. 24(1): 11-14.
- 2100 Manasse, R. and H. Gershon. 1967. A convenient preparation of lysopine and its dibutyl NE-trifluoroacetyl derivative. *CBTI*. 24(1): 15-16.

- 2101 McNew, G.L. 1967. Boyce Thompson Institute for Plant Research, Inc. Science 158: 1489-1492.
- 2102 McCune, D.C., L.H. Weinstein, D.C. Maclean and J.S. Jacobson. 1967. The concept of hidden injury in plants. Amer. Assn. Adv. Sci. 476: 33-44.
- 2103 Streissle, G., L. Rosen and T. Tokumitsu. 1967. Host specificity of wound tumor virus and reoviruses and their serologic relationships. Archiv fur Gesamte Virusforschung 22(3/4): 409-416.
- 2104 Staples, R.C., D. Bedigian and P. Williams. 1968. Evidence for polysomes in extracts of bean rust uredospores. Phytopathology 58: 151-154.
- 2105 Streissle, G., V. Bystricky, R.R. Granados and K. Strohmaier. 1968. Number of virus particles in insects and plants infected with wound tumor virus. J. Virology 2: 214-217.
- 2106 Wang, D. and J. Beardow. 1968. Thermo-, photo-effect on Rosaceous seeds during germination as expressed in subsequent seedling development. CBTI 24(2): 17-23.
- 2107 Preuss, P.W., A.G. Lemmens and L.H. Weinstein. 1968. Studies on fluoro-organic compounds in plants. I. Metabolism of 2-14C fluoroacetate. CBTI. 24(2): 25-31.
- 2108 Gershon, H. and R. Parmegiani. 1968. Secondary mechanisms of antifungal action of substituted 8-quinolines. I. 5-and 5,7-substituted 8-methoxyquinolines. CBTI. 24(2): 33-36.
- 2109 Crisan, E.V. 1968. A 2,4-Dinitrophenylhydrazine spray for the identification of aflatoxin B1 on thin-layer chromatoplates. CBTI. 24(2): 37-38.
- 2110 Vite, J.P. and G.B. Pitman. 1968. Bark beetle aggregation: Effects of feeding on the release of pheromones in *Dendroctonus* and *Ips*. Nature 218(5137): 169-170.
- 2111 Dekhuijzen, H. and R.C. Staples. 1968. Mobilization factors in uredospores and bean leaves infected with bean rust fungus. CBTI. 24(3): 39-51.
- 2112 Rice, R.E. 1968. Observations on host selection by *Tomicobia tibialis* ashmead (*Hymenoptera: Pteromalidae*). CBTI. 24(3): 53-56.
- 2113 Granados, R.R., R.D. Gustin, K. Maramorosch and W.N. Stoner. 1968. Transmission of corn stunt virus by the leafhopper *Deltocephalus sonor* ball. CBTI. 24(3): 57-59.
- 2114 Granados, R.R., L.S. Ward and K. Maramorosch. 1968. Insect viremia caused by a plant-pathogenic virus: Electron microscopy of vector hemocytes. Virology 34: 790-796.
- 2115 Pitman, G. B., J.P. Vite, G.W. Kinzer and A.F. Fentiman, Jun. 1968. Bark beetle attractants: *Trans-verbenol* isolated from *Dendroctonus*. Nature 218(5137): 168-169.

- 2116 MacLean, D.C., D.C. McCune, L.H. Weinstein, R.R. Mandl and G.N. Woodruff. 1968. Effects of acute hydrogen fluoride and nitrogen dioxide exposures on citrus and ornamental plants of Central Florida. *Environmental Sci. & Tech.* 2: 444-449.
- 2117 Roberts, D.W. and R.R. Granados. 1968. An inexpensive device for pulling glass micro-needles for injection of small arthropods. *Ann. Entomol. Soc. Amer.* 61(4): 1042-1043.
- 2118 Granados, R.R., K. Maramorosch and E. Shikata. 1968. Mycoplasma: Suspected etiologic agent of corn stunt. *Proc. Nat. Acad. Sci.* 60(3): 841-844.
- 2119 Vite, J.P. and J.A.A. Renwick. 1968. Insect and host factors in the aggregation of the southern pine beetle. *CBTI.* 24(4): 61-63.
- 2120 Renwick, J.A.A. and J.P. Vite. 1968. Isolation of the population aggregating pheromone of the southern pine beetle. *CBTI.* 24(4): 65-68.
- 2121 Coster, J.E. and R.I. Gara. 1968. Studies on the attack behavior of the southern pine beetle. II. Response to attractive host material. *CBTI.* 24(4): 69-75.
- 2122 Gara, R.I. and J.E. Coster. 1968. Studies on the attack behavior of the southern pine beetle. III. Studies on the attack behavior of the southern pine beetle. III. Sequence of tree infestation within stands. *CBTI.* 24(4): 77-85.
- 2123 Vite, J.P. and R.G. Crozier. 1968. Studies on the attack behavior of the southern pine beetle. IV. Influence of host condition on aggregation pattern. *CBTI.* 24(4): 87-93.
- 2124 Wynn, W.K. 1968. Development of controlled conditions for the study of red stele disease of strawberries. *CBTI.* 24(4): 95-102.
- 2125 Maramorosch, K., E. Shikata and R.R. Granados. 1968. Structures resembling mycoplasma in diseased plants and in insect vectors. *N.Y. Acad. Sci. Trans.* 30(6): 841-855.
- 2126 Schulman, G. and H. Gershon. 1968. Intramolecular hydrogen bonding in the lowest excited singlet states of some substituted salicylic acids. *J. Phys. Chem.* 72(9): 3297-3299.
- 2127 Gershon, H. 1968. 7-nitro-8-quinolinols and their copper(II) complexes. Implications of the fungal spore wall as a possible barrier against potential antifungal agents. *J. Med. Chem.* 11: 1094-1096.
- 2128 Granados, R.R., J.S. Granados, K. Maramorosch and J. Reinitz. 1968. Corn stunt virus: Transmission by three cicadellid vectors. *J. Econ. Ent.* 61(5): 1282-1287.
- 2129 Vite, P. 1968. Timber industry attacks bark beetle problem through basic research. *Texas Industry* pgs. 14-16.
- 2130 Schulman, S.G. and H. Gershon. 1968. The absence of fluorescence in 5-nitro-8-quinolinol. *J. Phys. Chem.* 72(10): 3692-3695.

- 2131 Granados, R.R. and R.K. Chapman. 1968. Identification of some new aster yellows virus strains and their transmission by the aster leafhopper, *Macrostes fascifrons*. *Phytopathology* 58(12): 1685-1692.
- 2132 Staples, R.C. 1968. Protein synthesis by uredospores of the bean rust fungus. *Neth. J. Plant Path.* 78: 25-36.
- 2133 Bozarth, R.F. and C. C. Chow. 1968. Pea enation mosaic virus: differential suspension of virus components in buffer and sucrose. *Virology* 36(3): 506-508.
- 2134 Roberts, D.W. 1968. Entomogenous fungi as microbial control agents; some areas for research emphasis. *Pro. Joint U.S.-Japan Seminar on microbial Control of Insect Pests, Fukuoka* pgs. 21-23.
- 2135 Roberts, D.W. and R.R. Granados. 1968. A poxlike virus from *Amsacta moorei* (*Lepidoptera:Arctilidae*). *J. Invert. Path.* 12(1): 141-143.
- 2136 Granados, R.R. and R.K. Chapman. 1968. Heat inactivation and interactions of four aster yellows virus strains in their vector, *Macrostes fascifrons* *Virology* 36(3): 333-342.
- 2137 Yaniv, Z. and R.C. Staples. 1968. Study of the transfer of amino acids from aminoacyl transfer ribonucleic acid into protein by ribosomes from uredospores of the bean rust fungus. *CBTI*. 24(5): 103-108.
- 2138 Wang, D. 1968. Metabolism of amino acids and amides in germinating seeds. *CBTI*. 24(5): 109-115.
- 2139 Wang, D. 1968. Metabolism of ¹⁴C-labeled proline in higher plants. *CBTI*. 24(5): 117-122.
- 2140 Wynn, W.K. and C. Gadjdusek. 1968. Metabolism of glucomannan-protein during germination of bean rust spores. *CBTI*. 24(5): 123-138.
- 2141 Hirumi, H. and K. Maramorosch. 1969. Mycoplasma-like bodies in the salivary glands of insect vectors carrying the aster yellows agent. *J. Virology* 3(1): 82-84.
- 2142 Schulman, S.G., W.P. Kilroy and H. Gershon. 1968. Mixed ligand chelates of copper(II) with 8-quinolinol and arylhydroxycarboxylic acids. I. Electronic absorption spectra. *J. Physical. Chem.* 72(10): 3372-3375.
- 2143 Streissle, G. and R.R. Granados. 1968. The fine structure of wound tumor virus and reovirus. *Archiv. f.d. Gesamte Virusforschung* 25(3/4): 369-372.
- 2144 Bozarth, R.F. 1969. Pea enation mosaic virus: Glucose catabolism in leaves and pods of infected peas. *Phytopathology* 59(3): 389-390.
- 2145 Tokumitsu, T. and K. Maramorosch. 1967. Bubbling of dividing leafhopper cells *In vitro*. 2nd Internat. Colloq. Invert. Tissue Culture Inst. Lombardo: Fondazione Baselli pgs. 10-13.
- 2146 Hirumi, H., T.A. chen and K. Maramorosch. 1968. Intra-uterine development of the root knot nematode in organ culture. 2nd Internat. Colloq. Invert. Tissue Culture Inst. Lombardo: Fondazione Baselli pgs. 147-152

- 2147 Hirumi, H. and K. Maramorsch. 1968. Electron microscopy of wound tumor virus in cultured embryonic cells of the leafhopper *Macrostes fascifrons*. 2nd Internat. Colloq. Invert. Tissue Culture Inst. Lombardo: Fondazione Baselli pgs. 203-217.
- 2148 Hirumi, H., T.A. Chen, K.J. Lee and K. Maramorosch. 1968. Ultrastructure of the feeding apparatus of the nematode *Trichodorus christiei*. J. Ultrastructure research 24: 434-453.
- 2149 Turner, N.J. and R.D. Battershell. 1969. The relative influence of chemical and physical properties on the fungitoxicity of tetrachloroisophthalonitrile and some of its analogues. CBTI 24(6): 139-147.
- 2150 Gershon, H., R. Parmegiani, M.W. McNeil and Y. Hinds. 1969. Secondary mechanisms of antifungal action of substituted 8-quinolinols. II. Substituted quinolines. CBTI. 24(6): 149-150.
- 2151 Wood, H.A. and G. Streissle. 1969. Heterogeneity of wound tumor virus ribonucleic acid. Bacteriological Proceedings pg. 167.
- 2152 Pitman, G.B., J.P. Vite, G.W. Kinzer and A.F. Fentiman, Jr. 1969. Specificity of population-aggregating pheromone in *Dendroctonus*. J. of Insect Physiology 15: 363-366.
- 2153 Kinzer, G.W., A.F. Fentiman, T. F. Page, R.L. Foltz, J.P. Vite and G. B. Pitman. Bark beetle attractants: Identification, Synthesis and field bioassay of a new compound isolated from *Dendroctonus*. Nature 221: 477-478.
- 2154 Ploaie, P. and K. Maramorosch. 1969. Electron microscopic demonstration of particles resembling mycoplasma (PPLO) or psittacosis-lymphogranuloma-trachoma group in plants infected with European yellows-type diseases. Phytopathology 59(5): 536-544.
- 2155 Mussell, H.W. and D.J. Morre. 1969. A Quantitative bioassay specific for polygalacturonases. Analytical Biochemistry 28(1/3): 353-360.
- 2156 Vite, J.P. and G.B. Pitman. 1969. Insect and host odors in the aggregation of the western pine beetle. Canadian Entomologist 101(2): 113-117.
- 2157 Pitman, G.B. and J.P. Vite. 1969. Aggregation behavior of *Dendroctonus ponderosae* (Coleoptera:Scolytidae) in response to chemical messengers. Canadian Entomologist 101(2): 143-149.
- 2158 Preuss, P.W. and L.H. Weinstein. 1969. Studies on fluoro-organic compounds in plants. II. Defluorination of fluoroacetate. CBTI. 24(7):151-155.
- 2159 Yaniv, Z. and R.C. Staples. 1969. Transfer activity of ribosomes from germinating uredospores. CBTI 24(7): 157-163.
- 2160 Maclean, D.C., R.E. Schneider and L.H. Weinstein. 1969. Accumulation of fluoride by forage crops. CBTI 24(7): 165-166.
- 2161 Chen, T.A., H. Hirumi and K. Maramorosch. 1969. Tobacco rattle virus in roots of mechanically inoculated plants. Phytopathologische Zeitschrift 65(1): 15-20.

- 2162 Roberts, D.W. 1969. Toxins from the entomogenous fungus, *Metarrhizium anisopliae*: Isolation of destruxins from submerged cultures. *J. Invert. Pathol.* 14(1): 82-88.
- 2163 Gershon, H., S.G. Schulman and D. Olney. 1969. Mixed ligand chelation of copper (II) with 8-quinolinol and arylhydroxycarboxylic acids. III. The role of stability constants in antifungal action. *CBTI* 24(8): 167-171.
- 2164 Granados, R.R. 1969. Electron microscopy of plants and insect vectors infected with the corn stunt disease agent. *CBTI*. 24(8): 173-187.
- 2165 Coster, J.E. 1969. Observations on *Platypus flavicornis* (Coleoptera:Platypodidae) in southern pine beetle infestations. *Annals. Entomol. Soc. Amer.* 62(5): 1008-1011.
- 2166 Vite, J.P. and G.B. Pitman. 1969. Aggregation behavior of *Dendroctonus brevicomis* in response to synthetic pheromones. *J. Insect Physiology* 15: 1617-1622.
- 2167 Schulman, S.G. and H. Gershon. 1969. Mixed ligand chelates of copper (II) with 8-quinolinol and arylhydroxy carboxylic acids. II. Formation constants. *J. Inorganic and Nuclear Chem.* 31: 2467-2476.
- 2168 Maramorosch, K., E. Shikata, H. Hirumi and R.R. Granados. 1969. Multiplication and cytopathology of a plant tumor virus in insects. *Nat. Cancer Inst. Monograph* 31: 493-507.
- 2169 McCune, D.C. 1969. The technical significance of air quality standards. Fluoride criteria for vegetation reflect the diversity of plant kingdom. *Environmental Science and Technology* 3(8): 720-735.
- 2170 App, A.A. 1969. Involvement of aminoacyl-tRNA transfer factors in polyphenylalanine synthesis by rice embryo ribosomes. *Plant Physiology* 44(8): 1132-1138.
- 2171 Gershon, H., M.W. McNeil and Y. Hinds. 1969. 5-Nitro-8-quinolinols and their copper(II) complexes. Implications of the fungal spore wall as a possible barrier against potential antifungal agents. *J. Med. Chem.* 12: 1115-1117.
- 2172 Pitman, G.B. 1969. Pheromone response in pine bark beetles: Influence of host volatiles. *Science* 166: 905-906.
- 2173 Jacobson, J.S. and D.C. McCune. 1969. Interlaboratory study of analytical techniques for fluorine in vegetation. *J. Assoc. Off. Anal. Chem.* 52(5): 894-899.
- 2174 Manasse, R. 1969. Absence of arginase in healthy and crown gall tissues of tomato. *Canad. J. Botany* 47(11): 1815-1816.
- 2175 Maclean, D.C., O.F. Roark, G. Folkerts and R.E.Schneider. 1969. Influence of mineral nutrition on the sensitivity of tomato plants to hydrogen fluoride. *Environ. Sci. and Tech.* 3(11): 1201-1204.
- 2176 Gershon, H., M.W. McNeil and A.T. Grefig. 1969. Reinvestigation of the action of N-halosuccinimides on bis(8-quinolinolato) copper(II). *J. Organic Chem.* 34(11): 3268-3270.

- 2177 Rice, R.E. 1969. Response of some predators and parasites of *Ips confusus* (LeC) (Coleoptera: Scolytidae) to olfactory attractants. CBTI. 24(9): 189-194.
- 2178 Mandl, R.H. 1969. Modification of the mast ozone meter for continuous operation. CBTI 24(9): 195-196.
- 2179 Staples, R.C., L. Ramakrishnan and Z. Yaniv. 1970. Membrane-bound ribosomes in germinated uredospores. Phytopath. 60(1): 58-62.
- 2180 Mussell, H.W. and R.J. Green, Jr. 1970. Host colonization and polygalacturonase production by two tracheomycotic fungi. Phytopathology 60(2): 192-195.
- 2181 Renwick, J.A.A. and J.P. Vite. 1969. Bark beetle attractants: Mechanism of colonization by *Dendroctonus frontalis*. Nature 224(5225): 1222-1223.
- 2182 Weinstein, L.H. and D.C. McCune. 1970. Implications of air pollution for plant life. Proc. Amer. Philosoph. Soc. 114(1): 18-21.
- 2183 Vite, J.P. and D.L. Williamson. 1970. *Thanasimus dubius*: Prey perception. J. Insect Physiology 16:233-239.
- 2184 Weinstein, L.H., D.C. McCune, J.F. Mancini and P. Van Leuken. 1969. Acid-soluble nucleotides of pinto bean leaves at different stages of development. Plant Physiology 44: 1499-1510.
- 2185 Granados, R.R. and D.W. Roberts. 1970. Electron microscopy of a poxlike virus infecting an invertebrate host. Virology 40(2): 230-243.
- 2186 Wood, H.A. and G. Streissle. 1970. Wound tumor virus: Purification and fractionation of the double-stranded ribonucleic acid. Virology 40(2): 329-334.
- 2187 Ramakrishnan, L. and R.C. Staples. 1970. Evidence for a template RNA in resting uredospores. CBTI 24(10): 197-202.
- 2188 Turner, N.J. and R. Battershell. 1970. The relationship between chemical reactivity, oil:water partitioning and temperature on the rate of fungicidal action of tetrachloroisophthalonitrile and some of its analogues. CBTI 24(10): 203-212.
- 2189 McCune, D.C., L.H. Weinstein and J.F. Mancini. 1970. Effects of hydrogen fluoride on the acid-soluble nucleotide metabolism of plants. CBTI. 24(10): 213-225.
- 2190 Turner, N.J. 1970. Rate of fungicidal action. CBTI. 24(10): 227-229.
- 2191 Ristich, S.S. 1970. Gigantic fungi. CBTI. 24(10): 231-233.
- 2192 Shikata, E., K. Maramorosch and K.C. Ling. 1969. Presumptive mycoplasma etiology of yellows diseases. FAO Plant Prot. Bull. 17(6): 121-128.
- 2193 Chen, T.A. and R.R. Granados. 1970. Plant-pathogenic mycoplasma-like organism: Maintenance in vitro and transmission to *Zea mays* L. Science 167: 1633-1636.
- 2194 Pitman, G.B. and J.P. Vite. 1970. Field response of *Dendroctonus pseudotsugae* (Coleoptera: Scolytidae) to synthetic *frontalis*. Ann. Ent. Soc. Amer. 63(3): 661-664.

- 2195 Bozarth, R.F. and R.E. Browning. 1970. Effect of infection of southern bean mosaic virus and the diurnal cycle on the free nucleotide pool of bean leaves. *Phytopathology* 60(5): 852-855.
- 2196 Roberts, D.W. 1970. *Coelomomyces, Entomophthora, Beauveria* and *Metarrhizium* as parasites of mosquitoes. *Misc. Pub. Ent. Soc. Amer.* 7(1): 140-155.
- 2197 McClure, G.W. 1970. Accelerated degradation of herbicides in soil by the application of microbial nutrient broths. *CBTI* 24(11): 235-240.
- 2198 Schulman, S.G. and H. Gershon. 1970. Mixed ligand chelates of copper(II) with 8-quinolinol and arylhydroxycarboxylic acids. part IV. Electronic absorption spectra of copper(II) chelates with 5-halogeno-8-quinolinols and arylhydroxycarboxylic acids. *Analytica Chimica Acta.* 50: 348-350.
- 2199 Ramakrishnan, L. and R.C. Staples. 1970. Changes in ribonucleic acids during uredospore differentiation. *Phytopathology* 60(7): 1087-1091.
- 2200 Vite, J.P. and G.B. Pitman. 1970. Management of western pine beetle populations: use of chemical messengers. *J. Econ. Entomol.* 63(4): 1132-1135.
- 2201 Schneider, R.E. and D.C. Maclean. 1970. Relative susceptibility of seven grain sorghum hybrids to hydrogen fluoride. *CBTI.* 24(12); 241-243.
- 2202 Gershon, H., R.L.Rodin, R.Parmegiani and P.K. Godfrey. 1970. Antifungal properties of methyl esters of fatty acids and 2-fluoro fatty acids. *CBTI.* 24(12): 245-247.
- 2203 Maramorosch, K. 1970. Insect infection caused by a plant tumor virus. *World Review of Pest Control* 9(1): 29-41.
- 2204 Maramorosch, K. and N. Jernberg. 1970. An adjustable multiple-insect holder for microinjection. *J. Econ. Entomol.* 63(4): 1216-1218
- 2205 Wolanski, B. and K. Maramorosch. 1970. Negatively stained mycoplasmas: Fact or artifact. *Virology* 42: 319-327.
- 2206 Gershon, H., R.L.Rodin, R.Parmegiani and P.K. Godfrey. 1970. Organic fluorine compounds. IV. Synthesis and antifungal properties of 2-fluoro fatty acid amides. *J. Medicinal Chem.* 13:1237-1239.
- 2207 Macko, V., R.C. Staples, H. Gershon and J.A.A. Renwick. 1970. Self-inhibitor of bean rust uredospores: Methyl 3,4-dimethoxycinnamate. *Science* 170: 539-540.
- 2208 Gershon, H. and M.W. Mcneil. 1970. Action of N-halosuccinimide on 8-quinolinol. *J. Organic Chem.* 35: 3993-3994.
- 2209 Maramorosch, K., R.R. Granados and H. Hirumi. 1970. Mycoplasma diseases of plants and insects. *Advances in Virus Research.* 16: 135-193.
- 2210 McNew, G.L. 1970. The Boyce Thompson Institute program in forest entomology that led to the discovery of pheromones in bark beetles. *CBTI.* 24(13): 251-262
- 2211 Renwick, J.A.A. and J.P. Vite. 1970. Systems of chemical communication in *Dendroctonus*. *CBTI.* 24(13): 283-292.

- 2212 Vite, J.P. and J.A.A. Renwick. 1970. Differential diagnosis and isolation of population attractants. *CBTI*. 24(13): 323-328.
- 2213 Hughes, P.R. and G.B. Pitman. 1970. A method for observing and recording the flight behavior of tethered bark beetles in response to chemical messengers. *CBTI*. 24(13): 329-336.
- 2214 Renwick, J.A.A. 1971. Chemical aspects of bark beetle aggregation. *CBTI*. 24(13): 337-341.
- 2215 Vite, J.P. 1970. Pest management systems using synthetic pheromones. *CBTI*. 24(13): 343-350.
- 2216 Jacobson, J.S. and L.I. Heller. 1971. A simple, rapid potentiometric method for the estimation of fluorine in vegetation. *Environmental Letters* 1(1): 43-47.
- 2217 Granados, R.R. and R.F. Whitcomb. 1971. Transmission of corn stunt mycoplasma by the leafhopper *Baldulus tripsaci*. *Phytopathology* 61(2): 240-241.
- 2218 Ramakrishnan, L. and R.C. Staples. 1971. Effect of storage on the rate of incorporation of uridine into ribonucleic acid by germinating uredospores. *Phytopathology*. 61(2): 244-245.
- 2219 App, A.A., M.G. Bulis and W.J. McCarthy. 1971. Dissociation of ribosomes and seed germination. *Plant Physiol.* 47(1): 81-86.
- 2220 Wood, H.A. 1971. Buoyant density changes of cowpea mosaic virus components at different pH values. *Virology* 43(2): 511-513.
- 2221 Gershon, H. and M.W. McNeil. 1971. 7-Iodo-8-quinolinol from 5-amino-8-quinolinol via a Gattermann reaction. *J. Heterocyclic Chem.* 8: 129-131.
- 2222 Hibben, C.R. and B. Wolanski. 1971. Dodder transmission of a mycoplasma from ash witches-broom. *Phytopathology* 61(2): 151-156.
- 2223 Pogo, B.G.T., S. Dales, M. Bergoin and D.W. Roberts. 1971. Enzymes associated with an insect poxvirus. *Virology* 43(1): 306-309.
- 2224 McCune, D.C. and L.H. Weinstein. 1971. Metabolic effects of atmospheric fluorides on plants. *Environmental Pollution* 1(2): 169-174.
- 2225 Pitman, G.B. and J.P. Vite. 1971. Predator-prey response to western pine beetle attractants. *J. Econ. Entomol.* 64(2): 402-404.
- 2226 Pitman, G.B. 1971. Trans-verbenol and alpha-pinene: their utility in manipulation of the mountain pine beetle. *J. Econ. Entomol.* 64(2): 426-430.
- 2227 Frederick, R.J., M.Klein and K. Maramorosch. 1971. Acquisition and retention of tetracycline-hydrochloride by plants. *Plant Disease Reporter* 55: 223-226
- 2228 Yaniv, Z. and R.C. Staples. 1971. The purification and properties of the aminoacyl-tRNA binding enzyme from rust uredospores. *Biochimica et Biophysica Acta* 232(4): 717-725.

- 2229 Williamson, D.L. 1971. Olfactory discernment of prey by *Medetera bistrata* (Diptera: Dolichopodidae). Ann. Entomol. Soc. Amer. 54(3): 586-589.
- 2230 Gershon, H., W.P. Kilroy and S.G. Schulman. 1971. Reinterpretation of the apparent fungitoxicity of bis(5,7-dichloro-8-quinolinolato) copper (II) at low pH values. Implications of the fungal spore wall as a barrier against potential antifungal agents. CBTI. 24(14): 351-355
- 2231 Turner, N.J. 1971. The effect of oil: water partitioning and chemical reactivity on the reaction of halogenated isophthalonitriles with *Monilinia fructicola* spores. CBTI 24(14): 357-361
- 2232 Hitchcock, A.E., D.C. McCune, L.H. Weinstein, D.C. Maclean, J.S. Jacobson and R.H. Mandl. 1971. Effects of hydrogen fluoride fumigation on alfalfa and orchard grass: a summary of experiments from 1952-1965. CBTI. 24(14): 363-385.
- 2233 Buckley, E.H. 1971. Maintenance of a functional environment in the lower portion of the Hudson River estuary: an appraisal of the estuary. CBTI. 24(14): 387-396.
- 2234 Ristich, S.S. 1971. Western and South American species of *Solanum* in New York State. CBTI. 24(14): 397-400.
- 2235 McNew, G.L. 1971. The growing awareness of the profession of biology. Bios. 42(3): 51-57.
- 2236 Mussell, H.W. and R.C. Staples. 1971. Phytoalexin-like compounds apparently involved in strawberry resistance to *Phytophthora fragariae*. Phytopathology 61(5): 515-517.
- 2237 Hirumi, H., D.J. Raski and N.O. Jones. 1971. Primitive muscle cells of nematodes: Morphological aspects of platymyarian and shallow coelomarian muscles in two plant parasitic nematodes, *Trichodorus christiai* and *Longidorus elongatus*. J. Ultrastructure Research 34(5/6): 517-543.
- 2238 Bozarth, R.F. 1971. Comparative properties of necrotic ringspot virus from peach and cherry. Phytopathology 61(5): 532-537.
- 2239 Wood, H.A., R.F. Bozarth and P.B. Mislivec. 1971. Viruslike particles associated with an isolate of *Penicillium brevicompactus*. Virology 44(3): 592-598.
- 2240 Mussell, H. and F.E. Fay. 1971. A method for screening strawberry seedlings for resistance to *Phytophthora fragariae*. Plant Disease Reporter 55(6): 471-472.
- 2241 Gershon, H., M.W. McNeil and S.G. Schulman. 1971. Electrophilic halogenation of 8-quinolinol and its copper(II) chelate. J. Organic Chemistry 36(12): 1616-1619.
- 2242 McCarthy, W.J., A.A. App, and W.J. Crotty. 1971. The effects of calcium on in vitro polyphenylalanine synthesis by rice ribosomes. Biochimica et Biophysica Acta 246(1): 132-140.
- 2243 Weinstein, L.H. and D.C. McCune. 1971. Effects of fluoride on agriculture. J. Air Poll. Control Assoc. 21(7): 410-413.

- 2244 Bozarth, R.F., H.A. Wood and A. Mandelbroth. 1971. The *Penicillium stoloniferum* virus complex: Two similar double-stranded RNA virus-like particles in a single cell. *Virology* 45: 516-523.
- 2245 Macko, V., R.C. Staples, P.J. Allen and J.A.A. Renwick. 1971. Identification of the germination self-inhibitor from wheat stem rust uredospore. *Science* 173: 835-836.
- 2246 Manassa, R.J. and J. Lipetz. 1971. A simplified method for isolating bacteria-free crown gall tissue from *Vinca rosea*. *Canadian J. Botany* 49(7): 1255-1257
- 2247 Vite, J.P. and J.A.A. Renwick. 1971. Population aggregating pheromone in the bark beetle, *Ibs grandicollis*. *J. Insect Physiology* 17(9): 1699-1704.
- 2248 McNew, G.L. 1971. Interrelationships between agricultural chemicals and environmental quality in perspective. *J. Environmental Quality* 1(1): 18-22.
- 2249 Gershon, H., M.W. McNeil, R. Parmegiani and P.K. Godfrey. 1971. Antifungal activity of substituted nitrobenzenes and anilines. *Applied Microbiology* 22(3): 438-440.
- 2250 Streissle, G. 1970. The persistence of virus in wound tumor tissue cultures. *Proc. 2nd Internat. Plant Tissue Culture Conf.* pgs. 499-501.
- 2251 Hirumi, H., G.J. Burton and K. Maramorosch. 1971. Electron microscopy of Friend murine leukemia virus in the mid-gut of experimentally infected mosquitoes. *J. Virology* 8(5): 801-804.
- 2252 Gershon, H. and M.W. McNeil. 1971. Nitration of 5-halogeno-8-quinolinols and accompanying Reverdin rearrangement. *J. Heterocyclic Chem.* 8: 821-824.
- 2253 Gershon, H. and M.W. McNeil. 1971. 8-quinolinol sulfonic acids. *J. Organic Chem.* 36: 3494-3496.
- 2254 Williamson, D.L. and J.P. Vite. 1971. Impact of insecticidal control on the southern pine beetle population in East Texas. *J. Econ. Entomol.* 64(6): 1440-1444.
- 2255 Vite, J.P. and J.A.A. Renwick. 1971. Inhibition of *Dendroctonus frontalis* response to frontalin by isomers of brevicomin. 58(8): 418.
- 2256 McCune, D.C. 1971. Problems involved in devising air quality criteria for the effects of fluorides on vegetation. *Amer. Indus. Hygiene Assoc. Jour.* 32(10): 697-701.
- 2257 Gershon, H., M.W. McNeil, R. Parmegiani and P.K. Godfrey. 1972. Secondary mechanisms of antifungal action of substituted 8-quinolinols. 3,5,7,8-substituted quinolinols. *J. Medicinal Chem.* 15(1): 105-106.
- 2258 Granados, R.R. 1971. Development of an insect poxvirus in the nervous system of *Estigmene acrea* larvae. *IV Internat. Colloqu. of Insect Pathology* pgs. 110-114.
- 2259 Yendol, W.G. and D.W. Roberts. 1971. Is microbial control with entomogenous fungi possible? *Proc. 4th Internat. Colloqu. on Insect Pathology.* pgs. 28-42.

- 2260 Klein, M., R.J. Frederick and K. Maramorosch. 1972. Chemotherapy of aster yellows: tetracycline-hydrochloride uptake by healthy and diseased plants. *Phytopathology* 62(1): 111-115.
- 2261 Manasse, R.J., R.C. Staples, R.R. Granados and E. G. Barnes. 1972. Morphological, biological and physical properties of *Agrobacterium tumefaciens* bacteriophages. *Virology* 47(2): 375-384.
- 2262 Staples, R.C., Z.Yaniv and W.R. Bushnell. 1972. Spore germination and ribosomal activity in the rust fungi. I. Comparison of a bean rust fungus and a culturable wheat rust fungus. *Physiological Plant Pathology* 2: 27-35.
- 2263 Gershon, H. 1971. Implications of fungal spore wall as a barrier against potential antifungal agents. Proc. 2nd IUPAC Internat. Congr. of Pesticide Chem. pgs. 363-377.
- 2264 Banjac, B.P., P. Hunt and K. Maramorosch. 1972. Mycoplasma-like bodies associated with lethal yellowing disease of coconut palms. *Phytopathology* 62(2): 298-299.
- 2265 Wood, H.A. and R.F. Bozarth. 1972. Properties of virus-like particles of *Penicillium chrysogenum*: One double-stranded RNA molecule per particle. *Virology* 47: 604-609.
- 2266 Bozarth, R.F. and A. Goenaga. 1972. Purification and properties of mycoferritin from *Mortierella alpina*. *Canadian J. of Microbiology*. 18(5): 619-622.
- 2267 Roberts, D.W. and M. Bergoin. 1971. Purification and characterization of an inspectpox virus of *Lepidoptera*. Proc. 4th Internat. Colloq. on Insect Pathology pgs. 380-385.
- 2268 Knopf, J.A.E. and G.B. Pitman. 1972. Aggregation pheromone for manipulation of the Douglas-fir beetle. *J. Econ. Entomol.* 65(3): 723-726.
- 2269 Gershon, H., R.Parmegiani and P.K.Godfrey. 1972. Antifungal activity of 5-,7-, and 5,7-substituted 2-methyl-8-quinolinols. *Antimicrobiol Agents and Chemotherapy* 1(5): 373-375.
- 2270 McClure, G.W. 1972. Degradation of phenylcarbamates in soil by mixed suspension of IPC-adapted microorganisms. *J. Environ. Quality* 1(2): 177-180.
- 2271 Maramorosch, K., M. Klien and B.S. Wolanski. 1972. Beitrag zur Aetiologie der Hexenbesenkrankheit der Kaktee *Opuntia tuna* (tuna monstrosa). *Experientia* 28: 362-363.
- 2272 Renwick, J.A.A. and J.P. Vite. 1972. Pheromones and host volatiles that govern aggregation of the six-spined engraver beetle, *Ips calligraphus*. *J. Insect Physiology* 18: 1215-1219.
- 2273 McNew, G.L. 1972. Concept of pest management. *Pest Control: Strategies for the Future* pgs. 119-133.
- 2274 Gershon, H. and M.W. Mcneil. 1972. 5- and 7-substituted 2-methyl-8-quinolinols. *J. Heterocyclic Chem.* 9: 659-667.

- 2275 Mussell, H.W. and B. Strouse. 1972. Characterization of two polygalacturonases produced by *Verticillium albo-atrum*. *Canadian J. of Botany*. 50(6): 625-632.
- 2276 Gershon, H., M.W. McNeil, R. Parmegiani and P.K. Godfrey. 1972. Antifungal activity of 7- and 5,7- substituted 8-quinolinols. *J. of Medicinal Chemistry* 15(9): 987-989.
- 2277 Holmes, F.O., H. Hirumi and K. Maramorosch. 1972. Witches' broom of willow: *Salix* yellows. *Phytopathology* 62(8): 826-828.
- 2278 Wood, H.A. 1972. Genetic complementation between the two nucleo-protein components of cowpea mosaic virus. *Virology* 49(2): 592-598.
- 2279 Hooper, G.R., H.A. Wood, R. Myers and R.F. Bozarth. 1972. Virus-like particles in *penicillium brevi-cimpactum* and *P. stoloniferum hyphae* and spores. *Phytopathology* 62(7): 823-825.
- 2280 Manasse, R.J. 1972. A new culture flask for plant tissue suspension cultures. *Experientia* 28(6): 723-724.
- 2281 Jacobson, J.S. and D.C. McCune. 1972. Collaborative study of analytical methods for fluoride in vegetation: effects of individual techniques on results. *J. of the Association of Official Analytical Chemists*. 55(5): 991-1003.
- 2282 Bozarth, R.F. 1972. Mycoviruses: a new dimension in microbiology. *Environ. Health Perspectives* 2: 22-39.
- 2283 Banjac, B.P., K. Maramorosch and H.R. Von Uexkull. 1972. Preliminary observations of cadang-cadang diseased coconut palm leaves by electron microscopy. *Plant Disease Reporter* 56(8): 643-645.
- 2284 Hibben, C.R. and R.F. Bozarth. 1972. Identification of an ash strain of tobacco ringspot virus. *Phytopathology* 62(9): 1023-1029.
- 2285 Gershon, H., M.W. McNeil, S.G. Schulman and J.W. Parks. 1972. Stability constants of some sterically hindered bis(8-quinolinolato)copper(II) complexes. *Analytica Chimica Acta* 62: 43-47.
- 2286 Macko, V., R.C. Staples, J.A.A. Renwick and J. Pirone. 1972. Germination self-inhibitors of rust uredospores. *Physiological Plant Pathology* 2: 347-355.
- 2287 App, A.A. and R.R. Granados. 1972. Effect of nuclear polyhedrosis virus infection on polyribosomes content of gypsy moth larvae. (*Porthetria dispar*). *Experimental Cell Research* 74:519-524.
- 2288 McClure, G.W. 1972. Nutrient distribution in root zones. III. Further studies of the effects of phosphorus distribution on corn and wheat. *Canadian J. Botany* 50(11): 2275-2282.
- 2289 Maramorosch, K. 1972. The enigma of mycoplasmas in plants and insects. *Phytopathology* 62(11): 1230-1231.
- 2290 Gershon, H. and M.W. McNeil. 1972. Electrophilic halogenation of 8-methoxyquinoline. *J. of Organic Chem.* 37(25): 4078-4082.

- 2291 Hirumi, H and K. Maramorosch. 1972. Natural degeneration of mycoplasma-like bodies in an aster yellows infected host plant. *Phytopathologische Zeitschrift* 75: 9-26.
- 2292 Vite, J.P., G.B. Pitman, A.F. Fentiman, Jr. and G.W. Kinzer. 3-methyl-2-cyclohexen-1-ol isolated from *Dendroctonus*. *Naturwissenschaften* 59(10): 469-470.
- 2293 Madrid, F., J.P. Vite and J.A.A. Renwick. 1972. Evidence of aggregation pheromones in the ambrosia beetle *Platypus flavicornis*. *Zeitschr. f. angew. Entomologie* 72(1): 73-79.
- 2294 Maramorosch, K. 1972. Origin and classification of viruses and mycoplasmas. A Symposium on Ecosystems 4: 195-217.
- 2295 Weinstein, L.H., D.C. McCune, J.F. Mancini, L.J. Colavito, D. H. Silberman and P. VanLeuken. Studies on fluoro-organic compounds in plants. III. Comparison of the biosynthesis of fluoro-organic acids in *Acacia georginae* with other species. *Environmental Research* 5(4): 393-408.
- 2296 Pitman, G.B. 1973. Further observations on Douglure in a *Dendroctonus pseudotsuga* management system. *Environmental Entomology* 2(1): 109-112.
- 2297 Gershon, H., M.W. McNeil, A.T. Grefig and S.G. Schulman. 1973. Spectrometric evidence for the formation of sulfate esters of 8-quinolinol and some of its sulfonated derivatives in oleum. *Analytica Chimica Acta* 63(2): 454-458.
- 2298 Mussell, H.W. 1973. Endopolygalacturonase: evidence for involvement in Verticillium wilt of cotton. *Phytopathology* 63(1): 62-70.
- 2299 Staples, R.C. and Z. Yaniv. 1973. Spore germination and ribosomal activity in the rust fungi. II. Variable properties of ribosomes in the Uredinales. *Physiological Plant Pathology* 3: 137-145.
- 2300 Maramorosch, K. 1973. Principles and techniques in plant virology. *Amer. Soc. Microbiol. News* 39(4): 294-295
- 2301 Hirumi, H. 1973. Morphological characterization of the leafhopper AC-20 line cells. *Proc. 3rd Internat. Colloq. on Invert. Tissue Culture*. pgs. 233-254.
- 2302 Granados, R.R. 1973. Electron microscopy of wound tumor virus in leafhopper cell cultures. *Proc. 3rd Internat. Colloq. on Invert. Tissue Culture*. pgs. 491-499.
- 2303 Maramorosch, K. 1973. The past, present and future of invertebrate tissue culture. Closing remarks of the Third International Colloquium. *Proc. 3rd Internat. Colloq. on Invert. Tissue Culture*. pgs. 501-509.
- 2304 Granados, R.R. 1973. Entry of an insect poxvirus by fusion of the virus envelope with the host cell membrane. *Virology* 52(1): 305-309.
- 2305 McIntosh, A.H., K. Maramorosch and C. Rechteris. 1973. Adaptation of an insect cell line (*Agallia constricta*) in a mammalian cell culture medium. *In Vitro* 8(5): 375-378.
- 2306 Mussell, H.W. and R.C. Staples. 1973. Use of mycelial suspension for increasing *Puccinia graminis f. sp. tritici* in axenic culture. *Phytopathology* 63(5): 653-654.

- 2307 Manahan, C.O., A.A.App and C.Still. The presence of polyadenylate sequences in the ribonucleic acid of a higher plant. *Biochem. Biophys. Research Commun.* 53(2): 588-595.
- 2308 Hirumi, H. and K. Maramorosch. 1973. Interacytoplasmic mycoplasma-like bodies in phloem parenchyma cells of aster yellows-infected *Nicotiana rustica*. *Phytopathologische Zeitschrift* 77: 71-83.
- 2309 Wood, H.A. 1973. Viruses with double-stranded RNA genomes. *J. of Gen. Virology* 20: 61-85.
- 2310 Maramorosch, K. 1973. Book review of Annual Review of Phytopathology, Vol. 10. *Amer. Soc. Microbiology News* 39(8): 566.
- 2311 Maramorosch, K. 1973. Book review of Tropical American Plant Disease (Neotropical phytopathology problems). *Amer. Soc. Microbiology News* 39(8): 567.
- 2312 Maramorosch, K., L.F. Martorell, J. Bird and P.L. Melendez. 1972. *Platyplus Rugulosus* (Platygodidae) and *Xyleborus ferrugineus* (Scolytidae) and certain diseases of coconut palms in Puerto Rico. *J. N.Y. Entomol. Soc.* 80(4): 238-240.
- 2313 Roberts, D.W. 1973. Means for insect regulation: Fungi. *Annals N.Y. Acad. Sci.* 217: 76-84.
- 2314 Hughes, P.R. 1973. Effect of a pinene exposure on trans-verbenol synthesis in *Dendroctonus ponderosa* Hopk. *Naturwissenschaften* 60(5): 261-262.
- 2315 Manahan, C.O. and A.A. App. 1973. An Arginyl-transfer ribonucleic acid protein transferase from cereal embryos. *Plant Physiology* 52(1): 13-16.
- 2316 Hughes, P.R. 1973. *Dendroctonus*: Production of pheromones and related compounds in response to host monoterpenes. *Zeitsch. Angew. Ent.* 73(3): 294-312.
- 2317 Banjac, B.P., K. Maramorosch, V.T. John and S.P. Raychaudhuri. 1973. Rice yellow dwarf in India: mycoplasma-like etiology. *FAO Plant Protection Bull* 21(1): 1-4.
- 2318 Banjac, B.P., K. Maramorosch, S.P. Raychaudhuri, V.V. Chenulu, A. Varma and S.K. Ghosh. 1973. Electron microscopy of graft-transmitted Sandel Spike. *FAO Plant Protection Bull.* 21(2): 25-26.
- 2319 McCune, D.C. 1973. Summary and synthesis of plant toxicology. *Advances in Chemistry Series No. 122*: 48-62.
- 2320 Mandl, R.H., L.H. Weinstein, D.C. McCune and M. Keveny. 1973. A Cylindrical, open-top chamber for the exposure of plants to air pollutants in the field. *J. Environ. Quality* 2(3): 371-376.
- 2321 Renwick, J.A.A., P.R. Hughes and T. Ty. 1973. Oxidation products of pinene in the bark beetle, *Dendroctonus frontalis*. *J. of Insect Physiology*.
- 2322 Granados, R.R. and D.J. Meehan. 1973. Morphology and differential counts of hemocytes of healthy and wound tumor virus-infected *Agallia constricta*. *J. Invert. Path.* 22(1): 60-69.

- 2323 Maramorosch, K., B.P. Biljana, J.Bird and L.J. Liu. 1973. Electron microscopy of ratoon stunted sugar cane: Microorganisms in Xylem. *Phytopathologische Zeitschrift* 77: 270-273.
- 2324 Wood, H.A. and R. F. Bozarth. 1973. Heterokaryon transfer of viruslike particles and a cytoplasmically inherited determinant in *Ustilago maydis*. *Phytopathology* 63(8): 1019-1021.
- 2325 Mussell, H.W. and F. Fay. 1973. Aseptic zoospore production by *Phytophthora fragariae*. *Phytopathology* 63(8): 1081-1082.
- 2326 Roberts, D.W., M. Shapiro and R.L. Rodin. 1973. Dehiscence of *Coelomomyces psoroorhorae* sporangia from *Aedes taeniorhynchus*: Induction by amines and amino acids. *J. Invert. Path.* 22(2): 175-181.
- 2327 Gershon, H., M.W. McNeil, R. Parmegiani, P.K. Godfrey and J. M. Baricko. 1973. Antifungal properties of 2- alkenoic acids and 2-bromo alkenoic acids. *Antimicrobial agents and Chemotherapy*. 4(4): 435-438.
- 2328 McIntosh, A.H. and K. Maramorosch. 1973. Retention of insect virus infectivity in mammalian cell cultures. *J. N.Y. Entomol. Soc.* 81(3): 175-182.
- 2329 Wood, H.A., T.S. Papas, H. Hirumi and M.A. Chirigos. 1973. Antigenic and biochemical characterization of the C-type particle of the stable porcine kidney cell line PK-15. *J. Virology* 12(5): 1184-1186.
- 2330 Rodin, R.L. and H. Gershon. 1973. Photochemical α -chlorination of fatty acid chlorides by thionyl chloride. *J. Organic Chem.* 38(22): 3919-1921.
- 2331 Maclean, D.C. and R.E. Schneider. 1973. Fluoride accumulation of forage: Continuous vs. intermittent exposures to hydrogen fluoride. *J. Environmental Quality* 2(4): 501-503.
- 2332 Maramorosch, K. and H. Hirumi. 1973. Phytoferritin accumulations in leaves of diseased coconut palms. *Protoplasma* 78: 175-180.
- 2333 Gershon, H., M.W. McNeil and E.D. Bergmann. 1973. Amino acid analogs, 2,3-fluoroamine acids. I. Chain length three to seven carbon atoms. *J. Medicinal Chem.* 16(12): 1407-1409.
- 2334 Roberts, D.W. and W.G. Yendol. 1973. Since *Baccillus thuringiensis*. *Misc. Publ. Ent. Soc. Amer.* 9: 53-55.
- 2335 Granados, R.R. 1973. Insect poxvirus: Pathology, morphology and development. *Misc. Publ. Ent. Soc. Amer.* 9(2): 73-94.
- 2336 Maramorosch, K. 1973. "Introductory remarks" given at the Mycoplasma and Mycoplasma like agents of human, animal and plant conference, New York Academy of Sciences. *Ann. N.Y. Acad Sci.* 225:5-6.
- 2337 Maramorosch, K. 1973. "Concluding remarks" given at the Mycoplasma and Mycoplasma like agents of human, animal and plant conference. *Ann. N.Y. Acad. Sci.* 225: 531-532.

- 2338 McIntosh, A.H. and K. Maramorosch. 1973. Mycoplasma and acholeplasma in plants. *Ann. N.Y. Acad. Sci.* 225: 330-333.
- 2339 Hirumi, H., J.W. Frankel, C.O. Prickett and K. Maramorosch. 1974. Brief communication: Coexistence of particles resembling herpesvirus and type-C virus in feather follicle epithelium of chickens. *J. National Cancer Inst.* 52(1): 303-306.
- 2340 Macko, V. and R.C. Staples. 1973. Regulation of uredospore germination and germ tube development. *Bull. Torrey Bot. Club* 100(4): 223-229.
- 2341 Klein, M., R.J. Frederick and K. Maramorosch. 1973. Aster yellows: The effect of sulfa drugs. *Ann. N.Y. Acad. Sci.* 225: 522-530.
- 2342 Wood, H.A., R.F. Bozarth, J.Adler and D.W. Mackenzie. 1974. Proteinaceous virus-like particles from an isolate of *Aspergillus flavus*. *J. Virology* 13(2): 532-534.
- 2343 Mussell, H.W. 1973. Correlations between proteolytic enzyme production and virulence in cotton isolates of *Verticillium albo-atrum*. *Proc. Beltwide Cotton Production Research Conference*.
- 2344 Hirumi, H. and K. Maramorosch. 1973. Ultrastructure of the aster yellows agent. Mycoplasma-like bodies in sieve tube elements of *Nicotiana rustica*. *Ann. N.Y. Acad. Sci.* 225: 201-222.
- 2345 Musumeci, M.R., W.B.C. Moraes and R.C. Staples. 1974. A Self-inhibitor in uredospores of the coffee rust fungus. *Phytopathology* 64(1): 71-73.
- 2346 Federici, B. A., R.R. Granados, D.W. Anthony and E.I. Hazard. 1974. An entomopoxvirus and nonoccluded virus-like particles in larvae of the chironomid *Goeldichironomus holoprasinus*. *Invertebrate Pathology*. 23:117-120.
- 2347 Maramorosch, K. 1973. Book review of "Moving frontiers in invertebrate virology". *ASM News* 39(12): 817-818.
- 2348 Maramorosch, K. 1974. Book review of "Bacterial and fungal diseases of plants in the tropics". *Amer. Soc. Microbiol. News* 40(2): 146-147.
- 2349 McCarthy, W.J., R.R. Granados and D.W. Roberts. 1974. Isolation and characterization of entomopox virions from virus-containing inclusions of *Amsacta moorei* (Lepidoptera: Arctiidae). *Virology* 59: 59-69.
- 2350 Jacobson, J.S. and W.A. Feder. 1974. A regional network for environmental monitoring: Atmospheric oxidant concentrations and foliar injury to tobacco indicator plants in the eastern United States. *Mass. Agric. Exp. Sta. Bull.* 604: 31.
- 2351 Sirois, D.L. 1973. Community metabolism and water quality in the lower Hudson River Estuary. *Hudson River Ecology. 3rd Symp. on Hudson River Ecology.* 15: 22-23.
- 2352 Granados, R.R., W.J. McCarthy and M. Naughton. 1974. Replication of a cytoplasmic polyhedrosis virus in an established cell line of *Trichoplusia ni* cells. *Virology* 59(2): 584-586.

- 2353 Macko, V. and J.A.A. Renwick. 1974. Reversal of self-inhibition by peroxidase and hydrogen peroxide in wheat stem rust uredospores: Mode of action. *Phytopathology* 64(6): 901-902.
- 2354 Vite, J.P., F. Islas, J.A.A. Renwick, P.R. Hughes and R.A. Kliefoth. 1974. Biochemical and biological variation of southern pine beetle populations in North and Central America. *Zeitschr. Angew. Entomol.* 75(4): 422-435.
- 2355 McClure, G.W. 1974. Degradation of anilide herbicides by protham-adapted microorganisms. *Weed Science* 22(4): 323-329.
- 2356 Manasse, R.J. 1974. Physiological comparisons of transformed (crown gall) and nontransformed *Vinca rosea* cells. *In Vitro* 9(6): 434-440.
- 2357 Gershon, H. 1974. Antifungal activity of bischelates of 5-,7- and 5,7-halogenated 8-quinolinols with copper(II). Determination of approximate dimensions of the long and short axes of the pores in the fungal spore wall. *J. Med. Chem.* 17(8): 824-827.
- 2358 Hughes, P.R. 1974. A precursor of pheromones in *Ips* beetles. *J. Insect Physiology* 20: 1271-1275.
- 2359 Foudin, A.S. and V. Macko. 1974. Identification of the self-inhibitor and some germination characteristics of peanut rust uredospores. *Phytopathology* 64(7): 990-993.
- 2360 Pitman, G.B. and J.P. Vite. 1974. Biosynthesis of methylcyclohexenone by male Douglas-fir beetle. *Environmental Entomology* 3: 886-887.
- 2361 Yaniv, Z. and R.C. Staples. 1974. Ribosomal activity in uredospores germinated on membranes. *Phytopathology* 64(8): 1111-1114.
- 2362 Manasse, R.J. 1974. Variation in growth rate of plant cells in vitro. *J. Interdiscipl. Cycle Res.* 5(2): 119-122.
- 2363 Staples, R.C. 1974. Synthesis of DNA during differentiation of bean rust uredospores. *Physiological Plant Pathology* 4: 415-424.
- 2364 Vite, J.P., A. Bakke and P.R. Hughes. 1974. Ein populationslockstoff des zwölftzahnigen keifernborkenkäfers *Ips sexdentatus*. *Naturwissenschaften* 61(8): 365-366.
- 2365 App, A. and R.R. Granados. 1974. Isolation of nuclei from rice tissue grown in suspension culture. *Planta* 120: 201-205.
- 2366 Jacobson, J. S. and G.D. Salottolo. 1975. Photochemical oxidants in the New York-New Jersey Metropolitan area. *Atmospheric Environment* 9: 321-332.
- 2367 Gershon, H., R. Parmegiani and J.B. Hauck. 1975. Reversal of fungitoxicity of 8-quinolinols and their copper(II) bischelates. I. Amino acids and related compounds. *Can. J. Microbiology*.
- 2368 Hughes, P.R. 1975. Pheromones of *Dendroctonus*: Origin of a-pinene oxidation products present in emergent adults. *J. Insect Physiol.* 21: 687-691.

- 2369 Fowler, J.L. and E.L. Reeves. 1975. In vivo propagation of a microsporidan pathogenic to insects. *J. Invert. Path.* 25: 349-353.
- 2370 Yaniv, Z. and R.C. Staples. 1975. Changes in ribosomes associated with spore senescence in the bean rust fungus. *J. Gen. Microbiol.* 87: 189-197.
- 2371 Pitman, G.B., R.L. Hedden and R.I. Gara. 1975. Synergistic effects of ethyl alcohol on the aggregation of *Dendroctonus pseudosuge* (col., *Scolytidae*) in response to pheromones. *Zeitschrift fur angewandte Entomologie* pgs. 203-208.
- 2372 Renwick, J.A.A., P.R. Hughes and J.P. Vite. 1975. The aggregation pheromone system of a *dendroctonus* bark beetle in Guatamala. *J. Insect Physiol.* 21.
- 2373 Federici, B. A., G. Smedley and W. Van Leuken. 1975. Mosquito host range tests with *coelomomyces punctatus*. *Ann. Entom. Soc. Amer.*
- 2374 Federici, B.A. and D.W. Roberts. 1975. Experimental laboratory infection of mosquito larvae with fungi of the genus *coelomomyces*. *J. Invert. Path.* 26: 21-27.
- 2375 McCarthy, W.J., R.R. Granados, G.R. Sutter and D.W. Roberts. 1975. Characterization of Entomopox virions of the army cutworm, *Euxoa auxiliaris* (*Lepidopter: Noctuidae*). *J. Invert. Path.*
- 2376 Fowler, J.L. and E. Reeves. 1975. Microsporidan spore structure as revealed by scanning electron microscopy. *J. Invert. Path.* 26: 1-6.
- 2377 Staples, R.C., A.A. App and P. Ricci. 1975. DNA synthesis and nuclear division during formation of infection structure by bean rust uredospore germlings. *Arch. Microbiol.* 104: 123-127.
- 2378 Strand, L.L. and H. Mussell. 1975. Solubilization of peroxidase activity from cotton cell walls by Endopolygalacturonases. *Plytopathology* 65(7).
- 2379 Vidal, C.U. and H. Hirumi. 1974. Search for causative agents of the sugarbeet yellow wilt in Chile. *J. Amer. Soc. Sugar Beet Tech.* 18(2).
- 2380 Adler, J.P. 1975. Viruses of yeast. *Development in Industrial Microbiology* 16.
- 2381 Weinstein, L.H., D.C. McCune, A.L. Aluisio and P.Van Leuken. 1975. The effect of sulphur dioxide on the incidence and severity of bean rust and early blight of tomato. *Environ. Pollution* 9.
- 2382 Mandl, R.H., L.H. Weinstein and M. Keveny. 1975. Effects of hydrogen fluoride and sulphur dioxide alone and in combination on several species of plants. *Environ. Poll.* 9.
- 2383 Renwick, J.A.A. and P.R. Hughes. 1975. Oxidation of unsaturated cyclic hydrocarbons by *Dendroctonus frontalis*. *J. Insect Biochemistry.*
- 2384 Granados, R.R. and M. Naughton. 1975. Development of *Amsacta moorei* entomopoxvirus in ovarian and hemocyte cultures from *Estigmene acrea* larvae. *Intervirology.*

- 2385 Granados, R.R. and D.J. Meehan. 1975. Pathogenicity of the corn stunt agent to an insect vector *Dalbulus elimatus*. J. Invert. Path.
- 2386 McCarthy, W.J., C.F. Neser and D.W. Roberts. 1975. RNA polymerase activity of *amsacta moorei* Entomopox virions. Intervirology.
- 2387 Gershon, H. and L. Shanks. 1975. Fungitoxicity of 1,4-naphthoquinones to *Candida albicans* and *Trichophyton mentagrophytes*. Can. J. Microbiology 21(9): 1317-1321.
- 2388 Gershon, H., R. Parmegiani, V.R. Giannasio and I.S. Krull. 1975. Amino acid analogs III. New synthesis of Monomethyl- and Monophenylglutamic acids. J. Pharm. Sci. 64(11).
- 2389 Jacobson, J.S. and L.I. Heller. 1975. Collaborative study of a potentiometric method for the determination of fluoride in vegetation. J. Assoc. of Official Analytical Chemists 58: 1130-1134.
- 2390 Hirumi, H., K. Hirumi and A.H. McIntosh. 1975. Morphogenesis of a nuclear polyhedrosis virus of the alfalfa looper in a continuous cabbage looper cell line. Ann. N.Y. Acad. Sci. 266: 302- 326.
- 2391 Maclean, D.C. and R.E. Schneider. 1975. Photochemical oxidants in Yonkers, N.Y.: Effect on yield of bean and tomato. J. Envir. Qual. 5(1): 75-78.
- 2392 Renwick, J.A.A., P.R. Hughes and I.S. Krull. 1976. Selective production of cis-and trans-verbenol from (-)-and-(+)-pinene by a bark beetle. Science 191: 199-201.
- 2393 Hirumi, H., K. Hirumi, G. Speyer, C.E. Yunker, L.A. Thomas, J. Cory and B.H. Sweet. 1976. Viral contamination of a mosquito cell line *Aedes albopictus*, associated with syncytium formation. In Vitro 12(2).
- 2394 Jones, K.W., P.H. Gorodetzky and J.S. Jacobson. 1976. Determination of fluorine in vegetation by proton activation analysis. Intern. J. Environ. Anal. Chem. 4: 225-231.
- 2395 Renwick, J.A.A., G.B. Pitman and J.P. Vite. 1976. 2-Phenylethanol isolated from bark beetles. Naturwissenschaften.
- 2396 Bozarth, R.F. and E. H. Harley. 1976. The electrophoretic mobility of double-stranded RNA in polyacrylamide gels as a function of molecular weight. Biochimica et Biophysica Acta 432:329-335.
- 2397 Federici, B.A. and D.W. Roberts. 1976. Experimental laboratory infection of mosquito larvae with fungi of the genus *coelomyces*. II. Experiments with *coelomyces punctatus* in *Anopheles quadrimaculatus*. J. Invert. Path. 27: 333-341.
- 2398 Renwick, J.A.A., P.R. Hughes, G.B. Pitman and J.P. Vite. 1976. Oxidation products of terpenes identified from *Dendroctonus* and *Ips* bark beetles. J. Insect Physiol. 22: 725-727.
- 2399 Shapiro, M. and D.W. Roberts. 1976. Growth of *Coelomyces psorophorae* mycelium in vitro. J. Invert. Path. 27: 399-402.

- 2400 Hughes, P.R. 1976. Response of female southern pine beetles to the aggregation pheromone frontalin. *Z. angewandte Entomologie* 80: 280-284.
- 2401 Bozarth, R.F. 1976. The buoyant density of three double-stranded RNAs in cesium sulfate. *Biochimica et Biophysica Acta* 442: 32-36.
- 2402 Gershon, H., L. Shanks and D.E. Gawiak. 1976. Antifungal activity of 4-substituted crotonic acid esters. *J. of Med. Chem.* 19: 1069.
- 2403 Ristich, S.S., S.W. Frederick and E.H. Buckley. 1976. Transplantation of *Typha* and the distribution of vegetation and algae in a reclaimed estuarine marsh. *Bull. of Torrey Botanical Club* 103(4): 157-164.
- 2404 Maclean, D.C., R.E. Schneider and D.C. McCune. 1976. Fluoride susceptibility of tomato plants as affected by magnesium nutrition. *J. Amer. Soc. for Hort. Sci.* 101(4).
- 2405 Granados, R.R. 1976. Infection and replication of insect pathogenic viruses in tissue culture. *Advances in Virus Research* 20.
- 2406 Gershon, H. 1977. Fungal spore wall as a possible barrier against potential antifungal agents.
- 2407 Staples, R.C., L. Laccetti and Z. Yaniv. 1976. Appressorium formation and nuclear division in *Colletotrichum truncatum*. *Arch. Microbiol.* 109: 75-84.
- 2408 Jacobson, J.S., L.I. Heller and P. VanLeuken. 1976. Acidic precipitation at a site within the Northeastern conurbation. *Proceedings of 1st Internat. Symp. on Acid Precipitation and the Forest Ecology*. USDA Forest Service General Technical Report NE-23.
- 2409 Gershon, H. and L. Shanks. 1976. Antifungal properties of a,w, alkanedicarboxylic acids and their dimethyl esters. *Can. J. Microbiologie* 22(8): 1198-1201.
- 2410 Staples, R.C. and Z. Yaniv. 1976. Protein and nucleic acid metabolism during germination. *Encyclopedia of Plant Physiology* 4.
- 2411 Manasse, R.J. and R.C. Staples. 1976. Physical characteristics of DNA from bacteriophages of *Agrobacterium tumefaciens*. *Can. J. of Microbiology*.
- 2412 Hughes, P.R., J.A.A. Renwick and J.P. Vite. 1976. The identification and field bioassay of chemical attractants in the roundheaded pine beetle. *Envir. Entom.* 5(6): 165-168.
- 2413 Hashiba, T. and R.C. Staples. 1976. Nucleic acid metabolism in developing sclerotia of the rice sheath blight fungus (*Rhizoctonia solani kuhn*). *J. Gen. Microbiol.* 96: 239-245.
- 2414 Jacobson, J.S. and L.I. Heller. 1976. Evaluation probes used for source sampling of hydrogen fluoride. *APCA Journal* 26(11).
- 2415 Weinstein, L.H. 1977. Fluoride and Plant Life. *J. of Occupational Medicine* 19(1): 49-78.

- 2416 Jacobson, J.S. and L.H. Weinstein. 1977. Sampling and analysis of fluoride in ambient air, plant and animal tissues, water, soil and food. *J. Occupational Medicine* 19(1): 79-87.
- 2417 Langridge, W.H.R. and D.W. Roberts. 1977. Molecular weight of DNA from four entomopoxviruses determined by electron microscopy. *J. Virology* pgs. 301-308.
- 2418 Strand, L.L., C. Rechteris and H. Mussell. 1976. Polygalacturonases release cell-wall bound proteins. *Plant Physiol.* 58: 722-725.
- 2419 Jacobson, J.S. and L.J. Colavito. 1976. The combined effect of sulfur dioxide and ozone on bean and tobacco plants. *Environ. and Exp. Botany* 16: 227-285.
- 2420 Jacobson, J.S., L.I. Heller and P. VanLeuken. 1976. Acidic precipitation at a site within the northeastern conurbation. *Water, Air and Soil Pollution* 6: 339-349.
- 2421 Ristich, S.S., M. Crandall and J. Fortier. 1977. Benthic and Epibenthic macroinvertebrates of the Hudson river. *Estuarine and Coastal Marine Science* 5: 255-266.
- 2422 Buckley, E.H. and S.S. Ristich. 1977. Distribution of rooted vegetation in the brackish marshes and shallows of the Hudson river estuary.
- 2423 Buckley, E.H. 1975. Croton point ecology - Assessment of environmental impact of waste disposal area at Croton Point, Westchester County, New York.
- 2424 Gershon, H. and L. Shanks. 1977. Antifungal properties of 2-bromo-3-fluorosuccinic acid esters and related compounds. *J. Medicinal Chem.* 20: 606.
- 2425 McCune, D.C., D.H. Silberman, R.H. Mandl, L.H. Weinstein, P.C. Freudenthal and P.A. Giardina. 1977. Studies on the effects of saline aerosols of cooling tower origin on plants. *APCA Journal* 27(4).
- 2426 Langridge, W.H.R., R.F. Bozarth and D.W. Roberts. 1977. The base composition of entomopoxvirus DNA. *Virology* 76: 616-620
- 2427 Renwick, J.A.A., J.P. Vite and R.F. Billings. 1977. Aggregation pheromones in the Ambrosia beetle *Platypus flavicornis*. *Naturwissenschaften* 64: 226.
- 2428 Maclean, D.C., R.E. Schneider and D.C. McCune. 1977. Effects of chronic exposure to gaseous fluoride on yield of field-grown bean and tomato plants. *J. Amer. Soc. Hort. Sci.* 102(3): 297-299.
- 2429 Wood, H.A. 1977. An agar overlay plaque assay method for *autographa californica* nuclear polyhedrosis virus. *J. Invert. Path.* 29:304-307.
- 2430 Mussell, H. and L.L. Strand. 1977. Pectic enzymes: Involvement in pathogenesis and possible relevance to tolerance and specificity. *Cell Wall Biochemistry*.
- 2431 Hughes, P.R. and J.A.A. Renwick. 1977. Neural and hormonal control of pheromone biosynthesis in the bark beetle, *Ips paraconfusus*. *Physiological Entomology* 2: 117-123.

- 2432 Wellman, R.H. 1977. Problems in development, registration and use of fungicides. *Ann. Rev. Phytopathol.* 15: 153-163.
- 2433 Macko, V., E.J. Trione and S.A. Young. 1978. Identification of the germination selfinhibitor from uredospores of *Puccinia striiformis*. *Phytopathology* 67: 1473-1474.
- 2434 Jacobson, J.S. and L.I. Heller. 1978. Collaborative study of three methods for the determination of fluoride in vegetation. *Assoc. of Official Analytical Chemists* 61(1).
- 2435 Hughes, P.R. and J.A.A. Renwick. 1977. Hormonal and host factors stimulating pheromone synthesis in female western pine beetles *Dendroctonus brevicomis*. *Physiological Entomology* 2: 289-292.
- 2436 Macko, V., J.A.A. Renwick and J.F. Rissler. 1978. Acrolein induces differentiation of infection structures in the wheat stem rust fungus. *Science* 27(199): 442-443.
- 2437 Bozarth, R.F. and A. Goenaga. 1977. Complex of virus-like particles containing double-stranded RNA from *Thielaviopsis basicola*. *J. of Virology* p. 846-849.
- 2438 Temple, P. and L.H. Weinstein. 1978. Is hydrogen mutagenic in plants?
- 2439 Webster, A. C. Leopold. 1978. The ultrastructure of dry and imbibed cotyledons of soybean.
- 2440 Laurence, J.A. and F.A. Wood. 1978. Effects of ozone on infection of soybean by *pseudomonas glycinea*. *Phytopathology* p. 441-446
- 2441 Gershon, H. and L. Shanks. 1978. Antifungal properties of halofumarate esters. *J. Pharmaceutical Sciences* 67(4): 578-580
- 2442 Gershon, H. and L. Shanks. 1978. Antifungal properties of 2-alkynoic acids and their methyl esters. *Can. J. Microbiology* 24(5): 593-597.
- 2443 Gershon, H., L. Shanks and D.D. Clarke. 1978. Amino acid analogs IV: 4-fluoroisoleucine. *J. Pharm. Sci.* 67(5): 715-718.
- 2444 Laurence, J.A. and F.A. Wood. 1978. Effect of infection of wild strawberry by *Xanthomonas fragariae*.
- 2445 Granados, R.R., T. Nguyen and B. Cato. 1978. An insect cell line persistently infected with a baculovirus-like particle. *Intervirology*.
- 2446 Al-Aidroos, K. and D.W. Roberts. 1978. Mutants of *Metarhizium anisopliae* with increased virulence toward mosquito larvae. *Can. J. Genet. Cytol.* 20: 211-219.
- 2447 Wood, H.A. and G. Speyer. 1979. In vitro infectivity of the *Autographa californica* nuclear polyhedrosis virus under various conditions. *J. Gen. Virol.* 40: 493-497.
- 2448 Staples, R.C. and Z. Yaniv. 1978. Mitochondrial DNA polymerase from germinated bean rust uredospores. *Experimental Mycology* 2: 290-294.

- 2449 Yaniv, Z. and R.C. Staples. 1978. DNA polymerase from nongerminated bean rust uredospores. *Exp. Mycology* 2: 270-289.
- 2450 Stoakley, J.T., A.Bakke, J.A.A. Renwick and J.P. Vite. 1978. The aggregation pheromone system of the larch bark beetle, *Ips cembrae heer.* *Z. ang. Ent.* 86: 174-177.
- 2451 Sirois, D.L. and S.W. Fredrick. 1978. Phytoplankton and primary production in the lower Hudson River estuary. *Estuarine and Coastal Marine Science* 7: 413-423.
- 2452 Granados, R.R. 1978. Early events in the infection of *Heliothis zea* midgut cells by a baculovirus. *Virology* 90: 170-174.
- 2453 Johnston, L.B., S.H. Vernick and V. Sprague. 1978. Light and electron microscope study of a new species of *Thelohania (Microsporida)* in the shrimp *Pandalus jordani.* *J. Invert. Path.* 32: 278-290.
- 2454 Gershon, H., L. Shanks and A. DeAngelis. 1979. Antifungal properties of n-alkoxyacetic acids and their methyl esters. *J. Pharm. Sci.* 68(1).
- 2455 Renwick, J.A.A. and G.B. Pitman. 1979. An attractant isolated from female Jeffrey pine beetles, *Dendroctonus jeffreyi.* *Envir. Entom.*
- 2456 Gershon, H. and L. Shanks. 1978. Antifungal activity of fatty acids and derivatives: Structure activity relationships. *AOCS Monograph* 5: 51-62.
- 2457 Gershon, H. and I.S. Krull. 1979. Dipeptides of O-methyl-L-threonine as potential antimalarials. *J. Med. Chem.* 22: 877.
- 2458 Laurence, J.A. 1979. Response of maize and wheat to sulfur dioxide. *Plant Disease Reporter* 63(6).
- 2459 Leopold, A.C. and M.E. Musgrave. 1979. Respiratory changes with chilling injury of soybeans. *Plant Physiol.* 64: 702-705.
- 2460 Renwick, J.A.A. and J.C. Dickens. 1979. Control of pheromone production in the bark beetle, *Ips cembre.* *Physiological Entomology* 4: 377-381.
- 2461 Herman, R.A. and A.A. Kahn. 1980. Polyribosomes and protein synthesis in after ripening pear seeds. *Physiol. Plant* 48: 285-391.
- 2462 Jacobson, J.S., J.J. Troiano, C.C. Cosentini and J. Evans. 1982. Plants evaluation of agreement among routine methods for determination of fluoride in vegetation: Interlaboratory collaborative study. *J. Assoc. Off. Anal. Chem.* 65(5): 1150-1154.
- 2462 Laurence, J.A., L.H. Weinstein, D.C. McCune and A.L. Aluisio. 1979. Effects of sulfur dioxide on southern corn leaf blight of maize and stem rust of wheat. *Plant Disease reporter* 63(11)
- 2463 May, B., D.W. Roberts and R.S. Soper. 1979. Intraspecific genetic variability in laboratory strains of entomophthora as detected by enzyme electrophoresis. *Experimental Mycology* 3: 289-297.

- 2464 Wood, H.A. 1980. *Autographa californica* nuclear polyhedrosis virus-induced protein. *Virology* 102: 21-27.
- 2465 Jacobson, J.S., J. Troiano, L.J. Colavito, L.I. Heller and D.C. McCune. 1980. Polluted rain and plant growth. *Polluted Rain*.
- 2466 Gershon, H. and L. Shanks. 1980. Antifungal properties of n-alkanols, a,w-n-alkanediols and w-chloro-a-alkanols. *J. Pharm. Sci.* 69(4): 381-384.
- 2467 Castillo, J.M. and D.W. Roberts. 1980. In vitro studies of *Coelomomyces punctatus* from *Anopheles quadrimaculatus* and *Cyclops vernalis*. *J. Invert. Path.* 35: 144-157.
- 2468 Staples, R.C. and V. Macko. 1980. Formation of infection structures as a recognition response in fungi. *Exp. Mycology* 4: 2-16.
- 2469 Wood, H.A. 1980. Protease degradation of *Autographa californica* nuclear polyhedrosis virus proteins. *Virology* 103: 392-399.
- 2470 Granados, R.R. 1980. Infectivity and mode of action of Baculoviruses. *Biotechnology and Bioengineering* 22: 1377-1405.
- 2471 Leopold, A.C. and M.E. Musgrave. 1980. Respiratory pathways in aged soybean seeds. *Physiol. Plant* 49: 49-54.
- 2472 Leopold, A.C. 1980. Temperature effects on soybean imbibition and leakage. *Plant Physiol.* 65: 1096-1098.
- 2473 Szalay, A.A., C.J. Mackey and W.H.R. Langridge. 1979. Restriction endonucleases and their applications. *Enzyme Micob. Technol.* 1.
- 2474 No reprint assigned to this number.
- 2475 Wood, H.A. 1980. Isolation and replication of an occlusion body-deficient mutant of the *Autographa californica* nuclear polyhedrosis virus. *Virology* 105: 338-344.
- 2476 Renwick, J.A.A. and C.D. Radke. 1980. An oviposition deterrent associated with frass from feeding larvae of the cabbage looper, *Trichoplusia ni* (*Lepidoptera: Noctuidae*) *Environ. Entom.* 9(3): 318-320.
- 2477 Priestley, D.A. and H.W. Woolhouse. 1980. The chloroplast envelope of *Phaseolus vulgaris* L. II Enzymic characteristics. *Plant and Cell Physiol.* 21(4): 709-717.
- 2478 Priestley, D.A., M.B. McBride and C. Leopold. 1980. Tocopherol and organic free radical levels in soybean seeds during natural and accelerated aging. *Plant Physiol.* 66: 715-719.
- 2479 App, A.A., I. Watanabe, M. Alexander, W. Ventura, C. Daez, T. Santiago and K. DeDatta. 1980. Nonsymbiotic nitrogen fixation associated with the rice plant in flooded soils. *Soil Science*.
- 2480 Musgrave, M.E., D.A. Priestley and A.C. Leopold. 1980. Methanol stress as a test of seed vigor. *Crop Science* 20: 626-630.

- 2481 Granados, R.R. and K.A. Lawler. 1981. In vivo pathway of *Autographa californica* baculovirus invasion and infection. *Virology* 108: 297-308.
- 2482 Renwick, J.A.A. and J. Potter. 1981. Effects of sulfur dioxide on volatile terpene emission from balsam fir. *APCA Journal* 31(1).
- 2483 Maclean, D.C. and R.E. Schneider. 1981. Effects of gaseous flouride on the yield of field-grown wheat. *Environ Poll. Series A*: 39-44.
- 2484 Butterfield, E.J. and D.C. Torgeson. 1980. Fungicides agricultural.
- 2484 Jacobson, J.S. 1980. The influence of rainfall composition on the yield and quality of agricultural crops. *Proc. Inter. Conf. ecol. impact acid precip. SNSF project*
- 2485 Laurence, J.A., A.L. Aluisio, L.H. Weinstein and D.C. McCune. 1981. Effects of sulphur dioxide on southern bean mosaic and maize dwarf mosaic.
- 2486 Staples, R. 1981. Environmental Tolerance summary and discussions. *Advances in food producing systems for arid and semi-arid lands*.
- 2487 Staples, R.C., R.W. Robinson and N.F. Oebker. 1981. Development of vegetable crops for protected desert environments. *Advances in food producing systems for arid and semi-arid lands*.
- 2488 Hughes, P.R. and H.A. Wood. 1981. A Synchronous peroral technique for the bioassay of insect viruses.
- 2489 Humber, R.A. 1981. Proposal to conserve the entomopathogenic fungal genus *Triplosporium (Thaxter) Batko* against *Neozygites Witlaczil (Entomophthorales)*.
- 2490 Langridge, W.H.R. and J.E. Henry. 1981. Molecular weight and base composition of DNA isolated from *Melanoplus Entomopoxvirus*.
- 2491 Mandl, R.H., L.H. Weinstein, M. Dean and M. Wheeler. 1980. The response of sweet corn to HF and SO₂ under field conditions. *Environmental and Experimental Botany* 20: 359-365.
- 2492 Renwick, J.A.A. and J.P. Vite. 1980. Biology of pheromones. *Chemie der Pflanzenschutz und Schadlingsbekämpfungsmittel, Band 6*.
- 2493 Wilson, J.T., D.L. Eskew, and M. Harte. 1980. Recovery of nitrogen by rice from blue-green algae added in a flooded soil. *Soil Science of America Journal*. 44: 1330-1331.
- 2494 Laurence, J.A. 1981. Effects of air pollutants on plant-pathogen interactions. *J. Plant Diseases and Protection* 87(2/3): 156-172.
- 2494 Amundson, R.G. and L.H. Weinstein. 1981. Joint action of sulfur dioxide and nitrogen dioxide on foliar injury and stomatal behavior. *J. Environ. Qual.* 10(2): 204-208.
- 2495 Laurence, J.A. and A.L. Aluisio. 1981. Effects of sulfur dioxide on expansion of lesions caused by *Corynebacterium nebraskense* in maize and by *Xanthomonas phaseoli var. sojensis* in soybeans. *Ecology and Epidemiology* 71(4).

- 2496 Tully, R.E., M.E. Musgrave and A.C. Leopold. 1981. The seed coat as a control of imbibitional chilling injury. *Crop Science* 21: 312-317.
- 2497 Gershon, H. and L. Shanks 1981. Reversal of fungitoxicity of 8-quinolinols and their copper (II) bischelates. II Reversals of the action of 8-quinolinol by DL-a-lipoic acid. *Can. J. Microbio.* 26(6): 612-615.
- 2498 Laurence, J.A. 1981. Careers in air pollution control. *APCA Journal* 31(7).
- 2499 Priestley, D.A., W.C. Galinat and A.C. Leopold. 1981. Preservation of polyunsaturated fatty acid in ancient Amasazi maize seed. *Nature* 292(5819): 146-148.
- 2500 Laurence, J.A. and L.H. Weinstein. 1981. Effects of air pollutants on plant productivity. *An. Rev. Phytopathol.* 19: 257-271.
- 2501 Eskew, D.L., A.R.J. Eaglesham and A.A. App. 1981. Heterotrophic $^{15}\text{N}_2$ fixation and distribution of newly fixed nitrogen in a rice-flooded soil system. *Plant Physiol.* 68: 48-52.
- 2502 Peterson, J.B. and T.A. LaRue. 1981. Utilization of aldehydes and alcohols by soybean bacteroids. *Plant Physiol.* 68: 489-493.
- 2503 Lee, K.W., R.W. Holst, J. Watanabe and A.App. 1981. Gas transport through rice. *Soil Sci. Plant Nutr.* 27(2): 151-158.
- 2504 Granados, R.R. 1981. Entomopoxvirus infection in insects. *Intervirology.*
- 2505 Wood, H.A., P.R. Hughes, L.B. Johnston and W.H.R. Langridge. 1981. Increased virulence of *autographa californica* nuclear polyhedrosis virus by mutagenesis. *J. Invert. Path.* 38: 236-241.
- 2506 Leopold, A.C. 1981. Hormonal regulatory systems in plants. Recent developments in *Plant Sciences: S.M. Sicar Memorial Volume* 43-50.
- 2507 Langridge, W.H.R., R.R. Granados and J.F. Greenberg. 1981. Detection of *Autographa californica* and *Heliothis zea* baculovirus proteins by enzyme-linked immunosorbent assay (ELISA). *J. Invert Path.* 38: 242-250.
- 2508 Herman, R.A., M. Musgrave, A.C. Leopold and A.A. Khun. 1981. Respiratory changes with stratification of pear seeds. *Physiol. Plant* 52: 156-160.
- 2509 Ahmad, M.H., A.R.J. Eaglesham, S. Hassouna, B. Seaman, A. Ayanaba, K. Mulongoy and E.L. Pulver. 1981. Examining the potential for inoculant use with cowpeas in west African soils. *Trop. Agriculture.*
- 2510 Langridge, W.H.R. and K. Balter. 1981. Protease activity associated with the capsule protein of *Estigmene acrea* granulosis virus. *Virology* 114: 595-600.
- 2511 Jacobson, J.S. 1981. Acid rain and environmental policy. *APCA Journal* 31(10).
- 2512 Renwick, J.A.A. and C.D. Radke. 1981. Host plant constituents as oviposition deterrents for the cabbage looper *Trichoplusia ni*. *Ent. Exp. and Appl.* 30: 201-204.
- 2513 Hughes, P.R., J.E. Potter and L.H. Weinstein. 1981. Effects of air pollutants on plant-

insect investigations: Reactions of the Mexican bean beetle to SO₂-fumigated pinto beans. Entom. Soc. of America.

- 2514** Ahmad, M.H., A.R.J. Eaglesham and S. Hassouna. 1981. Examining serological diversity of "Cowpea" rhizobia by the ELISA technique. Arch. Microbiol. 130: 281-287.
- 2515** Morris, D.W., J.D. Noti, F.A. Osborne and A.A. Szalay. 1981. Plasmid vectors capable of transferring large DNA fragments to yeast. DNA 1(1): 27-36.
- 2516** Alstad, D.N., G.F. Edmunds, Jr. and L.H. Weinstein. 1982. Effects of air pollutants on insect populations. Ann. Rev. Entomol. 27: 369-384.
- 2517** Leopold, A.C., M.E. Musgrave and K.M. Williams. 1981. Solute leakage resulting from leaf desiccation. Plant Physiol. 68: 1222-1225.
- 2518** LaRue, T.A. and T.G. Patterson. 1981. How much nitrogen do legumes fix? Advances in Agronomy 34: 15-38.
- 2519** Langridge, W.H.R. and J.F. Greenberg. 1981. Detection of entomopoxvirus proteins in insect cell culture by enzyme-linked immunosorbent assay (ELISA). J. Gen. Virol. 57: 215-219.
- 2520** Watanabe, I., E.T. Craswell and A.A. App. 1981. Nitrogen cycling in wetland rice fields in south-east and east asia. Austral. Acad. Sci. Canberra.
- 2521** Granados, R.R., K.A. Lawler and J.P. Burand. 1981. Replication of *Heliothis zea* baculovirus in an insect cell line. Intervirology 16: 71-79.
- 2522** Amundson, R.G., L.H. Weinstein, P. VanLeuken and L.J. Colavito. 1982. Joint action of HF and NO₂ on growth, fluorine accumulation and leaf resistance in marcross sweet corn. Environ. and Exper. Botany 22(1): 49-55.
- 2523** Patterson, T.G., R. Glenister and T.A. LaRue. 1982. Simple estimate of ureides in soybean tissue. Analytical Biochemistry 119: 90-95.
- 2524** Hughes, P.R., J.E. Potter and L.H. Weinstein. 1982. Effects of air pollutants on plant-insect interactions: Increased susceptibility of greenhouse-grown soybeans to the Mexican bean beetle after plant exposure. Environ. Ent. 11.
- 2525** Maclean, D.C. 1982. Air quality standards for fluoride to protect vegetation: Regional, seasonal and other considerations. APCA Journal 22(1).
- 2526** Ellenson, J.L. and R.G. Amundson. 1982. Delayed light imaging for the early detection of plant stress. Science 26(215): 1104-1106.
- 2527** Huang, B.F. and R.C. Staples. 1982. Synthesis of proteins during differentiation of the bean rust fungus. Exp. Mycology 6: 7-14.
- 2528** Staples, R.C. and B.F. Huang. 1982. Gene activation during differentiation of the rusts and anthracnose fungi.

- 2529 Shory, R.E., H.W. Kraner, K.W. Jones, J.S. Jacobson and L.I. Heller. 1982. Proton activation analysis for the measurement of fluorine in food samples. *Anal. Chem.* 54: 407-413.
- 2530 Cattano, S.P. and W.H.R. Langridge. 1982. Characterization of DNA from a granulosis virus of *Estigmene acrea* (*Lepidoptera*). *Virology* 119: 199-203.
- 2530-a Herman, R.A. 1982. The effect of sulphite on light activation of chloroplast fructose 1, 6-bisphosphatase in two cultivars of soybean. *Environ. Poll. Series A* 27: 83-96.
- 2531 Chabot, J.F. and A.C. Leopold. 1982. Ultrastructural changes in membranes with hydration in soybean seeds. *Amer. J. Bot.* 69(4): 623-633.
- 2532 Peterson, J.B., R.A. Glenister and D.L. Eskew. 1982. A manifold and oxygen-removing apparatus for preparing anaerobic enzymes. *Analytical Biochemistry* 121: 335-338.
- 2533 Wood, H.A., L.B. Johnston and J.P. Burand. 1982. Inhibition of *Autographa californica* nuclear polyhedrosis virus replication in high-density *Trichoplusia ni* cell cultures. *Virology* 119: 245-254.
- 2534 Langridge, W.H.R. and D.W. Roberts. 1982. Structural proteins of *Amsacta moorei*, *Euxoa auxillaris* and *Melanoplus sanguinipes* Entomopoxviruses. *J. Invert. Path.* 39: 346-353.
- 2535 Buckley, E.H. 1982. Accumulation of airborne polychlorinated biphenyls in foliage. *Science* 30(216): 520-522.
- 2536 Renwick, J.A.A. and C.D. Radke. 1982. Ovipositional choice and larval survival of the spruce budworm, *Choristoneura fumiferana* (*Lepidoptera: tortricidae*).
- 2537 Sacher, R.F., R.C. Staples and R.W. Robinson. Saline tolerance in hybrids of *Lycopersicon esculentum* x *Solanum pennellii* and selected breeding lines.
- 2538 Chandra, S., J.F. Cabot, G.H. Morrison and A.C. Leopold. 1982. Localization of calcium in amyloplasts of root-cap cells using ion microscopy. *Science* 11(216): 1221-1223.
- 2539 Heck, W.W., O.C. Taylor, R. Adams, G. Bingham, J. Miller, E. Preston and L.H. Weinstein. 1982. Assessment of crop loss from ozone. *APCA Journal* 32(4).
- 2540 Reich, P.B., R.G. Amundson and J.P. Lassoie. 1982. Reduction in soybean yield after exposure to ozone and sulfur dioxide using a linear gradient exposure technique. *Water, Air and Soil Pollution* 17: 29-36.
- 2541 Daoust, R.A. and D.W. Roberts. 1982. Virulence of natural and insect-passaged strains of *Metarhizium anisopliae* to mosquito larvae. *JIP* 40: 107-117.
- 2542 Jacobson, Jay. 1982. Ozone and the growth and productivity of agricultural crops. *Effects of Gaseous Air Pollution in Agriculture and Horticulture*. M.H. Wentworth and D.P. Ormond, Eds. Butterworth Scientific..

- 2543 Laurence, J.A., D.C. Maclean, R.H. Mandl and R.E. Schneider. 1982. Field tests of a linear gradient system for exposure of row crops to SO₂ and HF. *Water, Air and Soil Pollution* 17: 398-407.
- 2544 Staples, R.C. and H.C. Hoch. 1982. A possible role for microfilaments in the induction of nuclear division of bean rust uredospore germlings. *Environmental Mycology* 6:293-302.
- 2544 Herman, R.A. 1982. The effect of sulphite on light activation of fructose 1, 6-bisphosphatase in soybean chloroplasts.
- 2545 Troiano, J., L. Heller and J.S. Jacobson. 1982. Effect of added water and acidity of simulated rain on growth of field-grown radish. *Environmental Pollution* 29: 1-11.
- 2546 Maclean, D.C., R.E. Schneider and L.H. Weinstein. 1982. Fluoride-induced foliar injury in solanum *Pseudo-capsicum*: Its induction in the dark and activation in the light. *Environmental Pollution* 29: 27-33.
- 2547 Tajima, S. and T.A. LaRue. 1982. Enzymes for Acetaldehyde and ethanol formation in legume nodules. *Plant Physiol.* 70:388-392.
- 2548 Weinstein, L.H. and R.A. Herman. 1982. Physiological responses of plants to fluorine. *Effects of air pollution in agriculture*. M.H. Unsworth, Eds. Butterworth Press.
- 2549 Laurence, J.A. and K.L. Reynolds. 1982. Effect of concentration of sulfur dioxide and other characteristics of exposure on the development of lesions caused by *Xanthomonas phaseoli* in red kidney bean. *Ecology and Epidemiology* 72(9): 1243-1248.
- 2550 Eaglesham, A.R.J., M.H. Ahmed, S. Hassouna and B.J. Goldman. 1982. Cowpea *Rhizobia* producing dark nodules: Use in competition studies. *Applied and Environmental Microbiology* Pg. 661-618.
- 2551 Some current problems of research on effects of airborne fluorine on vegetation. *Fluoride Emissions* pp. 95-99.
- 2552 Laurence, J.A. 1982. Monitoring fluoride in the environment. *Fluoride Emissions* pp 47-51.
- 2553 Maclean, D.C. 1982. Vegetation surveys to evaluate fluoride effects on plants. *Fluoride Emissions* 153-155.
- 2554 Herman, R.A. 1982. Chloroplast alkaline fructose 1, 6 Bisphosphatase exists in a membrane bound form. *Plant Physiol.* pp 728-734.
- 2555 Eaglesham, A.R.J. and S.Hassouna. 1982. Foliar chlorosis in legumes induced by cowpea rhizobia. *Plant and Soil* 65: 425-428.
- 2556 Priestly, D.A. and M.A. Posthumus. 1982. Extreme longevity of lotus seeds from Pulantien. *Nature* 299(5879): 148-149.

- 2557 Daoust, R.A., M.G. Ward and D.W. Roberts. 1982. Effect of formulation on the virulence of *Metarhizium anisopliae conidia* against mosquito larvae. JIP 40: 228-236.
- 2558 Rubinstein, R., K.A. Lawler and R.R. Granados. 1982. Use of primary fat body cultures for the study of baculovirus replication. JIP 40: 266-273.
- 2558 Eaglesham, A.R.J., A. Ayanaba, W.R. Rao and D.L. Eskew. 1982. Mineral N effects on cowpea and soybean crops in a Nigerian soil. I. Development, nodulation acetylene reduction and grain yield. Plant and Soil 68: 171-181.
- 2559 Eaglesham, A.R.J., A. Ayanaga, W. R. Rao and D.L. Eskew. 1982. Mineral effects on cowpea and soybean crops in a Nigerian soil. II Amounts of N fixed and accrual to the soil. Plant and Soil 68:183-192.
- 2560 Amundson, R.G. and D.C. Maclean. 1982. Influence of oxides of nitrogen on crop growth and yield. An overview. Air pollution by Nitrogen Oxides. pp 501-510.
- 2561 Priestley, D.A. and B. De Kruff. 1982. Phospholipid motional characteristics in a dry biological system. Plant Physiol. 70: 1073-1078.
- 2562 Jacobson, J.S., J.J. Troiano, C.C. Cosentini and J. Evans. 1982. Plants-evaluation of agreement among routine methods for determination of fluoride in vegetation: Interlaboratory collaborative study.
- 2563 Layzell, D.B. and T.A. LaRue. 1982. Modeling C and N transport to developing soybean fruits. Plant Physiol. pp 1290-1298.
- 2564 O'Neill, S. D. and A.C. Leopold. 1982. An assessment of phase transitions in soybean membranes. Plant Physiol. pp 1405-1409.
- 2565 Compton, J.L., A. Zamir and A.A. Szalay. 1982. Insertion of nonhomologous DNA into the yeast genome mediated by homologous recombination with a cotransforming plasmid. Mol. Gen. Genet. 188: 44-50
- 2566 Priestley, D.A. and J. Bruinsma. 1982. Sensitivity to drying in vitro of enzymes in mitochondrial subfractions from *Vinca faba* seed.
- 2567 Sack, F.D. and A.C. Leopold. 1982. Characteristics of statoliths from rootcaps and coleoptiles.
- 2568 Renwick, J.A.A. and C.D. Radke. 1982. Activity of cabbage extracts in deterring oviposition by the cabbage looper, *Trichoplusi ni*.
- 2569 Hughes, P.R., L.H. Weinstein, J.A. Laurence, R.F. Sacher, A.I. Dicki and L.M. Johnson. 1982. Modification of insect-plant relations by plant stress.
- 2570 Troiano, J., L. Colavito, L. Heller and D.C. McCune. Viability, vigor and maturity of seed harvested from two soybean cultivars exposed to simulated acidic rain and photochemical oxidants.
- 2571 Castillo, J.M., P. Chin and D.W. Roberts. 1982. Growth and development of *Romanormis culicivoras* in vitro. J. Nematology 14(4).

- 2572 Kneen, B.E. and T.A. LaRue. 1983. Congo red absorption by *Rhizobium leguminosarum*. Applied and Environmental Microbiology pp. 340-342.
- 2573 Willing, R.P. and A.C. Leopold. 1982. Cellular expansion at low temperature as a cause of membrane lesions. Plant Physiol. 71: 118-121.
- 2574 Hadley, R.G. and A.A. Szalay. 1982. DNA sequences homologous to the T DNA region of *Agrobacterium tumefaciens* are present in diverse *Rhizobium* species.
- 2575 Renwick, J.A.A. 1982. Nonpreference mechanisms: Plant characteristics influencing insect behavior.
- 2576 Troiano, J., L. Heller and J.S. Jacobson. 1982. Effect of added water and acidity of simulated rain on growth of field-grown radish.
- 2577 Daoust, R.A. and D.W. Roberts. 1982. Studies on the prolonged storage of *Metarhizium anisopliae* conidia: Effect of temperature and relative humidity on conidial viability and virulence against mosquitos.
- 2578 Hughes, P.R., R.R. Gettig and W.J. Mccarthy. 1982. Comparison of the time-mortality response of *Heliothis zea* to 14 isolat of heliothis nuclear polyhedrosis virus.
- 2579 Daoust, R.A., M.G. Ward and D.W. Roberts. 1982. Effect of formulation on the viability of *Metarhizium anisopliae* conidi.
- 2580 Daoust, R.C. and D.W. Roberts. 1982. Studies on the prolonged storage of *Metarhizium anisopliae* conidia: Effect of growth substrate on conidial survival and virulence against mosquitos.
- 2581 Staples, R.C., H.J. Granbow and H.C. Hoch. 1982. Potassium ion induces rust fungi to develop infection structures.
- 2582 Gershon, H., A.T. Grefig and A.A. Scala. 1982. 6-Trifluoromethyl chloropyrimidines and related compounds.
- 2583 Eaglesham, A.R.J., S. Hassouna and R.Seegers. 1982. Fertilizer-N effects on N₂ fixation by cowpea and soybean.
- 2584 Renwick, J.A.A. and C.D. Radke. 1982. Chemical recognition of host plants for oviposition by the cabbage butterfly *Pieris rapae* (*Lepidoptera: Pieridae*) Envir. Entom. 12: 445-451.
- 2585 Langridge, W.H.R. 1982. Virus DNA replication and protein synthesis in *Amsacta moorei* Entomopoxvirus-infected *Estigmene acrea* cells.
- 2586 Stiles, B., H.A. Wood and P.R. Hughes. 1982. Effect of Tunicamycin on the infectivity of *Autographa californica* nuclear polyhedrosis virus.
- 2586 Burand, J.P. and H.A. Wood. 1982. Defective particles from a persistent baculovirus infection in *Trichoplusia ni* tissue culture cells.
- 2587 Vertucci, C.P. and A.C. Leopold. 1982. Dynamics of imbibtion by soybean embryos.

- 2588 Messina, F.J. and J.A.A. Renwick. Effectiveness of oils in protecting stored cowpeas from the cowpea weevil (Coleoptera: Bruchidae).
- 2589 Roberts, D.W. and A.W. Sweeney. 1983. Laboratory evaluation of the fungus *Culicinomyces clavosporus* for control of blackfly (*Diptera: simuliidae*) larvae.
- 2590 Eaglesham, A.R.J. and A.A. Szalay. 1983. Aerial stem nodules on *Aeschynomene* spp.
- 2591 Troiano, J., L. Colavito, L. Heller, D.C. McCune and J.S. Jacobson. 1983. Effects of acidity of simulated rain and its joint action with ambient ozone on measures of biomass and yield in soybean.
- 2592 Ellenson, J.L. and R.M. Raba. 1983. Gas exchange and phytoluminigraphy of single red kidney bean leaves during periods of induced stomatal oscillations.
- 2593 Sacher, R.F., R.C. Staples and R.W. Robinson. 1983. Ion regulation and response of tomato to sodium chloride: A homeostatic system.
- 2594 Patterson, T.J. and T.A. LaRue. 1983. Nitrogen fixation by soybeans: Seasonal and cultivar effects and comparison of estimates.
- 2595 Patterson, T.G. and T.A. LaRue. 1983. Root respiration associated with nitrogenase activity (C₂H₂) of soybean and a comparison of estimates.
- 2596 Patterson, T.G., J.P. Peterson and T.A. LaRue. 1983. Effect of supra-ambient oxygen on nitrogenase activity (C₂H₂) and root respiration of soybeans and isolated soybean bacteroids.
- 2597 Langridge, W.H.R. 1983. Detection of *Amsacta moorei* entomopoxvirus and vaccinia virus proteins in cell cultures restrictive for poxvirus multiplication.
- 2598 Stiles, B., J.P. Burand, M. Meda and H.A. Wood. 1983. Characterization of gypsy moth (*Lymantria dispar*) nuclear polyhedrosis virus.
- 2599 Burand, J.P., B. Stiles and H.A. Wood. 1983. Structural and intracellular proteins of the nonoccluded baculovirus HZ-1.
- 2600 Williams, J.G.K. and A.A. Szalay. 1983. Stable integration of foreign DNA into the chromosomes of the cyanobacterium *Synechococcus* R2.
- 2601 Langridge, W.H.R. 1983. Characterization of a cytoplasmic polyhedrosis virus from *estigmene acraea* (Lepidoptera).
- 2602 Reich, P. 1983. Effects of low concentrations of O₃ on net photosynthesis, dark respiration and chlorophyll contents in aging hybrid poplar leaves. *Plant Physiol.* 73: 291-296.
- 2603 Hughes, P.R. and M.A. Penton. 1983. Effect of Dienochlor on Oogenesis of the mexican bean beetle (*Coleoptera: coccinellidae*).
- 2604 Kohut, R. and J.A. Laurence. 1983. Yield response of red kidney bean *Phaseolus vulgaris* to increased ozone concentrations in the field.

- 2605 Patterson, T.G. and T.A. LaRue. 1983. N fixation (C₂H₂) and ureide content of soybeans environmental effects and source sink manipulations.
- 2606 Hughes, P.R., A.I. Dickie and M.A. Penton. 1983. Increased success of the mexican bean beetle on field-grown soybeans exposed to sulfur dioxide.
- 2607 Amundson, R.G. 1983. Yield reduction of soybeans due to exposure to sulfur dioxide and nitrogen dioxide in combination.
- 2608 Staples, R.S., H.J. Grambow, H.C. Hoch and W.K. Wynn. 1983. Contact with membrane grooves induces wheat stem rust uredospore germlings to differentiate appressoria but not vesticles.
- 2609 Maclean, D.C. 1983. Impact of world atmospheric modification on plant growth and productivity.
- 2610 Leopold, A.C. 1983. Volumetric components of seed imbibition.
- 2611 Styles, B. and H.A. Wood. 1983. A study of the glycoprotiens of *Autographa californica* nuclear polyhedrosis virus (AcNPV).
- 2612 Langridge, W.H.R., E. Oma and J.E. Henry. 1983. Characterization of the DNA and stuctural protien of entomopoxvirus from *Melanoplus sanguinipes*, *Arpha conspirsa* and *Phoetaliotes nebrascensis* (orthoptera).
- 2613 Langridge, W.H.R. 1983. Partial characterization of DNA from five entomopoxviruses.
- 2614 Legocki, R.P., A.R.J. Eaglesham and A.A. Szalay. 1983. Stem nodulation in *Aeschynomene*: A model system for bacterium-Plant interactions.
- 2615 Messias, C.L., D.W. Roberts and A.T. Grefig. 1983. Pyrolysis-gas chromatography of the fungus *Metarhizium anisopliae*: An aid to strain identification.
- 2616 Hadley, R.G., A.R.J. Eaglesham and A.A. Szalay. 1984. Conservation of DNA regions adjacent to nifKDH homologous sequences in diverse slow-growing *Rhizobium strains*.
- 2617 Langridge, W.H.R. 1984. Detection of DNA base sequence homology between entomopoxviruses isolated from *Lepidoptera* and *Orthopetera*.
- 2618 Maina, C.V., G.P. Nolan and A.A. Szalay. 1984. Molecular weight determination program. Nucleic Acids Research 12(1): 695-702.
- 2619 Nolan, G.P., C.V. Maina and A.A. Szalay. 1984. Plasmid mapping computer program. Nucleic Acids Research 12(1): 717-729.
- 2620 Buckley, E.H. 1984. Decline of background PCB concentration in vegetation in New York state. NE Environ. Sci. 2(3/4): 181-187.
- 2621 Priestley, D.A. and A.C. Leopold. 1983. Lipid changes during natural aging of soybean seeds. Physiol. Plant 59: 467-470.

- 2622 Laurence, J.A. and K.L. Reynolds. 1984. Growth of leaf surface populations of *Xanthomonas phaseoli* on red kidney bean plants exposed to SO₂. Environ. Poll. (series A) 33: 379-385.
- 2623 Stowers, M.D. and A.R.J. Eaglesham. 1983. A stem-nodulating *Rhizobium* with physiological characteristics of both fast and slow growers. J. Gen. Microbiology 129: 3651-3655.
- 2624 McNeil, D.L. and T.A. LaRue. 1984. Effects of nitrogen source on ureides in soybean. Plant Physiol. 74: 227-232.
- 2625 Alscher, R. and C. Strick. 1984. Diphenyl-ether-chloroplast interactions. Pesticide Biochemistry and Physiology 21: 248-255.
- 2626 Reich, P.B. and R. Borchert. 1984. Water stress and tree phenology in a tropical dry forest in the lowlands of Costa Rica. J. of Ecology 72: 61-74.
- 2627 Dickie, R.C., D.C. McCune, D.C. Maclean and J.A. Laurence. 1984. Gradients of fluoride accumulation in southern pine forests near a new primary aluminum smelter. Light Metals pp. 1531-1539.
- 2628 Hughes, P.R., H.A. Wood, J.P. Burand and R.R. Granados. 1984. Quantification of the dose-mortality response of *Trichoplusia ni*, *Heliothis zea* and *Spodoptera frugiperda* to nuclear polyhedrosis virus: Applicability of an exponential model. JIP 43: 343-350.
- 2629 Kolowsky, K., J.G.K. Williams and A.A. Szalay. 1984. Length of foreign DNA in chimeric plasmids determines the efficiency of its intergration into the chromosome of the cyanobacterium *synechococcus* R2. GENE pp. 289-299.
- 2630 Laurence, J.A. and K.L. Reynolds. 1984. Growth and lesion development of *Xanthomas campestris* pv. *phaseoli* on leaves of red kidney bean exposed to hydrogen fluoride. Phytopathology 74: 578-580.
- 2631 Jaeger, B. and W.H.R. Langridge. 1984. Infection of *locusta nigratonia* with entomopoxviruses from *Aphia conspersa* and *Melanoplus sanguinipes* grasshoppers. JIP 43: 374-382.
- 2632 Vertucci, C.W. and A.C. Leopold. 1984. Bound water in soybean seed and its relation to respiration and imbibitional damage. Plant Physiol. 75: 114-117.
- 2633 Jacobson, J.S. 1984. Effects of acidic aerosol, fog, mist and rain on crops and trees. Phil. Trans. R. Soc. Land B305: 327-338.
- 2634 Stowers, M.D. and A.R.J. Eaglesham. 1984. Physiological and symbiotic characteristics of fast-growing *Rhizobium japonicum*. Plant and Soil 77: 3-14.
- 2635 Kneen, B.E. and T.A. LaRue. 1984. Nodulation resistant mutant of *Pisum sativum* (L). J. of Heredity 75: 238-240.
- 2636 Groner, A., R.R. Granados and J.P. Burand. 1984. Interactions of *Autographa californica* nuclear polyhedrosis virus with two nonpermissive cell lines. Intervirology 21: 203-209.

- 2637 Troiano, J., J.S. Jacobson and L. Heller. 1984. Effects of simulated acidic rain applied alone and in combination with ambient rain on growth and yield of field-grown snap bean. *Agriculture, Ecosystems and Environment* 11: 161-172.
- 2638 App, A., T. Santiago, C. Daer, C. Menguito, W. Ventura, A. Rirol, J. Po, I. Watanabe, S.K. DeData and P. Roger. 1984. Estimation of the nitrogen balance for irrigated rice and the contribution of phototropic nitrogen fixation. *Field Crop Research* 9: 17-27.
- 2639 Reich, P.B. 1984. Loss of stomatal function in aging hybrid poplar leaves. *Annals. of Botany* 53: 691-698.
- 2640 Jaffe, M.J. and A.C. Leopold. 1984. Callose deposition during gravitropism of *Zea mays* and *Pisum sativum* and its inhibition by 2-deoxy-D-glucose. *Planta* 161: 20-26.
- 2641 Reich, P.B. and R.G. Amundson. 1984. Low level O₃ and/or SO₂ exposure causes a linear decline in soybean yield. *Environ. Poll. (series A)* 34: 345-355.
- 2642 Messina, F.J. 1984. Influence of cowpea pod maturity on the oviposition choices and larval survival of a bruchid beetle *Allosobruchus maculatus*. *Entomol. Exp. Appl.* 35: 341-348.
- 2643 LaFavre, J.S. and A.R.J. Eaglesham. 1984. Increased nodulation of "non-nodulating" (rji rji) soybeans by high dose inoculation. *Plant and Soil* 80: 297-230.
- 2644 Schoettle, A.W. and A.C. Leopold. 1984. Solute leakage from artificially aged soybean seeds after imbibition. *Crop Sci.* 24: 835-838.
- 2645 Sinclair, M.J. and A.R.J. Eaglesham. 1984. Intrinsic antibiotic resistance in relation to colony morphology in three populations of west african cowpea rhizobia. *Soil Biology Bulletin* 16(3): 247-251.
- 2646 Sack, F.M., M.M. Suyemoto and A.C. Leopold. 1984. Kinetics of amyloplast sedimentation in gravistimulated maize coleptiles. *Planta* 161: 459-464.
- 2647 Kneen, B.E. and T.A. LaRue. 1984. Peas (*pisum sativum L.*) with strain specificity for *Rhizobium leguminosarum*. *Heredity* 52(3): 383-389.
- 2648 Gershon, H. and A.T. Grefig. 1984. Pyrimidines 7. A study of the chlorination of pyrimidines with phosphorous oxychloride in the presence of N, N-dimethylanile. *Pyrimidine* pp. 1161-1167.
- 2649 Reich, P.R. 1984. Oscillations in stomatal conductance of hybrid poplar leaves in the light and dark. *Physiol. Plant* 61: 541-548.
- 2650 Hughes, P.R. 1984. Quantitive bioassay in insect pathology. *Bulletin of the ESA* 30(3): 31-34.
- 2651 Staples, R.C., D. Gross, R. Tiburzy, H.C. Hoch, S. Hassouna and W.W. Wei. 1984. Changes in DNA content of nuclei in rust uredospore germlings during the start of differentiation. *Experimental Mycology* 8: 245-255.

- 2652 Staples, R.C., S. Hassouna, L. Lacetti and H.C. Hoch. 1984. Metabolic alterations in bean rust germlings during differentiation induced by the potassium ion. *Experimentaql Mycology* 8: 183-192.
- 2653 Troiano, J. and E.J. Butterfield. 1984. Effects of simulated acidic rain on retention of pesticides on leaf surfaces. *Phytopathology* 74: 1377-1380.
- 2654 Eaglesham, A.R., M.D. Stowers, M.J. Sinclair, A.A. Ayanaba and B.J. Goldman. 1984. Patterns of diversity of cowpea-miscellany rhizobia from three west african locations. *Symbiotic Nitrogen Fixation I* pp. 120-125.
- 2655 Jagadish, M.N. and A.A. Szalay. 1984. Directed transposon Tn5 mutagenesis and complementation in slow-growing, broadhost range cowpea rhizobium. *Mol. Gen. Genet.* 196: 290-300.
- 2656 Legocki, R.P., A.C. Yun and A.A. Szalay. 1984. Expression of B-galactosidase controlled by a nitrogenase promoter in stem nodules of *Aeschynomene scabra*. *Proc. Nat. Acad. Sci. USA* 81: 5806-5810.
- 2657 McCabe, D., R.A. Humber and R.S. Soper. 1984. Observation and interpretation of nuclear reductions during maturation and germination of entomophthoralesan resting spores. *Mycologia* 76(6): 1104-1107.
- 2658 Maclean, D.C., L.H. Weinstein, D.C. McCune and R.E. Schneider. 1984. Fluoride induced suture red spot in 'Elberta' peach. *Environ. and Exper. Botany* 24(4): 353-367.
- 2659 Maclean, D.C., D.C. McCune and R.E. Schneider. 1984. Growth and yield of wheat and sorghum after sequential exposures to hydrogen fluoride. *Environ. Poll. (series A)* 36: 351-365.
- 2660 Reich, P.B. 1984. Leaf stomatal density and diffusive conductance in three amphistomatous hybrid poplar cultivars. *New Phytol.* 98: 231-239.
- 2661 Reich, P.B. and J.P. Lassoie. 1984. Effects of low level O₃ exposure on leaf diffusive conductance and water-use efficiency in hybrid poplar. *Plant Cell and Environment* 7: 661-668.
- 2662 Gilbertson, J.R. and H. Langkamp, H. Gershon, G.E. Rowe and R.C. Santore. 1984. Antifungal properties of 2-n-alkyl-1-ols. *J. of Pharmaceutical Sciences* 73: 1840-1842.
- 2663 Sacher, R.F. and R.C. Staples. 1985. Inositol and sugars in adaptation of tomato in salt. *Plant Physiol.* 77: 206-210.
- 2664 Weinstein, L.H. 1984. Effects of air pollution on grapevines. *Vitis* 23: 274-303.
- 2665 LaFavre, A.K. and A.R.J. Eaglesham. 1984. The effects of N applied at planting on nodulation during soybean ontogeny. *Symbiotic N Fixation (1)*
- 2666 Laurence, J.A., K.L. Reynolds and C.S. Greitner. 1985. Bioindicators of SO₂: Response of three plant species to variation in dosage-kinetics of SO₂. *Environ. Poll. (series A)* 37: 43-52.

- 2667 El Banhawy, E.M. and T.E. Anderson. 1985. Effects of avermectins B1 and fenvalerate on the survival, reproduction and egg viability of the two-spotted spider mite *Tetranychus urticae* KOCH (Acardi): *Tetranychidae* Intil. J. Acarol. 11(1): 11-16.
- 2668 Reich, P.B., J.P. Lassoie and R.G. Amundson. 1984. Reduction in growth of hybrid poplar following field exposure to low levels of O and/or SO₂. Can. J. Bot. 62: 2835-2841.
- 2669 Jacobson, J.S., J. Troiano and L. Heller. 1985. Stage of development response and recovery of radish plants from episodic exposure to simulated acid rain. J. Exp. Botany 36(162): 159-167.
- 2670 Hughes, P.R., L.H. Weinstein, L.M. Johnson and A.R. Braun. 1985. Fluoride transfer in the environment: Accumulation and effects of cabbage looper *Trichoplusia ni* of flouride from water soluble salts and HF-fumigated leaves. Environ. Poll. (series A) 97: 175-192.
- 2671 Mussell, H. 1985. Interaction between 1-aminocyclopropane-1-carboxylic acid and an IAA-oxidase from tomato foliage. OYTON 45: 55-60.
- 2672 Braen, S. and L.H. Weinstein. 1985. Uptake of fluoride and aluminum by plants grown in contaminated soils. Water, Air and Soil Pollution 24: 215-223.
- 2673 Legocki, R.P., J.D. Noti, M.N. Jagadish, A.C. Yun and A.A. Szalay. 1984. Genetic manipulation of rhizobium- Plant cell communications: Prospects for delivery of foreign gene products to plants. Natural Products Chemistry.
- 2674 Reich, P.B., A.W. Schottle and R.G. Amundson. 1984. Effects of low concentrations of O₃, leaf age and water stress on leaf diffusive conductance and water use efficiency in soybean. Physiol. Plant 63: 58-64.
- 2675 Lord, J.C. and D.W. Roberts. 1985. Effects of salinity ph organic solutes, anaerobic conditions and the pressure of other microbes on production and survival of *Lagenidium giganteum* (Oomycetes: lagenidiales) zoospores. J. of Invert. Path. 45: 331-338.
- 2676 Staples, R.C., S. Hassouna and H.C. Hoch. 1985. Effect of potassium on sugar uptake and assimilation by bean rust germlings. Mycologia 77(2): 248-252.
- 2677 Rao, V.R., A. Ayanaba, A.R.J. Eaglesham and G. Thottappily. 1985. Effects of *Rhizobium* inoculation on field-grown soybeans in western nigeria and assessment of inoculum persistence during a two year fallow. Trop. Agriculture 62(2): 125-130.
- 2678 Eaglesham, A.R.J. 1985. Comparison of nodulation promiscuity of US- and asian-type soybeans. Trop. Agric. 62(2): 105-109.
- 2679 Reich, P.B. 1984. Relationship between leaf age, irradiance, leaf conductance, CO₂ exchange and water use efficiency in hybrid poplar photosynthetica. 18(4): 445-453.
- 2680 Seegers, R. and T.A. LaRue. 1985. Legume agglutinins that bind to *Rhizobium meliloti*. J. Bacteriol. 162: 784-789.

- 2681 Jacobson, J.S. and J.M. McManus. 1985. Pattern of atmospheric sulphur dioxide occurrence: An important criterion in vegetation effects assessment. *Atmospheric Environ.* 19(3): 501-505.
- 2682 Messina, F.J. and J.A.A. Renwick. 1985. Ability of ovipositing seed beetles to discriminate between seeds with differing egg load. *Ecol. Ento.* 10: 225-230.
- 2683 Wettlaufer, S.H., R. Alscher and C. Strick. 1985. Chloroplast-diphenyl ether interactions II. *Plant Physiol.* 78: 215-220.
- 2684 Sack, F.D. and A.C. Leopold. 1985. Cytoplasmic streaming affects gravity-induced amyloplast sedimentation in maize coleoptiles. *Planta* 164: 56-62.
- 2685 Messina, F.J., J.A.A. Renwick. 1985. Mechanism of egg recognition by the cowpea weevil *Callosbruchus maculatus*. *Entomol. Exp. Appl.* 37: 241-245.
- 2686 Priestley, D.A. and S.E. Williams. 1985. Changes in cotyledonary lipids during drying of cacao (*Theobroma cacao* L.) seeds. *Trop. Agric.* 62(1): 65-68.
- 2687 Priestley, D.A., B.G. Werner, A.C. Leopold and M.B. McBride. 1985. Organic free radical levels in seeds and pollen: The effects of hydration and aging. *Physiol. Plant.* 64: 88-94.
- 2688 Reich, P.B. and J.P. Lassoie. 1985. Influence of low concentrations of ozone on growth, biomass partitioning and leaf senescence in young hybrid poplar plants. *Environ. Poll.* 39: 39-51.
- 2689 Gershon, H., J.A. Jerome and K.F. McElwain. 1985. Antifungal properties of 3-n-alkyn-1-ols and synergism with 2-n-alkyn-1-ols and ketoconazole. *J. Pharm. Sci.* 74: 556-558.
- 2690 Messina, F.J., J.A.A. Renwick and J.L. Barmore. 1985. Resistance to *aphis cracivora* (*Homoptera: aphididae*) in selected varieties of cowpea. *J. Entom. Sci.* 20(2): 263-269.
- 2691 Gershon, H., A.T. Grefig and D.J. Cady. 1985. Evidence that the mechanisms of fungitoxicity of 8-quinolinol and its bischelate with copper (II) are different. *Can. J. Microbiol.* 31: 707-710.
- 2692 Jacobson, J.S. 1985. Scientific research, risk assessment and policy development. Pages 191-196 in *Acid Rain* (P. Mandelbaum, ed.). Plenum Press, NY.
- 2693 Ellenson, J.L. 1985. Phytoluminographic detection of dynamic variations in leaf gaseous conductivity. *Plant Physiol.* 78: 904-908.
- 2694 Austin, L., H. Mussell and J.A.A. Renwick. 1985. A simple freeze drying procedure for preserving waxy cuticle surface structures of leaves for scanning electron microscopy. *J. of Electron Microscopy Technique* 2:513-514.
- 2695 Chabot, J.F. and A.C. Leopold. 1985. Ultrastructural aspects of chilling injury in the soybean seed radicle. *Amer. J. Bot.* 72(7): 1120-1126.
- 2696 Sack, F.D., M.M. Suyemoto and A.C. Leopold. 1985. Amyloplast sedimentation kinetics in gravistimulated maize roots. *Planta* 165: 295-300.

- 2697 Vertucci, C.W., J.L. Ellenson and A.C. Leopold. 1985. Chlorophyll fluorescence characteristics associated with hydration level in pea cotyledons. *Plant Physiol* 79: 248-252.
- 2698 Rothermel, B. and R. Alscher. 1985. A light-enhanced metabolism of sulfite in cells of *Cucumis satovus L.* cotyledons. *Planta* 166: 105-110.
- 2699 Noti, J.D., B. Dudas and A.A. Szalay. 1985. Isolation and characterization of nodulation genes from *bradyrhizobium sp.* (vigna) strain IRc 78. *Proc. Nat. Acad. Sci.* 81: 7379-7383.
- 2700 Reich, P.B. and R.G. Amundson. 1985. Ambient levels of ozone reduce net photosynthesis in tree and crop species. *Science* 230: 566-570.
- 2701 Reich, P.B., A.W. Schottle, H.F. Stroo, J. Troiano and R.G. Amundson. 1985. Effects of O₃, SO₂ and acidic rain on mycorrhizal infection in northern red oak seedlings. *Can. J. Bot.* 63:2049-2055.
- 2702 Renwick, J.A.A. and C.D. Radke. 1985. Constituents of host and non-host plants deterring oviposition by the cabbage butterfly, *Pieris rapae*. *Entomol. Exp. Appl.* 39: 21-26.
- 2703 Priestley, D.A., B.G. Werner and A.C. Leopold. 1985. The suceptibility of soybean seed lipids to artificially enhanced atmospheric oxidation. *J. Exp. Botany* 36(171): 1653-1559.
- 2704 Grant, I.F., R. Seegers and I. Watanabe. 1983. Increasing biological nitrogen fixation in flooded rice using neem. *Proc. 2nd Neem Conf. Rauschhoizhauden* pp. 493-506.
- 2705 Grant, I.F. and R. Seegers. 1985. Tubificid role in soil materialization and recovery of algal nitrogen by lowland rice. *Soil Biol. Biochem* 17(4): 559-563.
- 2706 Grant, I.F., A.C. Tirol, T. Aziz and I. Watanabe. 1983. Regulation of invertebrate grazers as a means to enhance biomass and nitrogen fixation of cyanophyceae in wetland rice fields. *Soil Science Society of America Journal* 47:4.
- 2707 Grant, I.F. and R. Seegers. 1985. Movement of straw and algae facilitated by tubificids (*Oligochaeta*) in lowland rice soil. *Soil Biol. Biochem.* 17(5): 729-730.
- 2708 Grant, I.F., P.A. Roger and I. Watanabe. Effect of grazer regulation and algal inoculation on photodependent nitrogen fixation in a wetland rice field. 1985. *Biol. Fert. Soils* 1: 61-72.
- 2709 Jakai, L.E.N. and R.A. Daoust. 1986. Insect pests of cowpeas. *Ann. Rev. Entomol.* 31: 95-119.
- 2710 Hughes, P.R., J.J. Chiment and A.I. Dickie. 1986. Effect of pollutant dose on the response of mexican bean beetle (*Coleoptera:Coccinellidae*) to SO₂-induced changes in soybean. *Environ. Entomol.* 14(6): 718-721.
- 2711 Messina, F.J. and J.A.A. Renwick. 1986. Resistance to *callosobruchus maculatus* (*Coleoptera:Bruchidae*) in selected cowpea lines. *Environ. Entomology* 14(6): 868-872.

- 2712 Staples, R.C., H.C. Hoch, L. Epstein, L. Laccetti and S. Hassouna. 1985. Recognition of host morphology by rust fungi: responses and mechanisms. *Can. J. Plant Pathology* 7:314-322.
- 2713 Maclean, D.C. and K.S. Hansen. 1986. Responses of two deciduous plants to hydrogen fluoride during winter dormancy. *APCA Journal* 36(1).
- 2714 Reich, P.B., A.W. Schoettle, R.M. Raba and R.G. Amundson. 1986. Response of soybean to low concentrations of ozone. I Reductions in leaf and whole plant net photosynthesis and leaf chlorophyll content. *J. Environ. Quality* 14(1): 31-35.
- 2715 Kaijiang, L. and D.W. Roberts. 1986. The production of destruxins by entomogenous fungus *Metarhizium anisopliae* var *major*. *J. Invert. Path.* 47: 120-122.
- 2716 Burand, J.P. and H.A. Wood. 1986. Intracellular protein synthesis during standard and defective Hz-1 virus replication. *J. Gen. Virol.* pp. 167-173.
- 2717 Anderson, T.E., J.B. Babu, R.A. Dybas and H. Mehta. 1986. Avermectin B1: Ingestion and contact toxicity against *spodoptera eridania* and *heliiothis virescens* (*Lepidoptera: noctuidae*) and Potentiation by oil and piperonyl butoxide. *J. Economic Entomology* 79(1): 197-199.
- 2718 Doust, R.A. and D.W. Roberts. 1986. Virulence of a natural isolate, auxotrophic mutants and a diploid of *metarhizium anisopliae* var. *anisopliae* to *rhodnius prolixus*. *J. Invert. Path.* 47: 231-233.
- 2719 LaFavre, A.K. and A.R.J. Eaglesham. 1986. The effects of high temperatures on soybean nodulation and growth with different strains of *bradyrhizobia*. *Can. J. of Microbiology* 32(1): 22-27.
- 2720 Reich, P.B., A.W. Schottle and R.G. Amundson. 1986. Effects of O₃ and rain on photosynthesis and growth in sugar maple and northern red oak seedlings. *Environ. Poll. (series A)* pp. 1-15.
- 2721 Maclean, D.C., D.C. McCune, J.A. Laurence and L.H. Weinstein. 1986. Advances in understanding effects of atmospheric fluoride on vegetation. *Light Metals* pp. 933-938.
- 2722 LaFavre, J.S. and A.R.J. Eaglesham. 1986. Rhizobitoxine: A phytotoxin of unknown function which is commonly produced by *bradyrhizobia*. *Plant and Soil* 92: 443-452.
- 2723 Amundson, R.G., R.M. Raba, A.W. Schoettle and P.B. Reich. 1986. Response of soybean to low concentrations of ozone. II Effects on growth, biomass, allocation and flowering. *J. Environ. Quality* 15(2).
- 2724 Chiment, J.J., R. Alscher and P.R. Hughes. 1986. Glutathione as an indicator of SO₂ induced stress in soybean. *Environ. Exp. Botany* 26: 147-152.
- 2725 Ellenson, J.L. 1986. Flash-induced delayed light emission patterns of red kidney bean leaves: Evidence of a new component dependent upon tissue integrity. *Plant Physiol.* 80: 988-991.

- 2726 Reich, P.B., A. Shcoettle, R.G. Amundson and H.F. Stroo. 1986. Acid rain and ozone influence mycorrhizal infection in tree seedlings. *APCA Journal* 36(6).
- 2727 Daoust and Pereira. 1986. Survival of *Beauveria bassiana* (*Deuteromycetes: moniliales*) conidia on cadavers of cowpea pests stored outdoors and in laboratory in Brazil. *Environ. Entomol.* 15: 642-647.
- 2728 Kohut, R.J., R.G. Amundson and J.A. Laurence. 1986. Evaluation of growth and yield of soybean exposed to ozone in the field. *Environ. Pollut. (series A)* 41: 219-234.
- 2729 Van Ryn, D.M., J.S. Jacobson and J.P. Lassoie. 1986. Effects of acidity on in vitro pollen germination and tube elongation in four hardwood species. *Can. J. For. Res.* 16: 397-400.
- 2730 Granados, R.R., C.G. Derksen and K.G. Dwyer. 1986. Replication of the *Trichoplusia ni* granulosis and nuclear polyhedrosis viruses in cell cultures. *Virology* 152: 472-476.
- 2731 Laurence, J.A. and K.L. Reynolds. 1986. Joint action of hydrogen fluoride and sulfur dioxide on the development of common blight of red kidney bean. *Phytopathology* 76: 514-517.
- 2732 Rajam, M.V., L.H. Weinstein and A.W. Galston. 1985. Prevention of a plant disease by specific inhibition of frugal polyamine biosynthesis. *Proc. Natl. Acad. Sci.* 82: 6874-6878.
- 2733 Santiago, T.V., M. Bravo, C. Daez, V. Ventura, I. Watanabe and A.A. App. 1986. Effects of N- fertilizers, straw and dry fallow on the nitrogen balance of a flooded soil planted with rice. *Plant and Soil* 93: 405-411.
- 2734 Jacobson, J.S., J.J. Troiano, L.I. Heller and J. Osmeloski. 1986. Influence of sulfate, nitrate and chloride in simulated acidic rain on radish plants. *J. of Environ. Quality* 15: 301-304.
- 2735 MacLean, D.C., R.E. Schneider, L.H. Weinstein. 1986. Responses of five species of conifers to sulfur dioxide and hydrogen fluoride during winter dormancy. *Environ. Exp. Bot.* 26: 291-296.
- 2736 Rombach, M.C., R.M. Aguda, B.M. Shepard, D.W. Roberts. 1986. Entomopathogenic fungi (*Deuteromycotina*) in the control of the black bug of rice, *Scotinophara coarctata* (*Hemiptera; Pentatomidae*). *J. Invertebr. Pathol.* 48: 174-179.
- 2737 Van Beek, N.A.M., P.R. Hughes. 1986. Determination by fluorescence spectroscopy of the volume ingested by neonate lepidopterous larvae. *J. Invertebr. Pathol.* 48: 249-251.
- 2738 Hughes, P.R., N.A.M. Van Beek, H.A. Wood. 1986. A modified droplet feeding method for rapid assay of *Bacillus thuringiensis* and baculoviruses in noctuid larvae. *J. Invertebr. Pathol.* 48: 187-192.
- 2739 Rawsthorne, S. and T. A. LaRue. 1986. Preparation and properties of mitochondria from cowpea nodules. *Plant Physiol.* 81: 1092-1096.

- 2740 Rawsthorne, S. and T. A. LaRue. 1986. Metabolism under microaerobic conditions of mitochondria from cowpea nodules. *Plant Physiol.* 81: 1097-1102.
- 2741 App, A.A., I. Watanabe, T. Santiago Ventura, M. Bravo, C. Daez Jurey. 1986. Effect of cultivated and wild rice varieties on the nitrogen balance of flooded soil. *Soil Sci.* 141: 448-452.
- 2742 Sasakawa, H. and T. A. LaRue. 1986. Root respiration associated with nitrate assimilation by cowpea. *Plant Physiol.* 81: 972-975, 1986.
- 2743 Rombach, M.C., R.M. Aguda, B.M. Sheppard, D.W. Roberts. 1986. Infection of rice brown planthopper, *Nilaparvata lugens* (Homoptera: Delphacidae), by field application of entomopathogenic *Hyphomycetes* (Deuteromycotina). *Environ. Entomol.* 15: 1070-1073.
- 2744 Lord, J.C. and D.W. Roberts. 1986. The effects of culture medium quality and host passage on zoosporogenesis, oosporogenesis, and infectivity of *Lagenidium giganteum* (Oomycetes: Lagenidiales). *J. Invertebr. Pathol.* 48: 355-361.
- 2745 Hoch, H.C., T.M. Bourett, & R.C. Staples. 1986. Inhibition of cell differentiation in *Uromyces* with D₂O and taxol. *Eur. J. Cell Biol.* 41: 290-297.
- 2746 Glenister, R. and T.A. LaRue. 1986. Non-destructive estimate of nitrogenase activity (C₂H₂) of field-grown soybean. *Plant Soil* 96: 137-140.
- 2747 Weinstein, L.H., R. Kaur-Sawhney, M. Venkat Rajam, S.H. Wettlaufer and A.W. Galston. 1986. Cadmium-induced accumulation of putrescine in oat and bean leaves. *Plant Physiol.* 82: 641-645.
- 2748 Staples, R.C., O.C. Yoder, H.C. Hoch, L. Epstein and S. Bhairi. 1986. Gene expression during infection structure development by germlings of the rust fungi. In: *Biology and Molecular Biology of Plant-Pathogen Interactions*, ed. by J. Bailey. (NATO Adv. Study Inst. vol. H1) Springer-Verlag, Berlin. 331-341.
- 2749 Van Bruggen, A.H.C., J.F. Osmeloski, and J.S. Jacobson. 1986. Effects of simulated acidic rain on wash-off of fungicides and control of late blight on potato leaves. *Phytopathology* 76: 800-804.
- 2750 Amundson, R.G., R.B. Walker, A.H. Legge. 1986. Sulphur gas emissions in the boreal forest: the west Whitecourt case study. VII. Pine tree physiology. *Water Air Soil, Pollut.* 29: 129-147.
- 2751 Daoust, R.A. and R.M. Pereira. 1986. Stability of entomopathogenic fungi *Beauveria bassiana* and *Metarhizium anisopliae* on beetle-attracting tubers and cowpea foliage in Brazil. *Environ. Entomol.* 15: 1237-1243.
- 2752 Priestley, D.A. and A.C. Leopold. 1986. Alleviation of imbibitional chilling injury by use of lanolin. *Crop Science* 26: 1252-1254.
- 2753 Messina, F. 1987. Genetic contribution to the dispersal polymorphism of the cowpea weevil (*Coleoptera: Bruchidae*) *J. Ann. Entomol. Soc. Am.* 80:12-16.
- 2754 Glenister, R.A. and T.A. LaRue. 1986. A spot test for estimating ureides in soybean petioles. *Exp. Agric.* 22: 405-416.

- 2755 Rombach, M.C., R.A. Humber, D.W. Roberts. 1986. *Metarhizium flavoviride* var. *minus*, var. Nov., a pathogen of plant and leafhoppers on rice in the Philippines and Solomon Islands. *Mycotaxon* 27: 87-92.
- 2756 Messina, F.J., J.L. Barmore, J.A.A. Renwick. 1987. Oviposition deterrent from eggs of *Callosobruchus maculatus*: Spacing mechanism or artifact? *J. Chem. Ecol.* 13: 219-226.
- 2757 Mussell, H., E. Earle, L. Campbell, L.A. Batts. 1986. Ethylene synthesis during protoplast formation from leaves of *Avena sativa*. *Plant Sci.* 47: 207-214.
- 2758 Jacobson, J.S., J. Osmeloski, K. Yamada, L. Heller. 1987. The influence of simulated acidic rain on vegetative and reproductive tissues of cucumber (*Cucumis sativus* L.). *New Phytol.* 105: 139-147.
- 2759 Alscher, R., J. Bower, W. Zipfel. 1987. The basis for different sensitivities of photosynthesis to SO₂ in two cultivars of pea. *J. Exp. Bot.* 38: 99-108.
- 2760 Wolpert, T.J., V. Macko, W. Acklin, B. Jaun, D. Arigoni. 1986. Structure of minor host-selective toxins from *Cochliobolus victoriae*. *Experientia* 42: 1296-1299.
- 2761 Gershon, H., A. Grefig, D.D. Clarke. 1987. J. Pyrimidines. 8. Chlorination of 6-methyluracil with phosphorus oxychloride in the presence of trialkylamines. *Heterocyclic Chem.* 24: 205-209.
- 2762 Rombach, M.C. and D.W. Roberts. 1987. *Calcarisporium ovalisporum*, symbiotic with the insect pathogen *Hirsutella citriformis*. *Mycologia* 79: 153-155.
- 2763 Kohut, R.J., R.G. Amundson, J.A. Laurence, L. Colavito, P. Van Leuken, and P. King. 1987. Effects of ozone and sulfur dioxide on yield of winter wheat. *Phytopathology* 77: 71-74.
- 2764 Amundson, R.G., R.J. Kohut, A.W. Schoettle, R.M. Raba, P.B. Reich. 1987. Correlative reductions in whole-plant photosynthesis and yield of winter wheat caused by ozone. *Phytopathology* 77: 75-79.
- 2765 Zipfel, W., R. Alscher, J. Bower. 1987. Diurnal changes in electron transport capacity in pea thylakoids. Pages 609-612 in: Progress in Photosynthesis Research (J. Biggins, ed.). Martinus Nijhoff Publ.
- 2766 Hughes, P.R., L.H. Weinstein, S.H. Wettlaufer, J.J. Chiment, G.J. Doss, T.W. Culliney, W.H. Gutenmann, C. A. Bache, and D.J. Lisk. 1987. Effect of fertilization with municipal sludge on the glutathione, polyamine, and cadmium content of cole crops and associated loopers (*Trichoplusia ni*). *J. Agric. Food Chem.* 35: 50-54.
- 2767 Reynolds, K.L., M. Zanelli, and J.A. Laurence. 1987. Effects of sulfur dioxide exposure on the development of common blight in field-grown red kidney beans. *Phytopathology* 77: 331-334.
- 2768 Jacobson, J.S., J.J. Troiano, L.I. Heller, L. Osmeloski. 1987. Effect of fertilizer on the growth of radish plants exposed to simulated acidic rain containing different sulfate to nitrate ratios. *Environ. Pollut.* 44: 71-79.

- 2769 Glenister, R.A., and T.A. LaRue. 1987. Measuring ureides. Symbiotic Nitrogen Fixation Technology (G.H. Elkan, ed.) Marcel Dekker, Inc., NY. 307-320.
- 2770 Belsky, A.J. and R.G. Amundson. 1986. Sixty years of successional history behind a moving sand dune near Olduvai Gorge, Tanzania. *Biotropica* 18: 231-235.
- 2771 Van Bruggen, A.H.C., M.G. Milgroom, J.F. Osmeloski, W.E. Fry, and J.S. Jacobson. 1987. Attenuation of metalaxyl on potato leaves by simulated acidic rain and residence time. *Phytopathology* 77: 401-406.
- 2772 Mussell, H., J. Osmeloski, S.H. Wettlaufer, L. Weinstein. 1987. Suppression of *Verticillium* wilt of tomato by difluoromethylornithine, a suicidal inhibitor of polyamine biosynthesis. *Plant Dis.* 71: 313-316.
- 2773 Van Bruggen, A.H.C, J.F. Osmeloski, and J.S. Jacobson. 1987. Effects of simulated acidic mist on germination of *Alternaria solani* and *Phytophthora infestans* in vitro and their infection efficiency and sporulation on potato. *Phytopathology* 77: 564-570.
- 2774 Dwyer, K.G. and R.R. Granados. A Physical map of the *Pieris rapae* granulosis virus genome. *J. Gen. Virol.* 68: 1471-1476.
- 2775 Renwick, J.A.A. and C.D. Radke. Chemical stimulants and deterrents regulating acceptance or rejection of crucifers by cabbage butterflies. *J. Chem. Ecol.* 13: 1771-1776.
- 2776 *Torrubiella ratticaudata* sp. Nov. (*Pyrenomycetes: Clavicipitales*) and other fungi from spiders on the Solomon Islands. *21 Mycologia* 79: 375-382, 1987.
- 2777 Lord, J.C. and D.W. Roberts. 1987. Host age as a determinant of infection rates with the mosquito pathogen *Lagenidium giganteum* (*Oomycetes: Lagenidiales*). *J. Invertebr. Pathol.* 50: 70-71.
- 2778 Reich, P.B., A.W. Schoettle, H.F. Stroo, J. Troiano, and R.G. Amundson. 1987. Effects of ozone and acid rain on white pine (*Pinus strobus*) seedlings grown in five soils. I. Net photosynthesis and growth. *Can. J. Bot.* 65: 977-987.
- 2779 La Favre, A.K. and A.R.J. Eaglesham. 1987. Effects of high temperatures and starter nitrogen on the growth and nodulation of soybean. *Crop Sci.* 27: 742-745.
- 2780 Madkour, S. and L.H. Weinstein. 1987. Effects of hydrogen fluoride on incorporation and transport of photoassimilates in soybean. *Environ. Toxicol. Chem.* 6: 627-634.
- 2781 Rombach, M.C., R.A. Humber, and H.C. Evans. 1987. *Metarhizium album*, a fungal pathogen of leaf- and planthoppers of rice. *Trans. Br. Mycol. Soc.* 88: 451-459.
- 2782 Flore, P.H., J.P. Burand, R.R. Gettig, and H.A. Wood. Characterization of DNA polymerase activity in *Trichoplusia ni* cells infected with *Autographa californica* nuclear polyhedrosis virus. 1987. *J. Gen. Virol.* 68: 2025-2031.
- 2783 Hoch, H.C. and R.C. Staples. 1987. Structural and chemical changes among the rust fungi during appressorium development. *Annu. Rev. Phytopathol.* 25:231-247.

- 2784 Epstein, L., L.B. Laccetti, R.C. Staples, and H.C. Hoch. 1987. Cell-substratum adhesive protein involved in surface contact responses of the bean rust fungus. *Physiol. Mol. Plant Pathol.* 30: 373-388.
- 2785 Gettig, R.R., J.P. Burand, P.H. Flore, W.J. McCarthy, and H.A. Wood. 1987. Replication of *Heliothis zea* nuclear polyhedrosis virus in insect cell culture: virus-induced and structural proteins. *J. Gen Virol.* 68: 1617-1625.
- 2786 Wraight, S.P. and D.W. Roberts. 1987. Insect control efforts with fungi. *Developments in Industrial Microbiol.* 28: 77-87. (J. Industrial Microbiol. Suppl. No. 2)
- 2787 Eaglesham, A.R.J., M.D. Stowers, M.L. Maina, B.J. Goldman, M.J. Sinclair, and A.Ayanaba. 1987. Physiological and biochemical aspects of diversity of *Bradyrhizobium sp. (Vigna)* from three West African soils. *Soil Biol. Biochem.* 19: 575-581.
- 2788 Alscher, R., M. Franz and C.W. Jeske. 1987. Sulfur dioxide and chloroplast metabolism. Pages 1-28 in: Phytochemical Effects of Environmental Compounds (J.A. Saunders, L. Kosak-Channing, E. Conn, eds.). Plenum Publ. Corp.
- 2789 Buckley, E.H. 1987. PCBs in the atmosphere and their accumulation in foliage and crops. Pages 175-201 in: Phytochemical Effects of Environmental Compounds (J.A. Saunders, L. Kosak-Channing, E. Conn, eds.). Plenum Publ. Corp.
- 2790 Weinstein, L.H., J.F. Osmeloski, S.H. Wettlaufer, A.W. Galston. 1987. Protection of wheat against leaf and stem rust and powdery mildew diseases by inhibition of polyamine metabolism. *Plant Sci.* 51: 311-316.
- 2791 La Favre, A.K. and A.R.J. Eaglesham. 1987. The effects of a high level of N, applied at planting, on nodulation of soybean (*Glycine max* (L.) Merr. by diverse strains of *Bradyrhizobium*. *Plant Soil* 102: 267-270.
- 2792 Staples, R.C. and H.C. Hoch. 1987. Infection structures--form and function. *Exp. Mycol.* 11: 163-169.
- 2793 Gershon, H., A.T. Grefig, D.D. Clarke. 1987. Pyrimidines. 9. Chlorination of 6-Trifluoromethyluracil with phosphorus oxychloride in the presence of trialkylamines. *J. Heterocyclic Chem.* 24: 1243-1247.
- 2794 Vertucci, C.W. and A.C. Leopold. 1987. Water binding in legume seeds. *Plant Physiol.* 85: 224-231, 1987.
- 2795 Vertucci, C.W. and A.C. Leopold. 1987. The relationship between water binding and desiccation tolerance in tissues. *Plant Physiol* 85: 232-238.
- 2796 Muschinek, G., R. Alscher, and L.E. Anderson. 1987. The sensitivity of light modulation of enzyme activity to arsenite and sulphite and of photosynthetic induction to arsenite is determined by a cytoplasmic gene. *J. Exp. Bot.* 38: 1069-1075.
- 2797 Vertucci, C.W., F.A. Vertucci, and A.C. Leopold. 1987. Water content and the conversion of phytochrome regulation of lettuce dormancy. *Plant Physiol.* 84: 887-890.

- 2798 Van Beek, N.A.M., A.C.G. Derksen, R.R. Granados, and P.R. Hughes. 1987. Alkaline liberated baculovirus particles retain their infectivity per os for neonate lepidopterous larvae. *J. Invertebr. Pathol.* 50: 339-340.
- 2799 C.W. Vertucci and A.C. Leopold. 1987. Oxidative processes in soybean and pea seeds. *Plant Physiol.* 84: 1038-1043.
- 2800 L. Laccetti, R.C. Staples, H.C. Hoch. 1987. Purification of calmodulin from bean rust uredospores. *Exp. Mycol.* 11: 231-235.
- 2801 Hajek, A.E., R.S. Soper, D.W. Roberts, T.E. Anderson, K.D. Biever, D.N. Ferro, R.A. LeBrun, and R.H. Storch. 1987. Foliar applications of *Beauveria bassiana* (Balsamo) Vuillemin for control of the Colorado potato beetle, *Leptinotarsa decemlineata* (Say) (Coleoptera: Chrysomelidae): An overview of pilot test results from the northern United States. *Can. Entomol.* 119: 959-974.
- 2802 VanBeek, N.A.M., H.A. Wood, and P.R. Hughes. 1988. Quantitative aspects of nuclear polyhedrosis virus infections in lepidopterous larvae: The dose-survival time relationship. *J. Invertebr. Pathol.* 51: 58-63.
- 2803 Bjorkman, T., and A.C. Leopold. 1987. Effect of inhibitors of auxin transport and of calmodulin on a gravisensing-dependent current in maize roots. *Plant Physiol.* 84: 847-850.
- 2804 Bjorkman, T. and A.C. Leopold. 1987. An electric current associated with gravity sensing in maize roots. *Plant Physiol.* 84: 841-846.
- 2805 Hardy, R.W.F. 1988. Biotechnology for agriculture and food in the future. Pages 312-319 in: The Impact of Chemistry on Biotechnology: Multidisciplinary Discussions (M. Phillips, S.P. Shoemaker, R.D. Middlekauff, & R.M. Ottenbrite, eds.) ACS Symp. Ser. 362. Am. Chem. Society, Washington, DC.
- 2806 Renwick, J.A.A. and C.D. Radke. 1988. Sensory cues in host selection for oviposition by the cabbage butterfly, *Pieris rapae*. *J. Insect Physiol.* 34: 251-257.
- 2807 Caffrey, M., V. Fonseca, and A.C. Leopold. 1988. Lipid-sugar interactions. Relevance to anhydrous biology. *Plant Physiol.* 86: 754-758.
- 2808 Madkour, S. and L.H. Weinstein. 1988. Effects of fumigation with hydrogen fluoride on the loading of [¹⁴C]sucrose into the phloem of soybean leaves. *Environ. Toxicol. Chem.* 7: 317-320.
- 2809 Dwyer, K.G. and R.R. Granados. 1988. Mapping *Pieris rapae* granulosis virus transcripts and their in vitro translation products. *J. Virol.* 62: 1535-1542.
- 2810 Perdue, D.O., A.K. La Favre, and A.C. Leopold. 1988. Calcium in the regulation of gravitropism by light. *Plant Physiol.* 86: 1276-1280.
- 2811 Leopold, A. C. 1987. Contemplations on hormones as biological regulators. Pages 3-15 in Hormone Action in Plant Development (G. V. Head, ed.). Butterworth, London.
- 2812 Wettlaufer, S.H. and L.H. Weinstein. 1988. Quantitation of polyamines using thin-layer chromatography and image analysis. *J. Chromatog.* 441: 361-366.

- 2813 Van Beek, N.A.M., H.A. Wood, and P.R. Hughes. 1988. The number of nucleocapsids of enveloped *Autographa californica* nuclear polyhedrosis virus particles affects the survival time of neonate *Trichoplusia ni* larvae. *J. Invertebr. Pathol.* 52: 185-186.
- 2814 Feng, A., R.I. Carruthers, T.S. Larkin, and D.W. Roberts. 1988. A phenology model and field evaluation of *Beauveria bassiana* (Bals.) Vuillemin (*Deuteromycotina: Hyphomycetes*) mucosis of the European corn borer, *Ostrinia nubilalis* (HBN.) (*Lepidoptera: Pyralidae*) *Can. Entomol.* 120: 133-144.
- 2815 Butt, T.M., S.P. Wraight, S. Galaini-Wraight, R.A. Humber, D.W. Roberts, and R.S. Soper. 1988. Humoral encapsulation of the fungus *Erynia radicans* (*Entomophthorales*) by the potato leafhopper, *Empoasca fabae* (*Homoptera: Cicadellidae*). *J. Invertebr. Pathol.* 52: 49-56.
- 2816 Van Beek, N.A.M., H.A. Wood, J.E. Angellotti, P.R. Hughes. 1988. Rate of increase and critical amount of nuclear polyhedrosis virus in lepidopterous larvae estimated from survival time assay data with a birth-death model. *Arch. Virol.* 100: 51-60.
- 2817 Jacobson, J., A. Kuja, D. Shriener, S. Perrigan, P. Irving, J. Lee, J. Troiano, V. Cullinan. 1988. A collaborative effort to model plant response to acidic rain. *Pollution Control Assoc.* 38: 777-783.
- 2818 Dwyer, K.G., S.E. Webb, A.M. Shelton, R.R. Granados 1988. Establishment of cell lines from *Pieris rapae* embryos: Characterization and susceptibility to baculoviruses. *J. Invertebr. Pathol.*: 52, 268-274.
- 2819 Leopold, A.C. and S.H. Wettlaufer. 1988. Diagravitropism in corn roots. *Plant Physiol.* 87: 803-805.
- 2820 El-Mogazi, D., D.J. Lisk, and L.H. Weinstein. 1988. A review of physical, chemical, and biological properties of fly ash and effects on agricultural ecosystems. *The Science of the Total Environment* 74: 1-37.
- 2821 Kohut, R.J., J.A. Laurence, and L.J. Colavito. 1988. The influence of ozone exposure dynamics on the growth and yield of kidney bean. *Environ. Pollut.* 53: 79-88.
- 2822 Hughes, P.R. 1988. Insect populations on host plants subjected to air pollution. Pages 249-319 in: Plant Stress -- Insect Interactions (E.A. Heinrichs, ed.). John Wiley & Sons, Inc.
- 2823 Laurence, J.A., R.J. Kohut, and R.G. Amundson. 1989. Response of red spruce seedlings exposed to ozone and simulated acidic precipitation in the field. *Arch. Environ. Contam. Toxicol.* 18:285-290.
- 2824 Hughes, P.R. and J.J. Chiment. 1988. Enhanced success of Mexican bean beetle (*Coleoptera: Coccinellidae*) on glutathione-enriched soybean leaves. *Environ. Entomol.* 17: 782-784.
- 2825 Magalhaes, B.P., J.C. Lord, S.P. Wraight, R.A. Daoust, D.W. Roberts. 1988. Pathogenicity of *Beauveria bassiana* and *Zoophthora radicans* to the Coccinellid predators *Coleomegilla maculata* and *Eriopis connexa*. *J. Invertebr. Pathol.* 52: 471-473.

- 2826 Derksen, A.C.G. and R.R. Granados. 1988. Alteration of a lepidopteran peritrophic membrane by baculoviruses and enhancement of viral infectivity. *Virology* 167: 242-250.
- 2827 Kohut, R.J., J.A. Laurence, and R.G. Amundson. 1988. Effects of ozone and sulfur dioxide on yield of red clover and timothy. *J. Environ. Qual.* 17: 580-585.
- 2828 Wolpert, T.J., V. Macko, W. Acklin, and D. Arigoni. 1988. Molecular features affecting the biological activity of the host-selective toxins from *Cochliobolus yvictoriae*. *Plant Physiol.* 88: 37-41.
- 2829 Koster, K.L. and A.C. Leopold. 1988. Sugars and desiccation tolerance in seeds. *Plant Physiol.* 88: 829-832.
- 2830 La Favre, J.S., A.K. La Favre, and A.R.J. Eaglesham. 1988. Rhizobitoxine production by and nodulation characteristics of colony-type derivatives of *Bradyrhizobium japonicum* USDA 76. *Can. J. Microbiol.* 34: 1017-1022.
- 2831 Reynolds, K.L. and J.A. Laurence. 1988. Effects of hydrogen fluoride on growth, common blight development, and the accumulation of fluoride in field-grown red kidney beans. *Phytopathology* 78: 1168-1173.
- 2832 Renwick, J.A.A. 1988. Plant constituents as oviposition deterrents to lepidopterous insects. Pages 378-385 in: Biologically Active Natural Products: Potential Use in Agriculture (H.G. Cutler, ed.). ACS Symp. Ser. #30, American Chemical Society, Washington, D.C.
- 2833 Hughes, P.R. and M.L. Voland. 1988. Increase in feeding stimulants as the primary mechanism by which SO₂ enhances performance of Mexican bean beetle on soybean. *Entomol. Exp. Appl.* 48: 257-262.
- 2834 Schoni, R., E. Stadler, J.A.A. Renwick, and C.D. Radke. 1987. Host and non-host plant chemicals influencing the oviposition behavior of several herbivorous insects. Pages 31-36 in: Insects - Plants (V. Labeyrie, G. Fabres, D. Lachaise, eds.) Dr. W. Junk Publishers, Dordrecht, The Netherlands.
- 2835 Kneen, B.E. and T.A. LaRue. 1988. Induced symbiosis mutants of pea (*Pisum sativum*) and sweetclover (*Melilotus alba annua*). *Plant Sci.* 58: 177-182.
- 2836 Rombach, M.C., R.M. Aguda, and D.W. Roberts. 1988. Production of *Beauveria bassiana* [Deuteromycotina: Hyphomycetes] in different liquid media and subsequent conidiation of dry mycelium. *Entomophaga* 33: 315-324.
- 2837 Smith, I.R.L., N.A.M. van Beek, J.D. Podgwaite, H.A. Wood. 1988. Physical map and polyhedrin gene sequence of *Lymantria dispar* nuclear polyhedrosis virus. *Gene* 71: 97-105.
- 2838 Mandl, R.H., R.J. Kohut, and J.A. Laurence. An integrated system for evaluating the effects of ozone and acidic precipitation on the nutrition, growth and physiology of red spruce and sugar maple. Special issue of *Environ. Pollut.* 53: 444-447, 1988 Response of Crops to Air Pollutants (J.P. Dempster, W.J. Manning, eds.) Elsevier Applied Science.

- 2839 Anderson, T.E., A.E. Hajek, D.W. Roberts, H.K. Preisler & J.L. Robertson. 1989. Colorado potato beetle (Coleoptera: Chrysomelidae:) Effects of combinations of *Beauvaria bassiana* with insecticides. J. Econ. Entomol. 82: 83-89.
- 2840 Van Bruggen, A.H.C., & K.L. Reynolds. 1988. Effects of hydrogen fluoride on susceptibility of soybeans to *Rhizoctonia solani* and *Phytophthora megasperma f. sp. glycinea*. Agric. Ecosystems & Environ. 443-452.
- 2841 Eaglesham, A.R.J. 1989. Nitrate inhibition of root-nodule symbiosis in doubly rooted soybean plants. Crop Sci. 29:115-119.
- 2842 Stroo, H.F., P.B. Reich, A.W. Schoettle, R.G. Amundson. 1988. Effects of ozone and acid rain on white pine (*Pinus strobus*) seedlings grown in five soils. II Mycorrhizal infection. Can. J. Bot. 66: 1510-1516.
- 2843 Reich, P.B., A.W. Schoettle, H.F. Stroo, R.G. Amundson. 1988. Effects of ozone and acid rain on white pine (*Pinus strobus*) seedlings grown in five soils. III Nutrient relations. Can. J. Bot. 66: 1517-1531.
- 2844 Leopold, A.C., and C.W. Vertucci. 1989. Moisture as a regulator of physiological reaction in seeds. Pages 51-67 in Seed Moisture. Crop Sci. Soc. Am. Spec. 14.
- 2845 Van Ryn, D.M., J.P. Lassoie and J.S. Jacobson. 1988. Effects of acid mist on in-vivo pollen tube growth in red maple. Can. J. For. Res. 18:1049-1052.
- 2846 Van Bruggen, A.H.C., J. Troiano, E.J. Butterfield, L. Heller, J.F. Osmeloski and J.S. Jacobson. 1988. Retention of maneb and cupric hydroxide and control of late blight on potato foliage exposed to simulated acidic rain in the field. Agric. Ecosyst. Environ. 24: 431-442.
- 2847 Slocum, R.D., H.E. Flores, A.W. Galston, L.H. Weinstein. 1989. Improved method for HPLC analysis of polyamines, agmatine and aromatic monoamines in plant tissue. Plant Physiol. 89: 512-517.
- 2848 Weinstein, L.H., and K.S. Hansen. 1988. Relative susceptibilities of Brazilian vegetation to airborne floride. Pesq. agropec. bras. Brasilia. 23: 1125-1137.
- 2849 Renwick, J.A.A. 1989. Chemical ecology of oviposition in phytophagous insects. Experientia 45: 223-228.
- 2850 Leopold, A.C. and A.K. La Favre. 1989. Interactions between red light, abscisic acid, and calcium in gravitropism. Plant Physiol. 89:875-878.
- 2851 No reprint assigned to this number.
- 2852 Rombach, M.C., R.M. Aguda, D.W. Roberts, B.M. Shepard. 1988. Suppression of brown planthopper, *Nilaparvata lugens* (*Deuteromycotina*) and buprofezin. J. Plant Prot. Tropics 5(2): 109-113.
- 2853 Epstein, L., R.C. Staples and H.C. Hoch. 1989. Cyclic AMP cyclic GMP and bean rust uredospore germlings. Exp. Mycol. 13: 100-103.

- 2854 MacLean, D.C., R.E. Schneider, K.S. Hansen and J.J. Troiano. 1989. Effects of simulated acid rain on uptake, accumulation and retention of fluoride in forage crops. *Water Air Soil Poll.* 43: 191-198.
- 2855 Gupta, S., D.W. Roberts and J.A.A. Renwick. 1989. Preparative isolation of destruxins from *Metarhizium anisopliae* by high performance liquid chromatography. *J. Liq. Chromatogr.* 12: 383-395.
- 2856 Rajam, M.V., L.H. Weinstein and A.W. Galston. 1989. Inhibition of uredospore germination and germ tube growth by inhibitors of polyamine metabolism in *Uromyces phaseoli* L. *Plant Cell Physiol.* 30: 37-41.
- 2857 Macko, V., T.J. Wolpert, W. Acklin and D. Arigoni. 1989. Biological activities of structural variants of host-selective toxins from *cochliobolus victoriae*. pgs.31-41 in *Phytotoxins and Plant Pathogenesis*. (A. Graniti et al.,eds.) Springer-Verlag, Berlin.
- 2858 Wolpert, T.J. and V. Macko. 1989. Specific binding of victorin to a 100-kDk protein from oats. *Proc.Natl. Acad. Sci.* 86: 4092-4096.
- 2859 Lefohn, A.S., J.A. Laurence and R.J. Kohut. 1988. A comparison of indices that describe the relationship between exposure to ozone and reduction in the yield of agricultural crops. *Atmos. Environ.* 22: 1229-1240.
- 2860 Renwick, J.A.A., C.D. Radke and K.S. Gupta. 1989. Chemical constituents of *Erysimum cheiranthoides* deterring oviposition by the cabbage butterfly (*Pieris rapae*). *J. Chem. Ecol.* 15:2161-2169.
- 2861 Gupta, S., D.W. Roberts and J.A.A. Renwick. 1989. Molecular conformation of destruxin A. *Tetrahedron Letters.* 30:4189-4192
- 2862 St. Leger, R.J., T.M. Butt, R.C. Staples and D.W. Roberts. 1989. Synthesis of proteins including a cuticle-degrading protease during differentiation of the entomopathogenic fungus, *Metarhizium anisopliae*. *Exp. Mycol.* 13: 253-262.
- 2863 St. Leger, R.J., T.M. Butt, M.S. Goettel, R.C. Staples and D.W. Roberts. 1989. Production in vitro of appressoria by the entomopathogenic fungus, *Metarhizium anisopliae*. *Exp. Mycol.* 13: 274-288.
- 2864 Goettel, M.S., A.W. Sweeney and D.W. Roberts. 1989. Effects of drying and rehydration on mycelia of the mosquito pathogenic fungi, *Culicinomyces clavisporus* and *Tolypocladium cylindrosporum*. *Mycologia* 8: 472-475.
- 2865 St. Leger, R.J., D.W. Roberts and R.C. Staples. 1989. Calcium and calmodulin-mediated protein synthesis and protein phosphorylation during germination, growth and protease production by *Metarhizium anisopliae*. *J. Gen. Microbiol.* 135:2141-2154.
- 2866 Bruni, F., G. Careri and A.C. Leopold. 1989. Critical exponents of protonic percolation in maize seeds. *Phys. Rev. A.* 40: 2803-2805.

- 2867 Goettle, M.S., R.J. St. Leger, N.W. Rizzo, R.C. Staples and D.W. Roberts. 1989. Ultrastructural localization of a cuticle-degrading protease produced by the entomopathogenic fungus *Metarhizium anisopliae* during penetration of host (*Manduca sexta*) cuticle. *J. Gen. Microbiol.* 135: 2233-2239.
- 2868 St. Leger, R.J., D.W. Roberts and R.C. Staples. 1989. Novel GTP-binding proteins in plasma membranes of the fungus *Metarhizium anisopliae*. *Biochem. Biophys. Res. Commun.* 164: 562-566.
- 2869 Mandl, R.H., J.A. Laurence and R.J. Kohut. 1989. Development and testing of open-top chambers for exposing large, perennial plants to air pollutants. *J. Environ. Qual.* 18: 534-540.
- 2870 Monroe, J.D. and T.A. LaRue. 1989. Effects of carbohydrate on the internal oxygen concentration, oxygen uptake and nitrogenase activity in detached pea nodules. *Plant Physiol.* 91: 603-609.
- 2871 Monroe, J.D., T.G. Owens and T.A. LaRue. 1989. Measurement of the fractional oxygenation of leghemoglobin in intact detached pea nodules by reflectance spectroscopy. *Plant Physiol.* 91: 598-602
- 2872 Stern, D.B., H. Jones and W. Gruissem. 1989. Function of plastid mRNA 3' inverted repeats: RNA stabilization and gene-specific protein binding. *J. Biol. Chem.* 264:18742-18750.
- 2873 Fincher, J., J.R. Cumming, R.G. Alscher, G. Rubin and L. Weinstein. 1989. Long-term ozone exposure affects winter hardiness of red spruce (*Picea rubens* Sarg.) seedlings. *New Phytol.* 113: 85-96.
- 2874 Leopold, A.C. and S.H. Wettlaufer. 1989. Springback in root gravitropism. *Plant Physiol.* 91:1247-1250.
- 2875 Van Beek, N.A.M., P.H. Flore, H.A. Wood and P.R. Hughes. 1990. Rate of increase of *Autographa californica* nuclear polyhedrosis virus in *Trichoplusia ni* larvae determined by DNA:DNA hybridization. *J. Invertebr. Pathol.* 55: 85-92.
- 2876 Sinclair, M.J. and A.R.J. Eaglesham. 1990. Serological diversity of *Bradyrhizobium* sp. (*Vigna*) from three west African soils. *Soil Biol. Biochem.* 22: 69-74.
- 2877 Staples, R.C., H.C. Hoch, P. Freve and T.M. Bourett. 1989. Heat shock-induced development of infection structures by bean rust uredospore germlings. *Exp. Mycol.* 13: 149-157.
- 2878 Krasnoff, S.B. and W.L. Roelofs. 1989. Quantitative and qualitative effects of larval diet on male scent secretions of *Estigmene acrea*, *Phragmatobia fuliginosa* and *Pyrrharctia isabella* (Lepidoptera: Arctiidae). *J. Chem. Ecol.* 15: 1077-1093.
- 2879 Hadley, J.L. and W.K. Smith. 1989. Wind erosion of leaf surface wax in alpine timberline conifers. *Arct. Alp. Res.* 21: 392-398.
- 2880 Butt, T.M., H.C. Hoch, R.C. Staples and R.J. St. Leger. 1989. Use of fluorochromes in the study of fungal cytology and differentiation. *Exp. Mycol.* 13: 303-320.

- 2881 Gupta, S., D.W. Roberts and J.A.A. Renwick. 1989. Insecticidal cyclodepsipeptides from *Metarhizium anisopliae*. J. Chem. Soc. Perkin Trans. I:2347-2357.
- 2882 Coast, G.M. (Correspondence to S.B. Krasnoff) 1988. Fluid secretion by single isolated Malpighian tubules of the house cricket, *Acheta domesticus*, and their response to diuretic hormone. Physiol. Entomol. 13: 381-391.
- 2883 Lozano, J.L., S.H. Wettlaufer and A.C. Leopold. 1989. Polyamine content related to seed storage performance in *Zea mays*. J. Exp. Bot. 40: 1337-1340.
- 2884 Magalhaes, B.P., T.M. Butt, R.A.Humber, E.J. Shields and D.W. Roberts. 1990. Formation of Appressoria in vitro by the entomopathogenic fungus *Zoophthora radicans*(Zygomycetes:Entomophthorales). J. Invertebr. Pathol. 55: 284-288.
- 2885 Fearn, J.C. and T.A. LaRue. 1990. An altered constitutive peptide in sym 5 mutants of *Pisum sativum L.* Plant Molecular Bio. 14: 207-216.
- 2886 Jacobson, J.S., J.P. Lassoie, J. Osmeloski and K. Yamada. 1989. Changes in foliar elements in red spruce seedlings after exposure to sulfuric and nitric acid mist. Water, Air and Soil Pollution 48: 141-159.
- 2887 Wood, H.A., P.R. Hughes, N. Van Beek and M. Hamblin. 1989. An ecologically acceptable strategy for the use of genetically engineered Baculovirus pesticides. Insect Neurochem. and Neurophys. 285-288
- 2888 Hajek, A.E., R.I. Carruthers and R.S. Soper. 1990. Temperature and moisture relations of sporulation and germination by *Entomophaga maimaiga* (Zygomycetes: Entomophthoraceae), a fungal pathogen of *Lymantria dispar*(Lepidoptera: Lymantriidae). Environ. Entomol. 19(1): 85-90.
- 2889 Alscher, R.G., R.G. Amundson, J.R. Cumming, S. Fellows, J. Fincher, G. Rubin, P. Van Leuken and L.H. Weinstein. 1989. Seasonal changes in the pigments, carbohydrates and growth of red spruce as affected by ozone. New Phytol. 133: 211-223.
- 2890 Jacobson, J.S., T. Bethard, L.I. Heller and P. Lassoie. 1990. Response of pica rubens seedlings to intermittent mist varying in concentrations of acidity and sulfur-nitrogen containing pollutants. Physiologia Plantarum 78: 595-601.
- 2891 Jacobson, J.S., L.I. Heller, K.E. Yamada, J.F. Osmeloski and T. Bethard. 1990. Foliar injury and growth response of red spruce to sulfate and nitrate acid mist. Can. J. For. Res. 20: 58-65.
- 2892 Bhairi, S.M., R.C. Staples, P. Freve and O.C. Yoder. 1989. Characterization of infection structure-specific gene from the rust fungus *Uromyces appendicaulatus*. Gene. 81: 237-243.
- 2893 Mandl, R.H., R.J. Kohut and J.A. Laurence. 1988. An integrated system for evaluating the effects of ozone and acidic precipitation on the nutrition, growth and physiology of red spruce and sugar maple. Environ. Pollut. pgs. 444-447.
- 2894 Goettel, M.S., R.J. St. Leger, S. Bhairi, M.K. Jung, B.R. Oakley, D.W. Roberts and R.C. Staples. 1990. Pathogenicity and growth of *Metarhizium anisopliae* stably transformed to benomyl resistance. Curr. Genet. 17: 129-132.

- 2895 Lauver, T., R.H. Mandl, R.J. Kohut and J.A. Laurence. 1990. A weighing lysimeter for determining water loss in red spruce saplings (*Picea rubens sarg*). *Environ. and Exp. Botany*. 30:(2) 157-164.
- 2896 Hardy, R. 1988. Biotechnology and agricultural cooperatives opportunities and challenges workshop co-sponsored by committee for agr. Research policy Col. of Agr. Univ. Kentucky and Agr. coop. serv. US Dept. of Agr. Lexington, KY. April 5-7,1987.
- 2897 Reynolds, K.L. and J.A. Laurence. 1990. Development of common blight and accumulation of fluoride in red kidney bean plants exposed continuously or intermittently to hydrogen fluoride. *Phytopathology* 90: 211-216.
- 2898 Kelly, M. and K.J. Bradford. 1990. Ethylene synthesis and growth of tomato hypocotyls: Induction by auxin and fusicoccin and inhibition by vanadate. *J. Plant Growth Regul.* 9: 43-49
- 2899 Huang, D., S. Bhairi and R.C. Staples. 1989. A transformation procedure for *Botryotinia squamosa*. *Curr. Genet.* 15: 411-414.
- 2900 Gupta, S.K., J.A.A. Renwick and C.D. Radke. 1990. Isolation and identification of oviposition deterrents to cabbage butterfly, *Pieris rapae*, from *Erysimum cheiranthoides*. *J. of Chemical Ecology*. 16: 1059-1068
- 2901 MacLean, D.C. 1990. Joint action of ozone and hydrogen fluoride on foliar senescence in maize. *Environmental pollution* 63: 283-292.
- 2902 Briggs, M.A. 1990. Chemical defense production in *Lotus corniculatus* L. I: The effects of nitrogen source on growth, reproduction and defense. *Oecologia* 83: 27-31.
- 2903 Briggs, M.A. and J.C. Schultz. 1990. Chemical defense production in *Lotus corniculatus* L. II: Trade-offs among growth, reproduction and defense. *Oecologia* 83: 32-37.
- 2904 Chao, Y.C., M. Hamblin and A. Wood. 1990. Physical map of Hz-1 baculovirus genome from standard and defective interfering particles. *J. of Gen. Virology* 71: 1265-1270.
- 2905 Amundson, R.G., A.J. Belsky and R. Dicki. 1990. Fluoride deposition via litterfall in a coastal-plain pine plantation in South Carolina. *Water, Air and Soil Pollution* 50: 301-310.
- 2906 Hajek, A., R. Humber and M.H. Griggs. 1990. Decline in virulence of *Entomophaga maimaiga* (Zygomycetes: Entomophthorales) with repeated in Vitro subculture. *J. of Invertebrate Pathology*. 56: 91-97.
- 2907 Guinel, F.C. and T.A. LaRue. 1990. Formation of wall appositions in leaves and lateral roots of an iron-accumulating pea mutant. *Can. J. Bot.* 68: 1340-1348.
- 2908 Guinel, F.C. and T.A. LaRue. 1990. Papillae-like formations in leaves of the pea mutant E107. pgs. 117-125 in *Mechanisms of Plant Perception and Response to Environmental Stimuli*.(T.H. Thomas and A.R. Smith, eds.)

- 2909 Hardy, R.W.F. 1990. Uses of biotechnology transfer to keep food safe. *J. Dairy Sci.* 73: 1665-1669.
- 2910 Amundson, R.G., R.B. Walker, H.U. Schellhase and A.H. Legge. 1990. Sulfer gas emissions in the Boreal forest: The West Whitecourt case study. VIII: Pine tree mineral nutrition. *Water, Air and Soil Pollution* 50: 219-232.
- 2911 St. Leger, R.J., L.B. Laccetti, R.C. Staples and D.W. Roberts. 1990. Protein kinases in the entomopathogenic fungus *Metarhizium anisopliae*. *J. of Microbiology.* 136: 1401-1411.
- 2912 Sirois, D.L. 1990. Survey of rocky mountain arsenal for phytotoxin substances. pgs.188-197 in *Plants for Toxicity Assessment* (W. Wang, J.W. Gorsuch and W.R. Lower, eds).
- 2913 Bhairi, S., E.H. Buckley and R.C. Staples. 1990. Protein synthesis and gene expression during appressorium formation in *glomerella magna*. *Exp. Mycology* 14: 207-217.
- 2914 Lozano, J.L. and A.M. Mayer. 1990. Water relations and oxygen uptake by two lines of corn differing in storage performance. *Israel J. of Botany.* 39: 347-353.
- 2915 Lauver, T.L., J.A. Laurence and R.J. Kohut. 1990. Design and performance of an acidic precipitation delivery system for field investigations with plants. *Arch. Environ. Contam. Toxicol.* 19: 629-634.
- 2916 Wraight, S.P., T.M. Butt, S. Galaini-Wraight, L.L. Allee R.S. Soper and D.W. Roberts. 1990. Germination and infection processes of the entomophthoralean fungus *Erynia radicans* on the potato leafhopper, *Empoasca Fabae*. *J. of Invertebrate Pathology* 56: 157-174.
- 2917 Allee, L.L., M.L. Goettel, A. Golberg, H.S. Whitney and D.W. Roberts. 1990. Infection by *beauveria bassiana* of *leptinotarsa decemlineata* larvae as a consequence of fecal contamination of the integument following per OS inoculation. *Mycopathologia* 111: 17-24.
- 2918 Kneen, B.E., T.A. LaRue, R. Welch and N.F. Weeden. 1990. Pleiotropic effects of BRZ 1. A mutation in *pisum sativum* (L) CV "sparkle" conditioning decreased nodulation and increased iron uptake and leaf necrosis. *Plant Physiol.* 93: 717-722.
- 2919 Welch, R.M. and T.A. LaRue. 1990. Physiological characteristics of FE accumulation in the "bronze" mutant of *pisum sativum* L., CV "sparkle" E107(BRZ BRZ)1. *Plant Physiol.* 93: 723-729.
- 2920 Weinstein, L.H., J.A. Laurence, R.H. Mandl and K. Walti. 1990. Use of native and cultivated plants as bioindicators and biomonitors of pollution damage. Standard Technical Publication 1091.
- 2921 Quintela, E.D., J.C. Lord, S.P. Wraight, S.B. Alves and D.W. Roberts. 1990. Pathogenicity of *Beauveria bassiana* (Hyphomycetes: Monilliales) to larval and adult *Chalcodermus bimaculatus* (Coleoptera: curculionidae). *J. Econ. Entomol.* 83: 1276-1279.

- 2922 Hajek, A.E., R.A. Humber, J.S. Elkinton, B. May, S.R.A. Walsh and J.C. Silver. 1990. Allozyme and restriction fragment length polymorphism analyses confirm entomophaga maimaiga responsible for 1989 epizootics in North American gypsy moth populations. *Proc. Natl. Acad. Sci. USA* 87: 6979-6982.
- 2923 Hamblin, M., N.A.M. Van Beek, P.R. Hughes and H.A. Wood. 1990. Co-occlusion persistence of a baculovirus mutant lacking the polyhedrin gene. *Applied and Environmental Microbiology*. 56(10): 3057-3062.
- 2924 Adams, C.C. and D.B. Stern. 1990. Control of mRNA stability in chloroplasts by 3'inverted repeats; effects of stem and loop mutations on degradation of psbA mRNA in vitro. *Nucleic acids Research*. 18(20): 6003-6010.
- 2925 Sirois, D.L. 1990. Evaluation of protocols for the assessment of phytotoxicity. *Plants for Toxicity Assessment*. 1091: 225-234.
- 2926 Hadley, J.L. and W.K. Smith. 1990. Influence of leaf surface wax and leaf area to water content ratio on cuticular transpiration in western conifers, USA. *Can. J. For. Res.* 20: 1306-1311.
- 2927 Kohut, R.J., J.A. Laurence, R.G. Amundson, R.M. Raba and J.J. Melkonian. 1990. Effects of ozone and acidic precipitation on the growth and photosynthesis of red spruce after two years of exposure. *Water, Air and Soil Pollution* 51: 277-286.
- 2928 St. Leger, R.J., T.M. Butt, R.C. Staples and D.W. Roberts. 1990. Second messenger involvement in differentiation of the entomopathogenic fungus *Metarhizium anisopliae*. *J. Gen. Microbiol.* 136: 1779-1789.
- 2929 St. Leger, R.J., D.W. Roberts and R. Staples. 1990. Electrophoretic detection of multiple protein kinases in the entomopathogenic fungus *Metarhizium anisopliae*. *Arch. Microbiol.* 154: 518-520.
- 2930 Kneen, B.E., T.A. LaRue, A.M. Hirsch, C.A. Smith and N.F. Weeden. 1990. Sym 13 - A gene conditioning ineffective nodulation in *Pisum sativum* L. *Plant Physiol.* 94: 899- 905.
- 2931 St. Leger, R.J., A.K. Charnley and R.M. Cooper. 1990. Kinetics of the digestion of insect cuticles by a protease (PR1) from *Metarhizium anisopliae*. *J. Invert. Pathology*. 57: 146-147.
- 2932 Fenoll, C., J.J. Schwarz, D.M. Black, M. Schneider and S.H. Howell. 1990. The intergenic region of maize streak virus contains a GC-rich element that activates rightward transcription and binds maize nuclear factors. *Plant Molecular Biology* 15: 865-877.
- 2933 Magalhaes, B.P., R.J. St. Leger, R.A. Humber, L.L. Allee, E.J. Shields and D.W. Roberts . 1991. Nuclear events during germination and appressorial formation of the entomopathogenic fungus *zoophthora radicans* (zygomycetes: entomophthorales). *J. Invert. Path.* 57: 43-49.
- 2934 Fearn, J.C. and T.A. LaRue. 1990. Nodulation of pea sym 5 mutants is restored by ethylene inhibitors. *Plant Mol. Biol.* 14: 207-216.

- 2935 Slocum, R.D. and L.H. Weinstein. 1990. Stress-induced putrescine accumulation as a mechanism of ammonia detoxification in cereal leaves. Pages 157-165 in *Am. Soc. of Plant Physiol.*
- 2936 Stern, D.B., C.H. Ching, C.C. Adams and K.L. Kindle. 1990. Post-transcriptional control of gene expression in chloroplasts. Pages 73-82 in *Post-Transcriptional Control of Gene Expression.*(J.E.G. McCarthy and M.F. Tuite, eds.) Springer-Verlag, Berlin.
- 2937 Hungria, M., A.R.J. Eaglesham and R.W.F. Hardy. 1991. Physiological comparisons between root and stem nodules of *aeschynomene scabra* and *sesbania rostrata*. pg 186 in *The Rhizosphere and Plant Growth.*(D.L. Keister and P.B. Cregan, eds.) Kluwer Academic Publishers, Dordrecht.
- 2938 Chevon, B.I., J.R. Seiler, J. Melkonian and R.J. Amundson. 1990. Ozone-water stress interactions. Pages 311-328 in *Stress Responses in Plants: Adaptation and Acclimation.* (Wiley-Liss, eds.).
- 2939 Dimock, M.B., J.A.A. Renwick, C.D. Radke and K.S. Gupta. 1991. Chemical constituents of an unacceptable crucifer, *erysium cheiranthoides*, deter feeding. *J. Chem. Ecol.* 17(3): 525-533.
- 2940 Bruni, F. and A.C. Leopold. 1991. Hydration, protons and onset of physiological activities in maize seeds. *Physiol. Plant.* 81: 359-366.
- 2941 McCune, D.C. and D.H. Silberman. 1991. Responses of plants to simulated saline drift as affected by species and conditions of exposure. *Environmental Pollution* 70: 57-69.
- 2942 Stern, D.B., E.R. Radwanski and K.L. Kindle. 1991. A 3' stem/loop structure of the *chlamydomonas* chloroplast *atpB* gene regulates mRNA accumulation in vivo. *The Plant Cell* 3: 285-297.
- 2943 Hadley, J.L., A.J. Friedland, G.T. Herrick and R.G. Amundson. 1990. Winter desiccation and solar radiation in relation to red spruce decline in the Northern Appalachians. *Can. J. For. Res.* 21: 269-272.
- 2944 Magalhaes, B.P., R. Wayne, R.A. Humber, E.J. Shields and D.W. Roberts. 1991. Calcium-regulated appressorium formation of the entomopathogenic fungus *zoophthora radicans*. *Protoplasma* 160: 77-88.
- 2945 Last, R.L., P.H. Blissinger, D.J. Mahoney, E.R. Radwanski and G.R. Fink. 1991. Tryptophan mutants in *arabidopsis*: The consequences of duplicated tryptophan synthase B genes. *The Plant Cell* 3: 345-358.
- 2946 St. Leger, R.J., D.W. Roberts and R.C. Staples. 1991. A model to explain differentiation of appressoria by germlings of *Metarhizium anisopliae*. *J. Invert. Pathol.* 57: 299-310.
- 2947 Pruitt, K.D. and M.R. Hanson. 1991. Splicing of the *petunia* cytochrome oxidase subunit II intron. *Curr. Genet.* 19: 191-197.

- 2948 St. Leger, R.J., R.C. Staples and D.W. Roberts. 1991. Changes in translatable mRNA species associated with nutrient deprivation and protease synthesis in *Metarhizium anisopliae*. *J. Gen. Microbiol.* 137: 807-815.
- 2949 Fearn, J. and T.A. LaRue. 1991. Ethylene inhibitors restore nodulation to sym5 mutants of *Pisum sativum* L. cv sparkle. *Plant Physiol.* 96: 239-244.
- 2950 Stenzler, L. and S. Howell. 1991. Nonmutant forms of the avirulent satellite D of turnip crinkle virus are produced following inoculation of plants with mutant forms synthesized in vitro. *Virology* 183: 251-259.
- 2951 Amundson, R.G., R.G. Alscher, S. Fellows, G. Rubin J. Fincher, P. VanLeuken and L.H. Weinstein. 1991. Seasonal changes in the pigments, carbohydrates and growth of red spruce as affected by exposure to ozone for two growing seasons. *New Phytol.* 118: 127-137.
- 2952 Wood, H.A. 1991. Development of genetically enhanced baculovirus pesticides. *Annual review of Microbiology* 45: 69-87.
- 2953 Bruni, F. and A.C. Leopold. 1991. Glass transitions in soybean seed. *Plant Physiol.* 96: 650-655.
- 2954 Gupta, A.S., R.G. Alscher and D. McCune. 1991. Responses of photosynthesis and cellular antioxidants to ozone in populus leave. *Plant Physiol.* 96: 650-655.
- 2955 Bolsinger, M., M.E. Lier, D.M. Lansky and P.R. Hughes. 1991. Influence of ozone air pollution on plant-herbivore interactions. Part 1: Biochemical changes in ornamental milkweed (*Asclepias curassavica* L., *Asclepiadaceae*). induced by ozone. *Environmental pollution* 72: 69-83.
- FORWARD TO DIMOCK HE HAS ALL THE REPRINTS ADDRESS IN FILE 2956**
- 2956 Dimock, M.B. and J.A.A. Renwick. 1991. Oviposition by field populations of *Pieris rapae* (Lepidoptera: Pieridae) deterred by an extract of a wild crucifer. *Env. Ent.* 20(3): 802-806.
- 2957 Amundson, R.G., R.J. Kohut and J.A. Laurence. 1991. Mineral nutrition, carbohydrate content and cold tolerance of foliage of potted red spruce exposed to ozone and simulated acidic precipitation treatments. *Water, Air and Soil Pollution* 54: 175-182.
- 2958 Krueger, S.R., J.R. Nichols and W.A. Ramoska. 1991. Infection of chinch bug, *Blissus leucopterus leucopterus* (Hemiptera: Lygaeidae) conidia in soil under controlled temperature and moisture conditions. *J. of Invert. Pathol.* 58: 19-26.
- 2959 Hajek, A.E., T.M. Butt, L.I. Strelow and S.M. Gray. 1991. Detection of entomophaga maimaiga (Zygomycetes: Entomophthorales) using enzyme-linked immunosorbent assay. *J. Invert. Pathol.* 58: 1-9.
- 2960 Fearn, J.C., T.A. LaRue 1991. A temperature-sensitive nodulation mutant (sym 5) of *Pisum sativum* L. *Plant, cell and Environment* (1991) 14, 221-227.
- 2961 McCune, D.C., and G.P. Berlyn. 1991. A comparison of foliar wettability of red spruce and balsam fir* growing at high elevation. *New Phytol.* (1991), 117, 543-555.

- 2962 McCune, D.C., T.L. Lauer, and K.S. Hansen. Relationship of concentration of gaseous hydrogen fluoride to incidence and severity of foliar lesions in black spruce and white spruce. 1991 Can. J. For. Res. 21: 756-761.
- 2963 Hardy, R.W.F. 1991. Biotechnology and new directions for agrochemicals. Pages 131-144 in: Regulation of Agrochemicals: A Driving Force in their Evolution (G.J. Marco, R.M. Hollingworth, and J.R. Plimmer, Eds.). Am. Chem. Soc., Washington, D.C.
- 2964 Wettlaufer, S.H., J. Osmeloske and L.H. Weinstein 1990. Response of Polyamines to Heavy Metal Stress in oatseedings, Environmental Toxicology and Chemistry, Vol. 10, pp. 1083-1088, 1990
- 2965 Hajek, A.E., & D.W. Roberts. 1991. Pathogen Reservoirs as a Biological Control Resource: Introduction of Entomophaga maimaiga to North American Gypsy Moth, Lymantria dispar, Populations. Biological Control 1, 29-34 (1991)
- 2966 Gallo, L.G., B.G. Corsaro, P.R. Hughes, & R.R. Granados. 1991 In Vivo Enhancement of Baculovirus Infection by the Viral Enhancing Factor of a Granulosis Virus of the Cabbage Looper, Trichoplusia ni (Lepidoptera: Noctuidae) J. of Invertebrate Pathology 58, 203-212967
- 2967 St. Leger, R.J., M. Goettel, D.W. Roberts, & R.C. Staples 1991 Prepenetration Events during infection of Host Cuticle by Metarhizium anisopliae. J. of Invertbrt. Pthlgy. 58, 168-179.
- 2968 Hsu-Ching, C. & D.B. Stern. 1991 Specific Binding of Chloroplast Proteins in Vitro to the 3' Untranslated Region of Spinach Chloroplast pet DmRNA Molecular & Cellular Biology, 11 Sept. 1991, p. 4380-4388
- 2969 Weinstein, D.A., R.M. Beloin, & R.D. Yanai. 1991. Modeling changes in red spruce carbon balance and allocation in response to interacting ozone and nutrient stresses 1. Tree Physiology 9, 127-146
- 2970 Wood, H.A. & R.R. Granados. 1991. Genetically Engineered Baculoviruses as Agents For Pest Control Annu. Rev. Microbiol. 1991. 45:69-87
- 2971 Blackman, S.A. S. Wettlaufer, R. Obendorf, & C. Leopold. 1991. Maturation Proteins Associated with Desiccation Tolerance in Soybean1. Plant Physiol. 1991. 96, 868-874.
- 2972 Alscher, R.G., R.G. Amundson & Fellows 2. 1991. Seasonal changes in antioxidants in red spruce (*Picea rubens* Sarg.) from three field sites in the northeastern United States. New Phytol. 1991, 118, 331-338
- 2973 Wettlaufer, S. & C. Leopold* 1991. Relevance of Amadori & Maillard Products to Seed Deterioration1 Plant Physiol. (1991) 97, 165-169
- 2974 Magalhaes, B.P., R.A. Humber, E.J. Shields, & D.W. Roberts. 1991. Effects of Environment and Nutrition on Conidium Germination and Appressorium Formation by Zoophthora radicans (Zygomycetes: Entomophthorales): (Homoptera: Cicadellidae) Environ. Entomol. 20(5): 1460-1468 (1991)

- 2975 McCune, D.C. 1991. An Invited Review Paper. Effects of Airborne Saline Particles On Vegetation in Relation to Variables of Exposure and Other Factors. *Environmental Pollution* 74 (1991) 176-203
- 2976 Gupta, S., S.B. Krasnoff, *N.L. Underwood, J.A.A. Renwick & D.W. Roberts. 1991. Isolation of beauvericin as an insect toxin from *Fusarium semitectum* and *Fusarium moniliforme* var. *subglutinans*. *Mycopathologia* 115: 185-189.
- 2977 Gupta, S., *S.B. Krasnoff, D.W. Roberts, and J.A.A. Renwick. 1991. Structures of the Efraeptins: Potent Inhibitors of Mitochondrial ATPase from the Fungus *Tolypocladium niveum*. *J. of Am.Chem. Soc.*, 113.
- 2978 Hajek, A.E, & R.S. Soper. 1991. Within-Tree location of Gypsy Moth, *Lymantria dispar*, Larvae Killed by *Entomophaga maimaiga* (Zygomycetes: Entomophthorales) 1991 *J. of invertebrate Pathology* 58, 468-469
- 2979 Hajek, A.E. & R.A. Humber. 1991. Sympatric Occurrence of Two *Entomophaga aulicae* (Zygomycetes: Entomophthorales) Complex Species Attacking Forest Lepidoptera. *J. of Invertebrate Pathology* 58, 373-380 (1991)
- 2980 St. Leger, R.J., R.M. Cooper, and A.K. Charnley. 1991. Characterization of Chitinase and Chitobiase Produced by the Entomopathogenic Fungus *Metarhizium anisopliae*. 1991. *J. of Invertebrate Pathology* 58, 415-426
- 2981 Galaini-Wraight, S., S.P. Wraight, R.I. Carruthers, B.P. Magalhaes & D.W. Roberts 1991. Description of a *Zoophthora radicans* (Zygomycetes: Entomophthoraceae) Epizootic in a Population of *Empoasca kraemerii* (Homoptera: Cicadellidae) on Beans in Central Brazil. *J. of Invertebrate Pathology* 58, 311-326 (1991)
- 2982 Blissard, G.W. and G.F. Rohrmann. 1991. Baculovirus gp64 Gene Expression: Analysis of Sequences Modulating Early Transcription and Transactivation by IE1. *J. of Virology*, Nov. 1991, Vol. 65, No.11 p. 5820-5827.
- 2983 Yoshifumi Hashimoto, B.G. Corsaro & R. Granados. 1991. Location and nucleotide sequence of the gene encoding the viral enhancing factor of the *LTrichoplusia ni* granulosis virus. *J. of General Virology* (1991), 72, 2645-2651
- 2984 Guinel, F.C. and T.A. LaRue 1991. Light Microscopy Study of Nodule Initiation in *Pisum sativum* L. cv Sparkle and in its Low-Nodulating Mutand E2 (sym 5) 1. *Plant Physiol.*(1991) 97, 1206-1211
- 2985 Krueger, S.R., M.G. Villani, J.P. Nyrop, and D.W. Roberts (1991) Effect of Soil Environment on the Efficacy of Fungal Pathogens against Scarab Grubs in Laboratory Bioassays *Biological control* 1, 203-209 1991
- 2986 Elkinton, J.S. A.E. Hajek, G.H. Boettner and E.E. Simons 1991. Distribution and Apparent Spread of *Entomophaga maimaiga* (Zygomycetes: Entomophthorales) in Gypsy Moth (Lepidoptera: Lymantriidae) Populations in North America *Environ. Entomol.* 20960: 1601-1605 (1991)
- 2987 Hsu-Ching, C. and D.B. Stern, Specific Ribonuclease Activities in Spinach Chloroplasts Promote mRNA Maturation and Degradation 1991 *J. of Biological Chemistry* Vol.266, No.35, pp.24205-24211.

- 2988 Krueger, S.R., M.G. Villani, A.S. Martins, and D.W. Roberts. 1991. Efficacy of Soil Application of *Metarhizium anisopliae* (Metsch.) Sorokin Conidia, and Standard and Lyophilized Mycelial Particles against Scarab Grubs. *J. of Invertebrate Pathology* 59, 54-60
- 2989 Wang, P., R.R. Granados, and M.L. Shuler, 1992. Studies on Serum-Free Culture of Insect Cells for Virus Propagation and Recombinant Protein Production. *J. of Invertebrate Pathology* 59, 46-53.
- 2990 Leisner, S.M., R. Turgeon, and S.H. Howell. 1992. Long Distance Movement of Cauliflower Mosaic Virus in Infected Turnip Plants. *Molecular Plant-Microbe interactions* Vol. 5, No. 1, pp41-47, 1992
- 2991 Yanai, R.D. 1991. Soil Solution Phosphorus Dynamics in a Whole-Tree-Harvested Northern Hardwood Forest. *Soil Science Soc. of Am. J.* Vol 55:1746-1752.
- 2992 Hungria, M., A.R.J. Eaglesham, R.W.F. Hardy. 1992. Physiological comparisons of root and stem nodules of *Aeschynomene scabra* and *Sesbania rostrata*. *Plant and Soil* 139: 7-13, 1992
- 2993 Hajek, A.E., R.S. Soper. 1992. Temporal Dynamics of *Entomophaga maimaiga* After Death of Gypsy Moth (Lepidoptera: Lymantriidae) Larval Hosts. *Environ. Entomol.* 21(1): 129-135 1992
- 2994 MacLean, D.C., & D.C. McCune. 1992. A Fluoride Surveillance Program For An Agricultural Area. *Light Metals 1992. The Minerals, Metals & Materials Society, 1991.*
- 2995 Rapp, W.D., D. Stern. 1992. A conserved 11 nucleotide sequence contains an essential promoter element of the maize mitochondrial atp 1 gene. *The EMBO J.* vol. 11 no. 3 pp. 1065-1073, 1992.
- 2996 Xuei, X., S. Bhairi, R.C. Staples, O.C. Yoder 1992. Characterization of INF56, a gene expressed during infection structure development of *Uromyces appendiculatus*. 1992. *Gene.* 110, 49-55
- 2997 Fincher, J., R.G. Alscher. 1992. The effect of long-term ozone exposure on injury in seedlings of red spruce (*Picea rubens* Sarg.) *New Phytol.* (1992), 120, 49-59
- 2998 Kelly, M.O. and A.C. Leopold. 1992. Light Regulation of the Growth Response in Corn Root Gravitropism. *Plant Physiol.* (1992) 98, 835-839
- 2999 Arthur, M.A., G. Rubin, R.E. Schneider, L.H. Weinstein. 1992. Uptake and Accumulation of Selenium By Terrestrial plants growing on a Coal Fly Ash Landfill. Part I: Corn. *Envir. Toxicology & Chemistry*, Vol. 11, pp. 541-547,
- 3000 Bernal-Lugo, I., and C. Leopold, 1992. Changes in Soluble Carbohydrates during Seed Storage1. *Plant Physiol*; 98, 1207-1210 1992.
- 3001 Collmer, C.W., L. Stenzler, X. Chen, N. Fay, D. Hacker, S.H. Howell. 1992. Single amino acid change in the helicase domain of the putative RNA replicase of turnip crinkle virus alters symptom intensification by virulent satellites. 1992. *Proc. Natl. Acad. Sci.* Vol. 89, pp.309-313 *Plant Biology.*

- 3002 Gupta, S., S.B. Krasnoff, D.W. Roberts, J.A.A. Renwick. 1992. Structure of Efrapeptins from the Fungus *Tolyposcladium niveum*: Peptide Inhibitors of Mitochondrial ATPase1. *J. of Org. Chem.*, 1992, Vol. 57, pp. 2306 -2313
- 3003 St. Leger, R.J., D.C. Frank, D.W. Roberts, R.C. Staples. 1992. Molecular cloning and regulatory analysis of the cuticle-degrading-protease structural gene from the entomopathogenic fungus *Metarhizium anisopliae*. 1992. *Eur. J. Biochem*, 204, 991-1001.
- 3004 GIVE ALL REQUEST TO CARL & HE WILL MAKE COPIES
- 3004 Leopold, A.C. 1992. The Science Community Is Starved for Ethical Standards. *Scientist*. 6 (1): 11, 1992.
- 3005 GIVE ALL REQUEST TO CARL & HE WILL MAKE COPIES
- 3005 Leopold, A.C. 1992. "Coping with Desiccation" published in *Stress Responses in Plants* 12/90, p.37-56
- 3006 Dominov, J.A., L. Stenzler, S. Lee, J.J. Schwarz, S. Leisner, S.H. Howell. 1992. Cytokinins and Auxins Control the Expression of a Gene in *Nicotiana plumbaginifolia* Cells by Feedback Regulation. *The Plant cell*, Vol. 4, 451-461, April 1992.
- 3007 Collmer, C.W. L. Stenzler, X. Chen, N. Fay, D. Hacker, S.H. Howell. 1992. Single amino acid change in the helicase domain of the putative RNA replicase of turnip crinkle virus alters symptom intensification by virulent satellites. 1992. *Proc. Natl. Acad. Sci. Vol. 89*, pp. 309-313, *Plant Biology*.
- 3008 McCune, D.C. and R.L. Boyce. 1992. Precipitation and the Transfer of Water, Nutrients and Pollutants in Tree Canopies. *Trends in Ecology & Evolution* January 1992, Vol 7, No. 1, pp 4-7.
- 3009 St. Leger, R.J., B. May, L.L. Allee, D.C. Frank, *R.C. Staples,* D.W. Roberts* 1992. Genetic Differences in Allozymes and in Formation of Infection Structures among Isolates of the Entomopathogenic Fungus *Metarhizium anisopliae*. 1992 *J. of Invertebrate Pathology* 60, 89-101
- 3010 Yu, Zailin. J.D. Podgwaite and H. A. Wood. 1992. Genetic engineering of a *Lymantria dispar* nuclear Polyhedrosis virus for expression of foreign genes. 1992. *J. of General Virology* 73, 1509-1514
- 3011 Bolsinger, M. M.E. Lier, and P.R. Hughes. 1992. Influence of ozone air pollution on plant-herbivore interactions. Part 2: Effects of ozone on feeding preference, growth and consumption rates of monarch butter butterflies (*Danaus plexippus*) 1992. *Environmental Pollution* 77:31-37
- 3012 Arthur, M.A. and T.J. Fahey. 1992. Biomass and nutrients in an Engelmann spruce - subalpine fir forest in north central Colorado: pools, annual production, and internal cycling. 1992. *Can. J. For. Res.* 22: 315-325.
- 3013 Hadley, J.L., R.G. Amundson, 1992. Effects of radiational heating at low air temperature on water balance, cold tolerance, and visible injury of red spruce foliage. 1992. *Tree Physiology* 11, 1-17

- 3014 St. Leger, R. J. Integument as a Barrier to Microbial Infections. *Physiology of the Insect Epidermis* 284-306. 1991
- 3015 Roberts, D.W. 1991. Fungal-host interactions: Opportunities for interdisciplinary research. In *The Fungal Spore and Disease Initiation in Plants and Animals*. pp.xi-xvi. Plenum Press, NY
- 3016 Roberts, D.W. 1991. Use of pathogens in insect control. In *Handbook of Pest Management in Agriculture*, vol. 2,2d pp. 243-278. CRC Press, Boca Raton, Fla.
- 3017 Guinel, F.C., T.A. LaRue, 1992. Ethylene Inhibitors Partly Restore Nodulation to Pea Mutant E107 (brz)1 *Plant Physiol.* 1992. 99, 515-518.
- 3018 Kelly, M.O., & A.C. Leopold. 1992. Springback and diagravitropism in Merit Corn Roots 1. *Plant Physiol.* 1992. 99, 632-634
- 3019 MacLean, D.C., K.S. Hansen & R.E. Schneider. 1992. Amelioration of aluminium toxicity in wheat by fluoride. *New Phytol.* 1992, 121, 81-88
- 3020 Jacobson, J.S., L.I. Heller, S.L'hirondelle, & J.P. Lassoie. 1992. Phenology and Cold Tolerance of *Picea rubens* Sarg. Seedlings Exposed to Sulfuric and Nitric Acid Mist. 1992. *Scand. J. For. Res.* 7:331-344.
- 3021 Arthur, M.A., G.Rubin, P.B. Woodbury, R.E. Schneider & L.H. Weinstein. 1992. Uptake and accumulation of selenium by terrestrial plants growing on a coal fly ash landfill. Part 2. Forage and root crops. *Environmental Toxicology & Chemistry*, Vol.11 pp. 1289-1299, 1992.
- 3022 Part 3. Forbs and grasses (to the one above) Vol. 11, pp. 1301-1306, 1992.
- 3023 Collmer, C.W. & S.H. Howell. 1992. Role of Satellite RNA in the Expression of symptoms caused by plant viruses. 1992. *Annu. Rev. Phytopathol* 30:419-442
- 3024 Hajek, A.E., & D.W. Roberts. 1992. Field Diagnosis of Gypsy Moth (Lepidoptera: Lymantriidae) Larval Mortality Caused by *Entomophaga maimaiga* and the Gypsy Moth Nuclear Polyhedrosis Virus. *Environ. Entomol.* 21(4): 706-713.
- 3025 Lauver, T.L., D.C. McCune, J.E. Shaff & L.V. Kochian 1992. The use of ion-selective microelectrodes for measuring calcium and hydrogen ion transfer between foliar surfaces and simulated rain solutions. *New Phytol.* (1992), 121, 179-185.
- 3026 Wilson, T.M.A., J.W. Davies, S.H. Howell, M. Zaitlin. 1992. Genetic Engineering with Plant Viruses. Chapter 10 *The Impact of Genetic Engineering on Classical Plant Virology-Postscript and Perspectives.*
- 3027 Give all request to Srirama he took all reprints.
- 3027 Bhairi, S.M. and R.C. Staples. 1992. Transient Expression of the B-Glucuronidase Gene Introduced into *Uromyces appendiculatus* Uredospores by Particle Bombardment. 1992. *Phytopathology* 82:986-989
- 3028 Renwick, J.A.A. C.D. Radke, K. Sachdev-Gupta, E. Stadler. 1992. Leaf surface chemicals stimulating oviposition by *Pieris rapae* (Lipidoptera: Pieridae) on cabbage. *Chemoecology* 3 (1992) 33-38

- 3029 Blissard, G.W., P.H. Kogan, R.Wei, G.F. Rohrmann. 1992. A Synthetic Early Promoter from a Baculovirus: Roles of the TATA Box and Conserved Start Site CAGT Sequence in Basal Levels of Transcription. *Virology* 190, 783-793 (1992)
- 3030 Markwei C.M., & T.A. LaRue. 1992. Phenotypic characterization of sym8 and sym9, two genes conditioning non-nodulation in *Pisum sativum* 'Sparkle' 1992. *Can. J. Microbiol.* 38/6 548-554.
- 3031 Yanai, R.D. 1992. Phosphorus budget of a 70-year-old northern hardwood forest. 1992. *Biogeochemistry* 17: 1-22.
- 3032 Davis T.R., K.M. Trotter, R.R. Granados & H.A. Wood. 1992. Baculovirus Expression of Alkaline Phosphatase as a reporter Gene for Evaluation of Production, Glycosylation and Secretion. *Biotechnology* Vol.10: 1148-1150.
- 3033 Blackman S.A., R.L. Obendorf, and C. Leopold. 1992. Maturation Proteins and Sugars in Desiccation Tolerance of Developing Soybean Seeds 1. 1992. *Plant Physiol* 100, 225-230
- 3034 Leisner S.M., and S.H. Howell (1992) Symptom Variation in Different *Arabidopsis thaliana* Ecotypes Produced by Cauliflower Mosaic Virus. 1992. *Phytopathology* Vol. 82, No. 10 pp 1042-1045
- 3035 St. Leger R.J., R.C. Staples, D.W. Roberts (1992) Cloning and regulatory analysis of starvation-stress gene, *ssgA*, encoding a hydrophobin-like protein from the entomopathogenic fungus, *Metarhizium anisopliae*. 1992. *Gene*, 120 119-124
- 3036 Blissard G.W., and J.R. Wenz. 1992. Baculovirus gp64 Envelope Glycoprotein Is Sufficient To Mediate Ph-Dependent Membrane Fusion. (1992) *J. of Virology*, Nov. 1992, p. 6829-6835.
- 3037 Woodbury P.B. 1992. Trace Elements In Municipal Solid Waste Composts: A Review of Potential Detrimental Effects On Plants, Soil Biota, and Water Quality. 1992) *Biomass and Bioenergy* Vol. 3, Nos 3-4, pp. 239-259.
- 3038 Su, W. and S.H. Howell. 1992. A Single Genetic Locus, *Ckr1*, Defines *Arabidopsis* Mutants in which Root Growth Is Resistant to Low Concentrations of Cytokinin. *Plant Physiol.* (1992) 99, 1569-1574.
- 3039 Macko V., M.B. Stimmel, T.J. Wolpert, L.D. Dunkle, W. Acklin, R. Banteli, B. Jaun and D. Arigoni. 1992. Structure of the host-specific toxins produced by the fungal pathogen *Periconia circinata*. Vol. 89, pp. 9574-9578.
- 3040 Woodbury P.B. and V.T. Breslin. 1992. Assuring Compost Quality: Suggestions For Facility Managers, REGULATORS, and Researchers. *Biomass and Bioenergy* Vol. 3, Nos 3-4, pp, 213-225, 1992
- 3041 Bruni F. and A.C. Leopold. 1992. Pools of water in anhydrobiotic organisms. 1992 *Biophysical Society* Vol. 63 633-672.
- 3042 Leopold A.C. 1992. What remains of the Chododny- Went theory? Valid but not universal. 1992. *Plant Cell and Environment* 15:777-778

- 3043 Richard T.L. and P.B. Woodbury. 1992. The Impact of separation on Heavy Metal Contaminants in Municipal Solid Waste Composts. 1992 Vol. 3, Nos 3-4, pp 195-211.
- 3044 Yanai R.D. 1992. Competitive Interactions between Norway Spruce and Scots Pine At Gisburn Forest, NW England. Forestry, Vol. 65, No 4 1992
- 3045 Rose A.B., A.L. Casselman, and R.L. Last. 1992. A Phosphoribosylanthranilate Transferase Gene is Defective in Blue Fluorescent Arabidopsis thaliana Tryptophan Mutants. Plant Physiol. (1992) 100, 582-592.
- 3046 Leopold A.C., F. Bruni and R.J. Williams. 1992. Water in Dry Organisms. pp.161-169. Springer Verlag, Berlin.
- 3047 Wettlaufer S.H. and R.W. Hardy. 1992. Effect of Light and Organic Acids on Oxygen Uptake by BTAi 1, a Photosynthetic Rhizobium. Applied and Environmental Microbiology, Dec. 1992, p. 3830-3833.
- 3048 Lee K.H. and T.A. LaRue. 1992. Pleiotropic Effects of sym-17 1. A Mutation in Pisum sativum L. cv Sparkle Causes Decreased Nodulation, Altered Root and Shoot Growth, and Increased Ethylene Production. Plant Physiol. (1992) 100, 1326-1333.
- 3049 Lee K.H. and T.A. LaRue. 1992. Ethylene as a Possible Mediator of Light- and Nitrate Induced Inhibition of Nodulation of Pisum sativum L. cv Sparkle 1. Plant Physiol. (1992) 100, 1334-1338.
- 3050 Renwick J.A.A. 1992. New directions in semiochemical research. J. Appl. Ent. 114 (1992) 431-438
- 3051 St. Leger R.J., R.C. Staples, and D.W. Roberts. 1993. Entomopathogenic Isolates of Metarhizium anisopliae, Beauveria bassiana, and Aspergillus flavus Produce Multiple Extracellular Chitinase Isozymes. J. of Inv. Path. 61, 81-84 (1993)
- 3052 Sachdev-Gupta, K., C.D. Radke and J.A.A. Renwick. 1992. Chemical recognition of diverse hosts by Pieris rapae butterflies. Proc. 8th Int. Symp. Insect-Plant Relationships, Dordrecht: kluwer Acad. Publ. S.B.J. Menken, J.H Visser & P. Harrewijn (eds)
- 3053 Hardy R.W.F. Industrial Aspects of Transgenic Plant Products. 1992. Transgenic Plants, Vol. 2
- 3054 Sakamoto W., K.L. Kindle & D.B. Stern. 1992. In Vivo analysis of Chlamydomonas chloroplast petD gene expression using stable transformation of B-glucuronidase translational fusions. Proc. Natl. Acad. Sci USA Vol. 90, pp 497-501, January 1993 Plant Biology
- 3055 Rose A.B., A.L. Casselman, and R.L. Last. 1992. A Phosphoribosylanthranilate Transferase Gene Is Defective in Blue Fluorescent Arabidopsis thaliana Tryptophan Mutants1. Plant Physiol. (1992) 100, 582-592.
- 3056 Lee K.H. & T.A. LaRue. 1992. Exogenous Ethylene Inhibits Nodulation of Pisum sativum L. cv Sparkle1. Plant physiol. (1992) 100, 1759-1763

- 3057 Amundson R.G., J.L. Hadley, J.F. Fincher, S. Fellows, & R.G. Alscher. 1992. Comparisons of seasonal changes in photosynthetic capacity, pigments, and carbohydrates of healthy sapling and mature red spruce and of declining and healthy red spruce. 1992. *Can. J. Bot.* 70: 1605-1616.
- 3058 St. Leger R.J., L.L. Allee, B. May, R.C. Staples, & D.W. Roberts. 1992. World-wide distribution of genetic variation among isolates of *Beauveria* spp. *Mycol. Res.* 96 (12): 1007-1015 (1992)
- 3059 Wickham T.J., M.L. Shuler, D.A. Hammer, R.R. Granados & Wood. 1992. Equilibrium and kinetic analysis of *Autographa californica* nuclear polyhedrosis virus attachment to different insect cell lines. *J. of Gen. Vir.* (1992), 73, 3185-3194.
- 3060 Arthur M.A., G. Rubin, P.B. Woodbury & L.H. Weinstein (1993) Gypsum amendment to soil can reduce selenium uptake by alfalfa grown in the presence of coal fly ash. *Plant and Soil* 148: 83-90, 1993.
- 3061 Gupta S., S.B. Krasnoff, J.A.A. Renwick, & D. W. Roberts. 1993. Viridoxins A and B: Novel Toxins from the Fungus *Metarhizium flavoviride*. *J. of Organic Chem.*, 58. 1993.
- 3062 Huang X., J.A.A. Renwick,* and K. Sachdev-Gupta. 1993. A Chemical Basis For Differential Acceptance of Two *Pieris* Species. 1993. *J. of Chemical Ecology*. Vol. 19, No.2 195-210
- 3063 Leisner, S.M., R. Turgeon, and S.H. Howell. 1993. Effects of Host Plant Development and Genetic Determinants on the Long Distance Movement of Cauliflower Mosaic Virus in *Arabidopsis*. *The Plant cell*, Vol. 5, 191-202, 1993.
- 3064 Li, J., T. Ou-Lee, R. Raba, R.G. Amundson, & R. Last. 1993. *Arabidopsis* Flavonoid Mutants Are Hypersensitive to UV-B Irradiation. *The Plant cell*, Vol. 5, 171-179.
- 3065 Lin Y., M.T. Hamblin, M.J. Edwards, C. Barillas-Mury, M.R. Kanost, D.C. Knipple, M.F. Wolfner & H. H. Hagedorn. 1993. Structure, Expression, and Hormonal Control of Genes from the Mosquito, *Aedes aegypti*, Which Encode Proteins Similar to the Vitelline Membrane Proteins of *Drosophila melanogaster*. 1993. *Developmental Biology* 155, 558-568.
- 3066 St. Leger, R.J., R.M. Cooper and K. Charnley. 1993. Analysis of aminopeptidase and dipeptidylpeptidase IV from the entomopathogenic fungus *Metarhizium anisopliae*. *J. of Gen. Microbiology* 1993, 139, 237-243.
- 3067 Stern, D.B. and K.L. Kindle. 1993. 3' End Maturation of the *Chlamydomonas reinhardtii* Chloroplast *atpB* mRNA Is a Two-Step Process. *Molecular and Cellular Biology*. 1993, vol. 13 p.2277-2285.
- 3068 Last Robert, 1993. The Genetics of Nitrogen Assimilation and Amino Acid Biosynthesis in Flowering Plants: Progress and Prospects. 1993, *International Review of Cytology*. Vol.143:297-330
- 3069 Esashi Y., M. Ogasawara, R. Gorecki and C. Leopold. 1993. Possible mechanisms of afterripening in *Xanthium* seeds. 1993. *Physiologia Plantarum* 87: 359-364.

- 3070 Sun W.Q., and C. Leopold. 1993. Acquisition of desiccation tolerance in soybeans. 1993. *Physiologia plantarum* 87: 403-409.
- 3071 Huang, X. & J.A.A. Renwick. 1993. Differential selection of host plants by two *Pieris* species: the role of oviposition stimulants and deterrents. *Entomol. esp. appl.* 68: 59-69, 1993.
- 3072 Wood H.A., K.M. Trotter, T.R. Davis, & P.R. Hughes. n 1993. Per Os Infectivity of Preoccluded Virions from Polyhedrin- Minus Recombinant Baculoviruses. *J. of Inv. Path.* 62, 64-67 1993.
- 3073 Pruitt K.D., & R.L. Last. 1993. Expression Patterns of Duplicate Tryptophan Synthase B Genes in *Arabidopsis thaliana* 1. *Plant Physiol.* 102: 1019-1026 1993.
- 3074 Sachdev-Gupta K., C.D. Radke,* J.A.A. Renwick & M.B. Dimock. Cardenolides From *Erysimum cheiranthoides*: Feeding Deterrents To *Pieris rapae* LARVE. 1993. *J. of Chem. Ecol.*, Vol. 19, No. 7, 1993. 1355-1369
- 3075 Hughes P.R., C.D. Radke, & J.A.A. Renwick. A Simple, Low-Input Method For Continuous Laboratory Rearing Of The Monarch Butterfly (LEPIDOPTERA:DANAIDAE) For Research. 1993. *Am. Ent.*, 39:2, 109-111
- 3076 Amundson R.G., R.J. Kohut, J.A. Laurence, S. Fellows and L.J. Colavito. Moderate Water Stress Alters Carbohydrate Content and Cold Tolerance of Red Spruce Foliage. 1993. *Environmental and Experimental Botany*, Vol. 33, No. 3, pp.383-390, 1993.
- 3077 Laurence, J.A., R.J. Kohut, R.G. Amundson. Use of TREGRO to Simulate the Effects of Ozone on the Growth of Red Spruce Seedlings. 1993. *Forest Science*, Vol. 39, No. 3, pp. 453-464, August 1993.
- 3078 Huang, X., J.A.A. Renwick*, and K. Sachdev-Gupta. Oviposition Stimulants and Deterrents Regulating Differential Acceptance of *Iberis amara* By *Pieris rapae* and *P. napi oleracea*. 1993. *J. of Chem. Ecol.*, Vol. 19, No.8, pp. 1645-1663, 1993.
- 3079 Sachdev-Gupta, K., C.D. Radke* and A. Renwick. Antifeedent Activity of Cucurbitacins from *Iberis Amara* Against Larvae of *Pieris Rapae*. *Phytochemistry*, Vol.33,no.6, pp.1385-1388, 1993.
- 3080 Chen X., K. Kindle, and D.B. Stern. Initiation Codon Mutations in the *Chlamydomonas* Chloroplast *petD* Gene Result in the Temperature-sensitive Photosynthetic Growth. *The EMBO J.*, Vol. 12, no.9, pp.3627-3635, 1993.
- 3081 Wood, H.A., and P.R. Hughes. Environmental and Commercial Evaluations of Genetically Engineered Baculovirus Pesticides. *Advanced Engineered Pesticides*, Leo Kim, edt., Mycogen Corporation. San Diego, California, 1993.
- 3082 H.A Wood, T.R. Davis, T.J. Wickman, K.A. McKenna, R.R. Granados, and M.L. Shuler. Comparative Recombinant Protein Production of Eight Insect Cell Line. *In Vitro Cell. Dev. Bio.* 29A: pp.388-390, May 1993.

- 3083 Hadley J.L., R.G. Amundson, J.A. Laurence and R.J. Kohut. Red Spruce Bud Mortality at White-Face Mountain, New York. *Can. J. of Bot.* 71: pp. 827-833, January 12, 1993.
- 3084 Kuehny, J.S. and M.C. Halbrooks. Episodic Whole Plant Growth Patterns in *Ligustrum*. *Physiologia Plantarum* 89: pp.33-39.
- 3085 Hajek, A.E. & A.A. Renwick. Incorporation of *Quercus rubra* foliage into artificial diet alters development of a fungal pathogen of *Lymantria dispar*. *Entomol. Exp. Appl.* 68: pp.265-267, February 2nd, 1993.
- 3086 Topa, M.A. and J.M. Cheeseman, 1993. ³²P uptake and transport to shoots in *Pinus serotina* seedlings under aerobic and hypoxic growth conditions. *Physiologia Plantarum* 87: pp.125-133. Copenhagen 1993.
- 3087 Hajek, A.E., T.S. Larkin, R. Carruthers, and R.S. Soper, 1993. Modeling the Dynamics of *Entomophaga maimaiga* (Zygomycetes: Entomophthorales) Epizootics in Gypsy Moth (Lepidoptera: Lymantriidae) Populations. *Environ. Entomol.* 22(5): pp.1172-1187.
- 3088 Hadley, J.L., R.G. Amundson, J.A. Laurence, and R.J. Kohut, 1993. Physiological Response to Controlled Freezing of Attached Red Spruce Branches. *Environmental and Experimental Botany*, Vol. 33, No.4, pp. 591-609, 1993.
- 3089 Hajek, A.E. 1993. New Options For Insect Control Using Fungi. Boyce Thompson Institute. (Am. Chem. Soc.)
- 3090 Hardy, R.W.F. 1993. Biologically Based Pest Management in Managed Ecosystems: Increasing Its Acceptance. Boyce Thompson Institute. (Am. Chem. Soc.)
- 3091 Rapp, W.D., S. Lupold, S. Mack, and D.B. Stern. Architecture of the Maize Mitochondrial *atp1* Promoter as Determined by the Linker Scanning and Point Mutagenesis. *Mol. & Cel. Bio.*, Dec. 1993, Vol.13, No.12, pp.7232-7238
- 3092 Rusch, H. and J.A. Laurence, 1993. Interactive Effects of Ozone and Powdery Mildew on Pea Seedlings. Boyce Thompson Institute. (Am. Phytopathological Soc.) 1258-1263
- 3093 Hadley, J.L., R.G. Amundson, J.A. Laurence, and R.J. Kohut. 1993. Physiological Response to Controlled Freezing of Attached Red Spruce Branches. *Environmental and Experimental Botany*, Vol. 33, No. 4 pp. 591-609.
- 3094 Hajek, A.E. and R.L. St. Leger, 1994. Interactions Between Fungal Pathogens and Insect Hosts. *Annu. Rev. Ent.* 39:293-322
- 3095 Renwick, J.A.A. and F.S. Chew, 1994. Oviposition Behavior in Lepidoptera. *Annu. Rev. Entomol.* 1994. 39:377-400.
- 3096 Comstock, J. and J. Ehleringer, 1994. Stomatal Response to Humidity in Common Bean (*Phaseolus vulgaris*): Implications for Maximum Transpiration Rate, Water-use Efficiency and Productivity. *Aust. J. Plant Physiol.*, 1993, 20: 669-91.
- 3097 Sun, W.Q., and C.A. Leopold. 1993. The Glassy state and accelerated aging of soybeans. *Physiologia Plantarum* 1993, 89: 767-774.

- 3098 Hajek, A.E. and R. Reardon, 1993. *Entomophaga maimaiga* in North America: A Review.
- 3099 GIVE ALL REQUESTS TO GRETA COLAVITO
- 3099 Hardy, R.W.F. 1993. Biological nitrogen fertilization: Present and future applications. *Agric. & Env. Challenges*. 1993 109-117 Proc. 13th Agric. Sector Symp. The World Bank, Wash.DC
- 3100 Guinel, F.C. and T.A. LaRue, 1993. Excessive aluminium accumulation in the pea mutant E107 (brz). *Plant & Soil*. 1993, 157: 75-82.
- 3101 Kogan, P.H. and G.W. Blissard, 1994. A Baculovirus gp64 Early Promoter Is Activated by Host Transcription Factor Binding to CACGTG and GATA Elements. *Am. Soc. for Microbiology*. Vol.68, No.2, 81-822.
- 3102 Hungria, M., J.M. Ellis, R.W.F. Hardy, and A.R.J. Eaglesham. 1993. Light-stimulated ¹⁴CO₂ uptake and acetylene reduction by bacteriochlorophyll containing stem nodule isolate BTAi 1. *Biol. Fertil Soils* 15:208-214.
- 3103 Davis, T.R., M.L. Shuler, R.R. Granados, & H.A. Wood, 1993. Comparison of Oligosaccharide among insect cells expressing a secreted Glycoprotein. *In Vitro Cell. Dev. Biol.* 29A:842-846.
- 3104 Woodbury, P.B., J.A. Laurence, & G.W. Hudler, 1994. Chronic Ozone Exposure Alters the Growth of Leaves, Stems, and Roots of Hybrid Populus. *Env. Poll.* 85:103-108
- 3105 Huang, X.P., J.A.A. Renwick, & K. Sachdev-Gupta, 1994. Oviposition Stimulants in *Barbarea vulgaris* for *Pieris rapae* and *P. napi oleracea*: Isolation, identification and differential activity. *Jrnl. of Chem. Ecol.* Vol. 20, #2, 423-438, 1994.
- 3106 Bidochka, M.J., M.A. McDonald, R.J. St. Leger, & D.W. Roberts. 1994. Differentiation of species and strains of entomopathogenic fungi by random amplification of polymorphic DNA (RAPD). *Curr. Genet.* 25:107-113
- 3107 Hajek, A.E., P.E. Nelson, R.A. Humber, and J.L. Perry, 1993. (Brief Article) Two *Fusarium* Species Pathogenic To Gypsy Moth, *Lymantria Dispar*. *Mycologia*, 85(6) 937-940.
- 3108 Howell, S. Resistance to Viral Diseases of Vegetables.
Send out the green flyer as per Mary Westlake.
- 3109 Finnerty, C.M., R.R. Granados, P.R. Hughes, and A.C. Bellotti, 1994. Bioassay of Several Baculoviruses for Virus-induced Mortality in *Manduca sexta* Larvae and Induction of Infection-Specific Protein. *J. of Inv. Path.* 63:140-144.
- 3110 Sun, W.Q., T.C. Irving & A.C. Leopold. 1994. The role of sugar, vitrification and membrane phase transition in seed desiccation tolerance. *Physiologia Plantarum*. 90:621-628.
- 3111 Huang, X.P. and J.A.A. Renwick. 1994. Relative activities of Glucosinolates as oviposition stimulants for *Pieris rapae* and *P. napi oleracea*. *J. of Chem. Ecol.* 20(5) 1025-1037.

- 3112 Huang, X.P. and J.A.A. Renwick. 1994. Cardenolides as Oviposition Deterrents to Two *Pieris* Species: Structure-Activity Relationships. *J. of Chem. Ec.* 20(5) 1039-1051.
- 3113 Wood, A.H., P.R. Hughes & A. Shelton. 1994. Field Studies of the Co-Occlusion Strategy with a Genetically Altered Isolate of the *Autographa californica* Nuclear Polyhedrosis Virus. *Ent. Soc. of Am.* 23(2): 211-219.
- 3114 Maki, K.S., J.A. Bartsch, R.E. Pitt, & A.C. Leopold. 1994. Viscoelastic properties and the glassy state in soybeans. *Seed Science Research.* 4, 27-31
- 3115 Laurence, J.A., R.G. Amundson, A.L. Friend, E.J. Pell, & P.J. Temple. 1994. Allocation of Carbon in Plants under Stress: An Analysis of the ROPIS Experiments. *J. of Env. Quality.* Vol. 23:412-417.
- 3116 Weinstein, D.A, & R.D. Yanai. 1994. Integrating the Effects of Simultaneous Multiple Stresses on Plants Using the Simulation Model TREGRO. *J. of Env. Quality.* 23:418-428
- 3117 Woodbury, P.B., J.A. Laurence & G.W. Hudler. 1994. Chronic Ozone Exposure Increases the Susceptibility of Hybrid *Populus* to Disease Caused by *Septoria Musiva*. *Env. Poll.* 86: 109-114.
- 3118 Bidochka, M.J., & G.G. Khachatourians. 1994. Basic Proteases of Entomopathogenic Fungi Differ in Their Adsorption Properties to Insect Cuticle. *J. of Inv. Path.* 64:26-32.
- 3119 Hajek, A.E. & M.M. Wheeler. 1994. Note: Application of Techniques for Quantification of Soil-Borne Entomophthoralean Resting Spores. 64:71-73.
- 3120 St. Leger, R.J., M.J. Bidochka, & D.W. Roberts. 1994. Isoforms of the Cuticle-Degrading Pr1 Proteinase and Production of a Metalloproteinase by *Metarhizium anisopliae*. *Archives of Biochemistry & Biophysics*, Vol.313 1:1-7.
- 3121 Sturm, N.R., R. Kuras, S. Buschlen, W. Sakamoto, K. Kindle, D.B. Stern & F.A. Wollman. 1994. The *petD* Gene Is Transcribed by Functionally Redundant Promoters in *Chlamydomonas reinhardtii* Chloroplasts. *Mol. & Cell. Bio.* Vol. 14, No. 9, 6171-6179.
- 3122 Sakamoto, W., N.R. Sturm, K.L. Kindle, & D.B. Stern. 1994. *petD* mRNA Maturation in *Chlamydomonas reinhardtii* Chloroplasts: Role of 5' Endonucleolytic Processing. *Mol. & Cell. Bio.* 14:9, 6180-6186.
- 3123 Wang, P., D.A. Hammer, & R.R. Granados. 1994. Interaction of *Trichoplusia ni* granulosis virus-encoded enhancin with the midgut epithelium and peritrophic membrane of four lepidopteran insects. *J. of Gen. Vir.* 75: 1961-1967.
- 3124 St. Leger, R.J., M.J. Bidochka, & D.W. Roberts. 1994. Characterization of a Novel Carboxypeptidase Produced by the Entomopathogenic Fungus *Metarhizium Anisopliae*. *Archives of Biochemistry and Biophysics.* 314:2 392-398.

- 3125 Sakamoto, W., X. Chen, K.L. Kindle, & D.B. Stern. 1994. Function of the *Chlamydomonas reinhardtii* *petD* 5' untranslated region in regulating the accumulation of subunit IV of the cytochrome *b₆/f* complex. *The Plant Journal*, 6:4 503-512.
- 3126 Yanai, R.D. 1994. A Steady-State Model of Nutrient Uptake Accounting for Newly Grown Roots. *Soil Sci. Soc. Am. J.* 58:1562-1571
- 3127 Granados, R.R., L. Guoxun, A.C.G. Derksen, & K.A. McKenna. 1994. A New Insect Cell Line from *Trichoplusia ni* (BTI-Tn-5B1-4) Susceptible to *Trichoplusia ni* Single Enveloped Nuclear Polyhedrosis Virus. *J. Inv. Path.* 64, 260-266.
- 3128 Yanai, R.D., T.J. Fahey, & S.L. Miller. 1994. Efficiency of Nutrient Acquisition by Fine Roots and Mycorrhizae. *Rsc. Physlgy. of Conifers.* pgs. 75-103 - Academic Press.
- 3129 Bidochka, M.J., S.R.A. Walsh, M.E. Ramos, R.J. St. Leger, J.C. Silver & D.W. Roberts. 1995. Pathotypes in the *Entomophaga grylli* Species Complex of Grasshopper Pathogens Differentiated with Random Amplification of Polymorphic DNA and Cloned-DNA Probes. *App. & Env. Microbiology.* 61:2 556-560.
- 3130 Joshi, L., R.J. St. Leger, M.J. Bidochka. 1995. Cloning of a cuticle-degrading protease from the entomopathogenic fungus, *Beauveria bassiana*. *FEMS Microbiology Letters* 211-217.
- 3131 Leopold, A.C., W.Q. Sun, I. Bernal-Lugo. 1994. The glassy state in seeds: analysis and function. 4:267-274.
- 3132 Kogan, P.H., Xiaoying Chen, & G.W. Blissard. 1995. Overlapping TATA-Dependent and TATA-Independent Early Promoter Activities in the Baculovirus *gp64* envelope fusion protein Gene. *J. of Virology.* p. 1452-1461. 69:3.
- 3133 Sun, W.Q., A.C. Leopold. 1994. Glassy State and Seed Storage: A Viability Equation Analysis. *Annals of Botany* 74: 601-604.
- 3134 Heller, L.I., A.J. Shaw, & J.S. Jacobson. 1994. Exposure of red spruce seedlings to acid mist: importance of droplet composition just prior to drying periods. *New Phytol.* 129, 55-61.
- 3135 Topa, M.A., J.M. Cheeseman. 1994. Maintenance of ³²P uptake and transport in *Pinus Serotina* seedlings under hypoxic growth conditions. *Physiologia Plantarum.* 92: 171-180.
- 3136 Amundson, R.G., R.J. Kohut, & J.A. Laurence. 1995. Influence of foliar N on foliar soluble sugars and starch of red spruce saplings exposed to ambient and elevated ozone. *Tree Physiology.* 15 167-174.
- 3137 Monsma, S.A., & G.W. Blissard. 1995. Identification of a Membrane Fusion Domain and an Oligomerization Domain in the Baculovirus GP64 Envelope Fusion Protein. *J. of Virology,* 2583-2595.
- 3138 Zhao, J., & R.L. Last. 1995. Immunological Characterization and Chloroplast Localization of the Tryptophan Biosynthetic Enzymes of the Flowering Plant *Arabidopsis thaliana**. *J. of Biological Chem.* Vol. 270, No. 11, 6081-6087.

- 3139 Chen, Q., C.C. Adams, L. Usack, J. Yang, R.A. Monde, & D.B. Stern. 1995. An AU-Rich Element in the 3' Untranslated Region of the Spinach Chloroplast *petD* Gene Participates in Sequence-Specific RNA-Protein Complex Formation. *Mol. & Cell. Bio.* pp. 2010-2018.
- 3140 Cary, A.J., W. Liu, S.H. Howell. 1995. Cytokinin Action is Coupled to Ethylene in Its Effects on the Inhibition of Root and Hypocotyl Elongation in *Arabidopsis thaliana* Seedlings¹. *Plant Physiol.* 107: 1075-1082.
- 3141 Li, J., J. Zhao, A.B. Rose, R. Schmidt, & R.L. Last. 1995. *Arabidopsis* Phosphoribosylanthranilate Isomerase: Molecular Genetic Analysis of Triplicate Tryptophan Pathway Genes. *The Plant Cell.* 7: 447-461
- 3142 Barczak, A.J., J. Zhao, K.D. Pruitt & R.L. Last. 1995. 5-Fluoroindole Resistance Identifies Tryptophan Synthase Beta Subunit Mutants in *Arabidopsis thaliana*. *Gen. Soc. of Am.* 140: 303-313
- 3143 Renwick, J.A.A. & X.P. Huang. 1995. Rejection of host plant by larvae of cabbage butterfly: Diet-dependent sensitivity to an antifeedant. *J. of Chem. Ecol.* 21:4 465-475.
- 3144 W.Q. Sun & A.C. Leopold. 1995. The Maillard reaction and oxidative stress during aging of soybean seeds. *Physiologia Plantarum* 94: 94-104.
- 3145 Bidochka, M.J., R.J. St. Leger, L. Joshi & D.W. Roberts. 1995. The rodlet layer from aerial and submerged conidia of the entomopathogenic fungus *Beauveria bassiana* contains hydrophobin. *Mycol. Res.* 99(4) 403-406.
- 3146 Wood, H.A. & P.R. Hughes. 1995. Development of Novel Delivery Strategies for Use with Genetically Enhanced Baculovirus Pesticides. Chapter 16. *Am. Chem. Soc.* 221-228.
- 3147 J.M. Slack, J. Kuzio & P. Faulkner. 1995. Characterization of *v-cath*, a cathespsin L-like proteinase expressed by the baculovirus *Autographa californica* multiple nuclear polyhedrosis virus. *J. of Gen. Vir.* 76: 1091-1098.
- 3148 Bidochka, M.J., R.J. St. Leger, L. Joshi & D.W. Roberts. 1995. An inner cell wall protein (cwp1) from conidia of the entomopathogenic fungus *Beauveria bassiana*. *Microbiology* 141: 1075-1080
- 3149 Li, J., S. Chen, L. Zhu & R.L. Last. 1995. Isolation of cDNAs Encoding the Tryptophan Pathway Enzyme Indole-3-Glycerol Phosphate Synthase from *Arabidopsis thaliana*¹. *Plant Physiol.* 108: 877-878.
- 3150 Oomens, A.G.P., S.A. Monsma, & G.W. Blissard. 1995. The Baculovirus GP64 Envelope Fusion Protein: Synthesis, Oligomerization, and Processing. *Virology.* 209: 592-603.
- 3151 Boese, S.R., D.C. MacLean & D. El-Mogazi. 1995. Effects of Fluoride on Chlorophylla Fluorescence in Spinach. *Env. Poll.* 2: 203-208.
- 3152 Wettlaufer, S.H. & R.W.F. Hardy. 1995. Effect of Oxygen and Light on the Accumulation of Bacteriochlorophyll in the Rhizobial Strain BTAi 1. *Plant Cell Physiol.* 36(3): 391-396.

- 3153 Radwanski, E.R., & R.L. Last. 1995. Tryptophan Biosynthesis and Metabolism: Biochemical and Molecular Genetics. *The Plant Cell*. 7:921-934.
- 3154 Hajek, A.E., R.A. Humber & J.S. Elkinton. 1995. Mysterious Origin of *Entomophaga maimaiga* in North America. *Am. Ent. Vol* 41 1: 31-42.
- 3155 Su, W., & S.H. Howell. 1995. The Effects of Cytokinin and Light on Hypocotyl Elongation in *Arabidopsis* Seedlings Are Independent and Additive¹. *Plant Physiol*. 108: 1423-1430.
- 3156 Huang, X.P. & J.A.A. Renwick. 1995. Cross habituation to feeding deterrents and acceptance of a marginal host plant by *Pieris rapae* larvae. *Entomologia Experimentalis et Applicata*. 76: 295-302.
- 3157 Conklin, P.L. & R.L. Last. 1995. Differential Accumulation of Antioxidant mRNAs in *Arabidopsis thaliana* Exposed to Ozone¹. *Plant Physiol*. 109: 203-212.
- 3158 Davis, T.R., & H.A. Wood. 1995. Intrinsic Glycosylation Potentials of Insect Cell Cultures and Insect Larvae. *In Vitro Cell Dev. Biol*. 31:659-663.
- 3159 Tracy, R.L. & D.B. Stern. 1995. Mitochondrial transcription initiation: promoter structures and RNA polymerases. *Curr. Genet*. 28: 205-216.
- 3160 Chen, X., K.L. Kindle & D.B. Stern. 1995. The Initiation Codon Determines the Efficiency but Not the Site of Translation Initiation in *Chlamydomonas* Chloroplasts. *The Plant Cell*. 7: 1295-1305.
- 3161 Wood, H.A. 1995 Molecular Biology of the Biological Control of Pests and Diseases of Plants. Chapter 6: Genetically Enhanced Baculovirus Insecticides. 91-104.
- 3162 Huang, X.P., J.A.A. Renwick & F.S. Chew. 1995. Oviposition stimulants and deterrents control acceptance of *Alliaria petiolata* by *Pieris rapae* and *P. napi oleracea*. *Chemoecology*. 5/6,2: 79-87.
- 3163 Huang, X.P. & J.A.A. Renwick. 1995. Chemical and Experiential Basis for Rejection of *Tropaeolum majus* by *Pieris rapae* Larvae. *J. of Chem. Ecology*. 21:10 1601-1617.
- 3164 Radwanski, E.R., J. Zhao, & R.L. Last. 1995. *Arabidopsis thaliana* tryptophan synthase alpha: gene cloning, expression, and subunit interaction. *Mol. Gen. Genet*. 248: 657-667.
- 3165 Roelvink, P.W., B.G. Corsaro, & R.R. Granados. 1995. Characterization of the *Helicoverpa armigera* and *Pseudaletia unipuncta* granulovirus enhancin genes. *J. of Gen. Vir*. 76: 2693-2705.
- 3166 Landry, L.G., C.C.S. Chapple, & R.L. Last. 1995. *Arabidopsis* Mutants Lacking Phenolic Sunscreens Exhibit Enhanced Ultraviolet-B Injury and Oxidative Damage¹. *Plant Physiol*. 109: 1159-1166.
- 3167 St. Leger, R.J., S. Shimizu, L. Joshi, M.J. Bidochka, & D.W. Roberts. 1995. Co-transformation of *Metarhizium anisopliae* by electroporation or using the gene gun to produce stable GUS transformants. *FEMS Microbiology Ltr*. 289-294.

- 3168 St. Leger, R.J., L. Joshi, M.J. Bidochka & D.W. Roberts. 1995. Multiple Aminopeptidases Produced by *Metarhizium anisoplia*. *J. Inv. Path.* 65: 313-314
- 3169 St. Leger, R.J., M.J. Bidochka & D.W. Roberts. 1994. Germination triggers of *Metarhizium anisopliae* conidia are related to host species. *Microbiology*. 140: 1651-1660.
- 3170 St. Leger, R.J. L. Joshi, M.J. Bidochka, & D.W. Roberts. 1995. Protein synthesis in *Metarhizium anisopliae* growing on host cuticle. *Mycol. Res.* 99(9): 1034-1040.
- 3171 Haribal M., & J.A.A. Renwick. 1996. Oviposition stimulants for the Monarch butterfly: Flavonol Glycosides from *Asclepias curassavica*. *Phytochem.* 41, 1:139-144.
- 3172 Hughes, P.R. & H.A. Wood. 1996. In Vivo Production, Stabilization, and Infectivity of Baculovirus Preoccluded Virions. *App. & Environmtl. Merblgy.* 62:1, 105-108.
- 3173 Li, J. & R.L. Last. 1996. The *Arabidopsis thaliana trp5* Mutant has a Feedback-Resistant Anthranilate Synthase and Elevated Soluble Tryptophan¹. *Plant Physiol.* 110: 51-59.
- 3174 Lanier, L.M., J.M. Slack & L.E. Volkman. 1996. Actin Binding and Proteolysis by the Baculovirus AcMNPV: The Role of Virion-Associated V-CATH. *Virology* 216: 380-388.
- 3175 Richter, L., H.S. Mason & C.J. Arntzen. 1996. Transgenic Plants Created for Oral Immunization Against Diarrheal Diseases. *J. Travel Med.* 3: 52-56.
- 3176 Grant-Peterson, J. & J.A.A. Renwick. 1996. Effects of Ultraviolet-B Exposure of *Arabidopsis thaliana* on Herbivory by Two Crucifer-Feeding Insects (Lepidoptera). *Ent. Soc. Am.* 135-142.
- 3177 Bidochka, M.J, S.R.A. Walsh, M.E. Ramos, R.J. St. Leger, J.C. Silver & D.W. Roberts. 1996. Fate of biological control introductions: Monitoring an Australian fungal pathogen of grasshoppers in North America. *Proc. Natl. Acad. Sci.* 93: 918-921.
- 3178 Rubin, G., C.E. McCulloch & J.A. Laurence. 1996. A Model for Estimating Daily Ozone Dose for Plants From Atmospheric Ozone Concentration and Vapor Pressure Deficit. *J. Agric. Biolgcl. Envrnmntl. Statistics.* 1-16
- 3179 Laurence, J.A., R.J. Kohut, R.G. Amundson, D.A. Weinstein & D.C. MacLean. 1996. Response of sugar maple to multiple year exposures to ozone and simulated acidic precipitation. *Env. Poll.* 92:2 119-126.
- 3180 Taylor, D.P., J. Slattery & A.C. Leopold. 1996. Apoplastic pH in corn root gravitropism: A laser scanning confocal microscopy measurement. *Phys. Plantarum* 97: 35-38
- 3181 Larsen, P.B., C.Y. Tai, L.V. Kochian & S.H. Howell. 1996. Arabidopsis Mutants with Increased Sensitivity to Aluminum¹. *Plant Physiol.* 110: 743-751.
- 3182 Mason, H.S., J.M. Ball, J.J. Shi, X. Jiang, M.K. Estes & C.J. Arntzen. 1996. Expression of Norwalk virus capsid protein in transgenic tobacco and potato and its oral immunogenicity in mice. *Proc. Natl. Acad. Sci.* 5335-5340.

- 3183 Monsma, S.A., A.G.P. Oomens, G.W. Blissard. 1996. The GP64 Envelope Fusion Protein Is An Essential Baculovirus Protein Required for Cell-to-Cell Transmission of Infection. *J. of Virology*. 4607-4616.
- 3184 St. Leger, R.J., L. Joshi, M.J. Bidochka & D.W. Roberts. 1996. Construction of an improved mycoinsecticide overexpressing a toxic protease. *Proc. Natl. Acad. Sci.* 93: 6349-6354.
- 3185 Drager, R.G., M. Zeidler, C.L. Simpson, & D.B. Stern. 1996. A chloroplast transcript lacking the 3' inverted repeat is degraded by 3'→5' exoribonuclease activity. *RNA* 2:652-663.
- 3186 Lyons, P.C., G.D. May, H.S. Mason & C.J. Arntzen. 1996. Production of Protein Pharmaceuticals in Transgenic Plants. *Pharmaceutical News* 3,3: 7-12.
- 3187 Renwick, J.A.A. & X.P. Huang. 1996. Development of Sensitivity to Feeding Deterrents in Larvae of *Pieris rapae*. *Entomol. Experim. et Appl.* 80: 90-92.
- 3188 Yang, J., G. Schuster & D.B. Stern. 1996. CSP41, A Sequence-Specific Chloroplast mRNA Binding Protein, Is an Endoribonuclease. *The Plant Cell*. 8: 1409-1420.
- 3189 Conklin, P.L., E.H. Williams, & R.L. Last. 1996. Environmental Stress Sensitivity of an Ascorbic Acid-deficient Arabidopsis Mutant. *Proc. Natl. Acad. Sci.* 93: 9970-9974.
- 3190 Blissard, G.W., 1996. Baculovirus-insect cell interactions. *Cytotechnology*. 20: 73-93.
- 3191 LaRue, T.A., S. Temnykh & N.F. Weeden. 1996. *sym 18*. A novel gene conditioning altered strain specificity in *Pisum sativum* cv. 'Sparkle'. *Plant & Soil*. 180: 191-195.
- 3192 Davis, T.R. & H.A. Wood. 1996. *In vitro* characterization of a *Trichoplusia ni* single nucleocapsid nuclear polyhedrosis virus. *J. of Gen. Vir.* 77: 2303-2310.
- 3193 Lepore, L.S., P.R. Roelvink & R.G. Granados. 1996. Enhancin, the Granulosis Virus Protein That Facilitates Nucleopolyhedrovirus (NPV) Infections, Is a Metalloprotease. *J. of Inv. Path.* 68: 131-140.
- 3194 Rott R., R.G. Drager, D.B. Stern & G. Schuster. 1996. The 3' untranslated regions of chloroplast genes in *Chlamydomonas reinhardtii* do not serve as efficient transcriptional terminators. *Mol. Gen. Genet.* 252: 676-683.
- 3195 Topa, M.A. 1996. Seed source variation in ³²P uptake in *Pinus taeda* L. seedlings: A possible regulation by efflux. *Plant & Soil*. 182: 259-265.
- 3196 Retlaff, W.A., D.A. Weinstein, J.A. Laurence, & B. Gollands. 1995. Simulated root dynamics of a 160-year-old sugar maple (*Acer saccharum* Marsh) tree with and without ozone exposure using the TREGRO model.
- 3197 Renwick, J.A.A. 1996. Chapter 3: Diversity and Dynamics of Crucifer Defenses Against Adults and Larvae of Cabbage Butterflies. *Phyto. Div. & Redundancy in Ecol. Interactions*. 57-79.

- 3198 Callaway, A., W. Liu, A. Vyacheslav, L. Stenzler, J. Zhao, S. Wettlaufer, P. Jayakumar & S.H. Howell. 1996. Characterization of Cauliflower Mosaic Virus (CaMV) Resistance in Virus-Resistant Ecotypes of *Arabidopsis*. MPMI Vol. 9, No. 9, 810-818. The Am. Phytopath. Soc.
- 3199 Landry, L.G., A.E. Stapleton, J. Lim, J.B. Hays, V. Walbot, & R.L. Last. 1997. An *Arabidopsis* photolyase mutant is hypersensitive to ultraviolet-B radiation. Proc. Natl. Acad. Sci. Vol. 94. 328-332.
- 3200 Zhao, J. & R.L. Last. 1996. Coordinate Regulation of the Tryptophan Biosynthetic Pathway and Indolic Phytoalexin Accumulation in *Arabidopsis*. The Plant Cell. 8: 2235-2244.
- 3201 Rose, A.B., J. Li, & R.L. Last. 1997. An Allelic Series of Blue Fluorescent *trp1* Mutants of *Arabidopsis thaliana*. Gen. Soc. of Am.
- 3202 Finnerty, C.M, & R.R. Granados. 1997. The Plasma Protein Scolexin from *Manduca sexta* is Induced by Baculovirus Infection and Other Immune Challenges. Insect Biochem. Molec. Biol. 27,1: 1-7.
- 3203 Hughes, P.R., H.A. Wood, J.P. Breen, S.F. Simpson, A.J. Duggan & J.A. Dybas. 1997. Enhanced bioactivity of recombinant baculoviruses expressing insect-specific spider toxins in lepidopteran crop pests. J. of Inv. Path. 69: 112-118.
- 3204 Huang, X.P. & J.A.A. Renwick. 1997. Feeding deterrents and sensitivity suppressors for *Pieris rapae* larvae in wheat germ diet. J. of Chem. Ec. 23,1: 51-70.
- 3205 St. Leger, R. & L. Joshi. 1997. The application of molecular techniques to insect pathology with emphasis on entomopathogenic fungi. Chapter VIII-3. Manual of Techniques in Insect Pathology. 367-394.
- 3206 Chen, X., C.L. Simpson, K.L. Kindle, & D.B. Stern. 1997. A Dominant Mutation in the *Chlamydomonas reinhardtii* Nuclear Gene SIM30 Suppresses Translational Defects Caused by Initiation Codon Mutations in Chloroplast Genes. Gen. Soc. of Amer. 145: 935-943
- 3207 Huang, X.P., T.R. Davis, P. Hughes & H.A. Wood. 1997. Potential Replication of Recombinant Baculoviruses in Nontarget Insect Species: Reporter Gene Products as Indicators of Infection. J. of Invert. Path. 69, 234-245.
- 3208 Garrity, D.B., M.J. Chang & G.W. Blissard. 1997. Late promoter selection in the baculovirus *gp64 envelope fusion protein* gene. Virology 231, 167-181.
- 3209 Levy. H., K.L. Kindle, D.B. Stern. 1997. A nuclear mutation that affects the 3' processing of several mRNA's in *chlamydomonas* chloroplasts. The Plant Cell 9: 825-836.
- 3210 Wang, P. & R.R. Granados. 1997. Molecular Cloning and Sequencing of a Novel Invertebrate Intestinal Mucin cDNA. J. of Biological Chemistry. 272:26 16663-16669.
- 3211 Wang, P. & R.R. Granados. 1997. An intestinal mucin is the target substrate for a baculovirus enhancin. Proc. Natl. Acad. Sci. 94: 6977-6982

- 3212 Clendennen, S.K., P.B. Kipp & G.D. May. 1997. The Role of Ethylene in Banana Fruit Ripening. *Biol. & Biotechnology of the Plant Hormone Ethylene*. 141-148
- 3213 St. Leger, R.J., L. Joshi and D.W. Roberts. 1997. Adaption of proteases and carbohydrates of saprophytic, phytopathogenic and entomopathogenic fungi to the requirements of their ecological niches. *Microbiology*. 1983-1992.
- 3214 Carpi, A. & S.E. Lindberg. 1997. Sunlight-Mediated Emission of Elemental Mercury from Soil Amended with Municipal Sewage Sludge. *Environ. Sci. Tech.* 2085-2091.
- 3215 May, G.D., H.S. Mason, and P.C. Lyons. 1996. Application of Transgenic Plants as Production Systems for Pharmaceuticals. *Am. Chem Soc. Sym. Series Chapter 13*: 194-204.
- 3216 Topa, M.A. & C.L. Sisak. 1997. Characterization of phosphorus uptake in slow- and fast-growing southern pine seedlings grown in solution culture. *Plant & Soil*. 190: 317-329.
- 3217 Laurence, J.A., R.G. Amundson, R.J. Kohut & D.A. Weinstein. 1997. Growth and water use of red spruce (*Picea Rubens* Sarg.) Exposed to ozone and simulated acidic precipitation for four growing seasons. *Forest Science* 43:3 355-361.
- 3218 Carpi, A. 1997. Mercury from combustion sources: a review of the chemical species emitted and their transport in the atmosphere. *Water, Air & Soil Poll.* 98: 241-254.
- 3219 Larsen, P.B., L.V. Kochian & S.H. Howell. 1997. Al Inhibits both shoot development and root growth in als3, an Al-sensitive arabidopsis mutant. *Plant Physiol.* 114: 1207-1214.
- 3220 Retzlaff, W.A., D.A. Weinstein, J.A. Laurence & B. Gollands. Simulating the growth of a 160-year-old sugar maple (*Acer saccharum*) tree with without ozone exposure using the TREGRO model. *Can. J. For. Res.* 27: 783-789.
- 3221 Stern, D.B., D.C. Higgs & J. Yang. 1997. Transcription and translation in chloroplasts. *Trends in Plant Science*. 308-315.
- 3222 Constable, J.V.H., W.A. Retzlaff. 1997. Simulating the response of mature yellow poplar and loblolly pine trees to shifts in peak ozone periods during the growing season using the TREGRO model. *Tree Physiology*. 17: 627-635.
- 3223 Chang, M.J. & G.W. Blissard. 1997. Baculovirus *gp64* Gene Expression: Negative Regulation by a Minicistron. *J. of Virology*. 7448-7460.
- 3224 Mencuccini, M. & J. Comstock. 1997. Vulnerability to cavitation in populations of two desert species, *Hymenoclea salsola* and *Ambrosia dumosa*, from different climatic regions. *J. of Exp. Botany*. 48:311 1323-1334.
- 3225 Hirsch, A.M. & T.A. LaRue. 1997. Is the legume nodule a modified root or stem or an organ *sui generis*? *Critical Reviews in Plant Science*. 16(4): 361-392.

- 3226 Markwei, C.M. & T.A. LaRue. 1997. Phenotypic characterization of *sym 21*, a gene conditioning shoot-controlled inhibition of nodulation in *Pisum sativum* cv. Sparkle. *Physiologia Plantarum*. 100: 927-932.
- 3227 Arntzen, C.J. and H. S. Mason. 1997. Oral vaccine production in the edible tissues of transgenic plants. *New Gen. Vaccines*. 263-277.
- 3228 Wood, H.A. & P.R. Hughes. 1997. Recombinant viral insecticides: Delivery of environmentally safe and cost-effective products. *Entomophaga* 41 361-373.
- 3229 Clendennen, S.K., & G.D. May. 1997. Differential Gene Expression in Ripening Banana Fruit¹. *Plant Physiol*. 115: 463-469.
- 3230 A.G.F.S. Caoile & D.B. Stern. 1997. A conserved core element is functionally important for maize mitochondrial promoter activity *in vitro*. *Nucleic Acids Resch*. Vol. 25, #20, 4055-4060.
- 3231 Joshi, L., R.J. St. Leger & D.W. Roberts. 1997. Isolation of a cDNA encoding a novel subtilisin-like protease (Pr1B) from the entomopathogenic fungus, *Metarhizium anisopliae* using differential display-RT-PCR. *GENE* 197, 1-8.
- 3232 Slack, J.M. & G.W. Blissard. 1997. Identification of two independent transcriptional activation domains of the *autographa californica* multicapsid nuclear polyhedrosis virus IE1 protein. *J. of Virology*. Vol. 71 #12: 9579-9587.
- 3233 Conklin, P.L., J.E. Pallanca, R.L. Last & N. Smirnov. 1997. L- Ascorbic acid metabolism in the ascorbate-deficient arabidopsis Mutant *vtc1*¹. *Plant Physiol*. 115: 1277-1285.
- 3234 Arntzen, C.J., & R.A. Dixon. 1997. Transgenic plant technology is entering the era of metabolic engineering. *Trends in Biotechnology*. Vol. 15 441-444.
- 3235 Magnus, V., J.S. Ozga, D.M. Reinecke, G.L. Pierson, T.A. Larue, J.D. Cohen & M.L. Brenner. 1997. 4-Chloroindole-3-acetic and indole-3-acetic acids in *Pisum sativum*. *Phytochemistry*. Vol. 46 #4: 675-681.
- 3236 Wang, P., D.A. Hammer & R.R. Granados. 1997. Binding and fusion of *Autographa californica* nucleopolyhedrovirus to cultured insect cells. *J. of Gen. Vir.* 78: 3081-3089.
- 3237 Carpi, A., S.E. Lindberg, E.M. Prestbo & N.S. Bloom. 1997. Methyl mercury contamination and emission to the atmosphere from soil amended with municipal sewage sludge. *J. of Env. Qual.* 1650-1655.
- 3238 Hughes, P.R., J.A. Renwick & K.D. Lopez. 1997. New oviposition stimulants for the diamondback moth in cabbage. *Entomologia Experimentalis et Applicata*. 85: 281-283.
- 3239 McKenna, K.A., H. Hong, E. vanNunen & R.G. Granados. 1998. Establishment of New *Trichoplusia ni* Cell Lines in Serum-Free Medium for Baculovirus and Recombinant Protein Production. *J. Invert. Path.* 71: 82-90.

- 3240 Clendennen, S.K, R. Lopez-Gomez, M. Gomez-Lim, C.J. Arntzen & G.D. May. 1998. The abundant 31-Kilodalton banana pulp protein is homologous to class-III acidic chitinases. *Phytochemistry*, Vol. 47 613-619.
- 3241 Kulakosky, P.C., M.L. Shuler & H.A. Wood. 1998. N-Glycosylation of a baculovirus-expressed recombinant glycoprotein in three insect cell lines. *In Vitro Cell. Dev. Biol.-Animal*. 34: 101-108
- 3242 Drager, R.G., J. Girard-Bascou, Y. Choquet, K.L. Kindle & D.B. Stern. 1998. *In vivo* evidence for 5' 3' exoribonuclease degradation of an unstable chloroplast mRNA. *The Plant Journal*. 13(1) 85-96.
- 3243 Zhao, J., C.C. Williams & R.L. Last. 1998. Induction of Arabidopsis Tryptophan Pathway Enzymes and Camalexin by Amino Acid Starvation, Oxidative Stress, and an Abiotic Elicitor. *The Plant Cell*. Vol 10, 359-370.
- 3244 Arntzen, C.J. 1997. High-Tech Herbal Medicine: Plant-based vaccines. *Nature Biotechnology*. 15(3) 221-222.
- 3245 Haribal, M. & J.A.A. Renwick. 1998. Identification and distribution of oviposition stimulants for monarch butterflies in hosts and nonhosts. *J. of Chem. Ec.* Vol 24, No. 5 891-904.
- 3246 Mason, H.S., C.O. Tacket, L.J. Richter & C.J. Arntzen. 1998. Subunit vaccines produced and delivered in transgenic plants as "edible vaccines." *Res. Immunol.* Vol 149, 71-74.
- 3247 Carpi, A. & S.E. Lindberg. 1998. Application of a teflon dynamic flux chamber for quantifying soil mercury flux: tests and results over background soil. *Atmospheric Envmt.* Vol. 32, No. 5, 873-882.
- 3248 Larsen, P.B, J. Degenhardt, C.Y. Tai, L.M. Stenzler, S.H. Howell & L.V. Kochian. 1998. Aluminum-resistant Arabidopsis mutants that exhibit altered patterns of aluminum accumulation and organic acid release from roots¹. *Plant Physiol.* 117: 9-18.
- 3249 J. Degenhardt, P.B. Larsen, S.H. Howell & L.V. Kochian. 1998. Aluminum resistance in the Arabidopsis mutant *alr-104* is caused by an aluminum-induced increase in Rhizosphere pH¹. *Plant Physiol.* 117: 19-27.
- 3250 Haribal, M. & J.A.A. Renwick. 1998. Isovitexin 6''-0-β-D-Glucopyranoside: A feeding deterrent to *Pieris napi oleracea* from *Alliaria petiolata*. *Phytochemistry* Vol 47, No. 7, 1237-1240.
- 3251 Wang, P. & R. R. Granados. 1998. Observations on the Presence of the Peritrophic Membrane in Larval *Trichoplusia ni* and Its Role in Limiting Baculovirus Infection. *Journal of Invertebrate Pathology* Vol. 73, 57-62.
- 3252 Kulakosky, P., Hughes, P.R. & Wood, H.A. 1998. N-Linked glycosylation of a baculovirus-expressed recombinant glycoprotein in insect larvae and tissue culture cells. *Glycobiology* vol 8, no.7, pp. 741-745.

- 3253 Drapier D., H. Suzuki, H. Levy, B. Rimbault, K.L. Kindle, D.B. Stern, & F.A. Wollman. 1998. The chloroplast *atpA* gene cluster in *Chlamydomonas reinhardtii*¹. *Plant Physiol.* 117: 629-641.
- 3254 Woodbury, P.B., J.E. Smith, D.A. Weinstein, J.A. Laurence. 1998. Assessing potential climate change effects on loblolly pine growth: A probabilistic regional modeling approach. *Forest Ecology and Management.* 107: 99-116.
- 3255 Mason H.S., T.A. Haq, J.D. Clements & C.J. Arntzen. 1998. Edible vaccine protects mice against *Escherichia coli* heat-labile enterotoxin (LT): potatoes expressing a synthetic LT-B gene. *Vaccine.* Vol 16, No. 13, 1336-1343.
- 3256 Tacket, C.O., H.S. Mason, G. Losonsky, J.D. Clements, M.M. Levine, C.J. Arntzen. 1998. Immunogenicity in humans of a recombinant bacterial antigen delivered in a transgenic potato. *Nature Medicine.* Vol. 4 #5, 607-609.
- 3257 Haribal, M. & J.A.A. Renwick. 1998. Differential postflight oviposition behavior of Monarch Butterflies on *Asclepias* species. *J. of Insect Behavior.* Vol. 11, No. 4, 507-538.
- 3258 Arntzen, C.J. 1998. Pharmaceutical foodstuffs--Oral immunization with transgenic plants. *Nature Medicine Vaccine Supplement.* Vol. 4 #5 (May 1998) 502-503.
- 3259 Kim, B.C., D.J. Tennessen, R.L. Last. 1998. UV-B-induced photomorphogenesis in *Arabidopsis thaliana*. *The Plant Journal.* Vol. 15 #5, 667-674.
- 3260 Kliebenstein, D.J., R.A. Monde & R.L. Last. 1998. Superoxide dismutase in arabidopsis: an eclectic enzyme family with disparate regulation and protein localization. *Plant Physiol.* 118: 637-650.
- 3261 Conklin, P.L. 1998. Vitamin C: A new pathway for an old antioxidant. *Trends in Plant Science.* Vol 3 #9, 329-330.
- 3262 Ayling, S.M., M.A. Topa. 1998. Phosphorous compartmentation in *Pinus serotina* Michx. (pond pine); observations from *in vivo* nuclear magnetic resonance spectroscopy. *Plant, Cell and Environment.* Vol. 21, 723-730.
- 3263 Mor, T.S., M.A. Gomez-Lim, & K.E. Palmer. 1998. Perspective: edible vaccines – a concept coming of age. *Trends in Microbiology.* Vol. 6 #11, 449-453.
- 3264 Kuehny, J.S., & M.A. Topa. 1998. Diurnal changes in allocation and partitioning of recently Assimilated carbon in loblolly pine seedlings. *Physiologia Plantarum.* Vol. 104, 317-328.
- 3265 Comstock, J., & M. Mencuccini. 1998. Control of stomatal conductance by leaf water potential in *Hymenoclea salsola* (T. & G.), a desert subshrub. *Plant, Cell, and Environment.* 21(10): 1029-1038.
- 3266 Weinstein, D.A., L.J. Samuelson, & M.A. Arthur. 1998. Comparison of the response of the red oak (*Quercus rubra*) seedlings and mature trees to ozone exposure using simulation modeling. *Env. Poll.* Vol. 102, 307-320.

- 3267 Haribal, M., J.A. Renwick, & A. Attygalle. 1999. A new sinapoyl of isovitexin 6''-O-_-D-Glucopyranoside from *Alliaria petiolata*. *Jnl. Of Nat. Prod.* Vol. 62(1), 179-180.
- 3268 Lupold, D.S., A.G.F.S. Caoile, & D.B. Stern. 1999. The maize mitochondrial *cox2* gene has five promoters in two genomic regions, including a complex promoter consisting of seven overlapping units. *Jnl. Of Bio. Chem.* Vol. 274(6), 3897-3903.
- 3269 Peng, J., J. Zhong, & R.R. Granados. 1999. A baculovirus enhancin alters the permeability of a mucosal midgut preitrophic matrix from lepidopteran larvae. *Jnl. Of Insect Physiology.* Vol. 45, 159-166.
- 3270 Oomens, A. G. P., & G. W. Blissard. 1999. Requirement for GP64 to drive efficient budding of *Autographa californica* multicapsid nucleopolyhedrovirus. *Virology.* Vol. 254, 297-314.
- 3271 Laurence, J.A. 1998. Ecological effects of ozone: integrating exposure and response with ecosystem dynamics and function. *Env. Sci. & Pol.* Vol. 1, 179-184.
- 3272 Woodbury, P.B., M.A. Arthur, G. Rubin, L.H. Weinstein & D.C. McCune. 1999. Gypsum application reduces selenium uptake by vegetation on a coal ash landfill. *Water, Air & Soil Pollution.* 110: 421-432.
- 3273 Conklin, P.L., S.R. Norris, G.L. Wheeler, E.H. Williams, N. Smirnoff, & R.L. Last. 1999. Genetic evidence for the role of GDP-mannose in plant ascorbic acid (vitamin C) biosynthesis. *Prod. Natl. Acad. Sci.* 96: 4198-4203.
- 3274 Back, J., D.W. Vanderklein, & M.A. Topa. 1999. Effects of elevated ozone on CO₂ uptake and leaf structure in sugar maple under two light environments. *Plant, Cell, & Env.* 22: 137-147.
- 3275 Woodbury, P.B., G. Rubin, D.C. McCune, L.H. Weinstein, & E.F. Neuhauser. 1999. Assessing trace element uptake by vegetation on a coal fly ash landfill. *Water, Air, And Soil Pollution*, 111: 271-286.
- 3276 Yun, S. & J.A. Laurence. 1999. The response of clones of *Populus tremuloides* differing in sensitivity to ozone in the field. *New Physiol*, 141: 411-421.
- 3277 Chang, C. C., J. Sheen, M. Bligny, Y. Niwa, S. Lerbs-Mache, & D. B. Stern. 1999. Functional analysis of two maize cDNAs encoding T7-like RNA polymerases. *The Plant Cell*, 11: 911-926.
- 3278 Hefferon, K.L., A.G.P. Oomens, S.A. Monsma, C.M. Finnerty, and G.W. Blissard. 1999. Host cell receptor binding by baculovirus GP64 and kinetics of virion entry. *Virology*, Vol. 258: 455-468.
- 3279 Renwick, J.A.A. 1999. Phytochemical modification of taste: An insect model. In *Biologically active natural products: Agrochemicals*. Eds. H.G. Cutler and S.J. Cutler. CRC Press: New York, 221-229.

- 3280 Wang, P., R. Toung, and R. R. Granados. 1999. The establishment of new cell lines from *Pseudaletia unipuncta* with differential responses to baculovirus infection. *In Vitro Cell. Dev. Biol. – Animal*, 35: 333-338.
- 3281 Chang, M., J. Kuzio, and G.W. Blissard. 1999. Modulation of translational efficiency by contextual nucleotides flanking a baculovirus initiator AUG codon. *Vir.*, 259: 369-383.
- 3282 Chang, C. and D.B. Stern. 1999. DNA-binding factors assemble in a sequence-specific manner on the maize mitochondrial *atpA* promoter. *Curr. Genet.* 35: 506-511.
- 3283 Yun, S.C., J.A. Laurence. 1999. The response of sensitive and tolerant clones of *Populus tremuloides* to dynamic ozone exposure under controlled environmental conditions. *New Phytol.* 143: 305-313.
- 3284 Lupold, S., A.G.F.S. Caoile, and D.B. Stern. 1999. Polyadenylation occurs at multiple sites in maize mitochondrial *cox2* mRNA and is independent of editing status. *The Plant Cell.* 11: 1565-1577.
- 3285 Kipp, P., J.M. Van Eck, P.R. Beetham, and G.D. May. 1999. Gene targeting in plants via site-directed mutagenesis. *Meth. in Mol. Biol.* 133: 213-221.
- 3286 Renwick, J.A.A., and K. Lopez. 1999. Experience-based food consumption by larvae of *Pieris rapae*: Addiction to glucosinolates? *Entomologia Experimentalis et Applicata.* 91: 51-58.
- 3287 Lupold, S., A.G.F.S. Caoile, and D.B. Stern. 1999. Genomic context influences the activity of maize mitochondrial *cox2* promoters. *Proc. Natl. Acad. Sci.* 96: 11670-11675.
- 3288 Kliebenstein, D.J., F.A. Dietrich, A.C. Martin, R.L. Last, and J.L. Dangl. 1999. LSD1 regulates Salicylic Acid induction of copper zinc superoxide dismutase in *Arabidopsis thaliana*. *Am. Phytopath. Soc.* 12: 1022-1026.
- 3289 Martin, G.B. 1999. Functional analysis of plant disease resistance genes and their downstream effectors. *Current Opinion in Plant Biology.* 2: 273-279.
- 3290 Jia, Y., and G.B. Martin. 1999. Rapid transcript accumulation of pathogenesis-related genes during incompatible interaction in bacterial speck disease-resistant tomato plants. *Pl. Mol. Biol.* 40: 455-465.
- 3291 Higgs, D.C., R.S. Shapiro, K.L. Kindle, and D.B. Stern. 1999. Small cis-Acting Sequences that specify secondary structures in a Chloroplast mRNA are essential for RNA stability and Translation. *Vol. 19*, 8479-8491.
- 3292 Levy, H. K.L. Kindle and D.B. Stern. 1999. Target and specificity of a nuclear gene product that participates in mRNA 3'-End formation in *Chlamydomonas* chloroplasts. *Vol. 274*, 35955-35962.
- 3293 Comstock, J.P. 1999. Why Canny's theory doesn't hold water. *Am. J. of Bot.* 86(8): 1077-1081.
- 3294 Wang, P., and R.R. Granados. 1999. Calcofluor disrupts the midgut defense system in insects. *Insect Biochem. and Mol. Biol.* 30: 135-143.

- 3295 Conklin, P.L., S.A. Saracco, J. Olive, F. Wollman, and D.B. Stern. 2000. Post-transcriptional defects in tobacco chloroplast mutants lacking the cytochrome b6/f complex. *The Pl. J.* 21: 61-72.
- 3296 Monde, R., F. Zito, J. Olive, F. Wollman, and D.B. Stern. 2000. Post-transcriptional defects in tobacco chloroplast mutants lacking the cytochrome b6/f complex. *The Pl. J.* 21: 61-72.
- 3297 Komine, Y. L. Kwong, M.C. Anguera, G. Schuster, and D.B. Stern. 2000. Polyadenylation of three classes of chloroplast RNA in *Chlamydomonas reinhardtii*. *RNA Soc.* 6: 598-607.
- 3298 Callaway, A., Z. Huang, and S.H. Howell. 2000. Host suppressors in *Arabidopsis thaliana* of mutations in the movement protein of Cauliflower Mosaic Virus. 512-519.
- 3299 Gu, Y.Q., C. Yang, V.K. Thara, J. Zhou, and G.B. Martin. 2000. Pti4 is induced by ethylene and salicylic acid, and its product is phosphorylated by the Pto kinase. *The Pl. Cell.* 12:771-785.
- 3300 Sessa, G., M. D'Ascenzo, and G.B. Martin. 2000. Thr38 and Ser198 are Pto autophosphorylation sites required for the AvrPto-Pto-mediation hypersensitive response. *The EMBO J.* 19:2257-2269.
- 3301 Huang, Z., Y. Han, and S.H. Howell. 2000. Formation of surface tubules and fluorescent foci in *Arabidopsis thaliana* protoplasts expressing a fusion between the green fluorescent protein and Cauliflower Mosaic Virus movement protein. *Virology.* 271:58-64.
- 3302 Comstock, J.P. 2000. Correction of thermocouple psychrometer readings for the interaction of temperature and actual water potential. *Crop Sciences.* 40:709-712.
- 3303 Sessa, G., M. D'Ascenzo, and G.B. Martin. 2000. The major site of the Pti1 kinase phosphorylated by the Pto kinase is located in the activations domain and is required for Pto-Pti1 physical interaction. *Eur. J. Biochem.* 267:171-178.
- 3304 Monde, R.A., J.C. Greene, and D.B. Stern. 2000. Disruption of the *petB-petD* intergenic region in tobacco chloroplasts affects *petD* RNA accumulation and translation. *Mol. Gen. Genet.* 263:610-618.
- 3305 Leopold, A.C., and M.J. Jaffe. Many modes of movement. *Science Report.* 288:2131-2132.
- 3306 Walmsley, A.M., and C.J. Arntzen. 2000. Plants for delivery of edible vaccines. 11:126-129.
- 3307 Martin, G.B. 1998. Gene discovery for crop improvement. *Cur. Op. In Biotech.* 9:220-226.
- 3308 Tacket, C.O., H.S. Mason, G. Losonsky, M.K. Estes, M.M. Levine, and C.J. Arntzen. 2000. Human immune responses to a novel Norwalk virus vaccine delivered in transgenic potatoes. *The J. of Infect. Dis.* 182:302-305.
- 3309 Bogdanove, A.J., and G.B. Martin. 2000. AvrPto-dependent Pto-interacting proteins and AvrPto-interacting proteins in tomato. *PNAS.* 97:8836-8840.
- 3310 Laurence, J.A., S.V. Ollinger, and P.B. Woodbury. 2000. Regional impacts of ozone on forest productivity. *Response of Northern U.S. Forests to Env. Change.* 139: 425-453.

- 3311 van Beek, N., P.R. Hughes and H.A. Wood. 2000. Effects of incubation temperature on the dose-survival time relationship of *Trichoplusia ni* larvae infected with *Autographa californica* nucleopolyhedrovirus. *J. of Inv. Path.* 76:185-190.
- 3312 Comstock, J.P. 2000. Variation in hydraulic architecture and gas-exchange in two desert subshrubs, *Hymedoclea salsola* (T.& G.) and *Ambrosia dumosa* (Payne). *Oecologia.* 125:1-10.
- 3313 Joshi, L., T.R. Davis, T.S. Mattu, P.M. Rudd, R.A. Dwek, M.L. Shuler, and H.A. Wood. 2000. Influence of baculovirus-host cell interactions on complex N-linked glycosylation of a recombinant human protein. *Biotech. Prog.* 16:650-656.
- 3314 Comstock, J.P., and J.S. Sperry. 2000. Theoretical considerations of optimal conduit length for water transport in vascular plants. *New Phytol.* 148:195-218.
- 3315 Number seems to have been skipped
- 3316 Del Campo, M., and J.A.A. Renwick. 2000. Induction of host specificity in larvae of *Manduca sexta*: Chemical dependence controlling host recognition and developmental rate. *Chemecology.* Vol 10:115-121.
- 3317 Sessa, G., and G.B. Martin. 2000. Signal recognition and transduction mediated by the tomato Pto kinase: a paradigm of innate immunity in plants. *Microbes and Infection.* 1591-1597.
- 3318 Mockaitis, K., and S.H. Howell. 2000. Auxin induces mitogenic activated protein kinase (MAPK) activation in roots of *Arabidopsis* seedlings. *The Pl. J.* 24: 785-796.
- 3319 Granados, R.R., Y. Fu, B. Corsaro, and P.R. Hughes. 2001. Enhancement of *Bacillus thuringiensis* toxicity to Lepidopterous species with the Enhancin from *Trichoplusia ni* granulovirus. *Biol. Cont.* 20:153-159.
- 3320 Monde, R., J.C. Greene, and D.B. Stern. 2000. The sequence and secondary structure of the 3'UTR affect 3'-end maturation. RNA accumulation and translation in tobacco chloroplast. *Pl. Mol. Biol.* 44:529-542.
- 3321 Richter, L.J., Y. Thanavala, C.J. Arntzen, and H.S. Mason. 2000. Production of Hepatitis B surface antigen in transgenic plants for oral immunization. *Nat. Biotech.* 1167-1171.
- 3322 Richter, L.J., and P.B. Kipp. 1999. Transgenic plants as edible vaccines. *Pl. Biol.* 240:159-176.
- 3323 Thara, V.K., X. Tang, Y.Q. Gu, G.B. Martin, and J.M. Zhou. 1999. *Pseudomonas syringae* pv tomato induces the expression of tomato EREBP-like genes in Pti4 and Pti5 independent of ethylene, salicylate and jasmonate. *The Pl. J.* 20:475-483.
- 3324 Yang, W.Q., and B.L. Goulart. 2000. Mycorrhizal infection reduces short-term aluminum uptake and increases root cation exchange capacity of highbush blueberry plants. *HortScience.* 35:1083-1086.
- 3325 Cohn, J., G. Sessa, and G.B. Martin. 2001. Innate immunity in plants. 13:55-62.

- 3326 Weinstein, D.A., B. Gollands, W.A. and Retzlaff. 2000. The effects of ozone on a lower slope forest of the Great Smoky Mountain National Park: Simulations linking an individual tree model to a stand model. *For. Sc.* 47: 29-42.
- 3327 Riely, B., and G.B. Martin. 2001. Ancient origin of pathogen recognition specificity conferred by the tomato disease resistance gene *Pto*. *PNAS.* 98: 2059-2064.
- 3328 Mangor, J.T., S.A. Monsma, M.C. Johnson, and G.W. Blissard. 2001. A GP64-Null baculovirus pseudotyped with vesicular stomatitis virus G protein. *J. of Vir. Vol 75:* 2544-2556.
- 3329 Wang, P., J.T. Conrad, J. Shahabuddin. 2001. Localization of midgut-specific protein antigens from *Aedes aegypti* (Diptera: Culicidae) using monoclonal antibodies. *J. Med. Entomol.* 38(2): 223-230.
- 3330 Ganapathi, T.R., N.S. Higgs, P.J. Balint-Kurti, C.J. Arntzen, G.D. May, and J.M. Van Eck. 2001. Agrobacterium-mediated transformation of embryogenic cell suspensions of the banana cultivar Rasthali (AAB). *Pl. Cell Reports.* 20: 157-162.
- 3331 Haribal, M., Z. Yang, A.B. Attygalle, J.A.A. Renwick and J. Meinwald. 2001. A Cyanoallyl glucoside from *Alliaria petiolata*, as a feeding deterrent for larvae of *Pieris napi oleracia*. *J. of Nat. Prod.* 64: 440-443.
- 3332 Giovannoni, J. 2001. Molecular biology of fruit maturation and ripening. *Pl. Mol. Biol.* 52:725-749.
- 3333 Leopold, A.C., R. Andrus, A. Finkeldey, D. Knowles. 2001. Attempting restoration of wet tropical forests in Costa Rica. *For. Ecol. & Mngmnt.* 142: 243-249.
- 3334 Conklin, P.L. 2001. Recent advances in the role and biosynthesis of ascorbic acid in plants. *Pl., Cell and Environ.* 24: 383-394.
- 3335 Cahoon, A.B., and D.B. Stern. 2001. Plastic trancription: a *menage a` trois*? *TRENDS in Pl. Sc.* 6:45-46.
- 3336 Mysore, K.S., R.P. Tuori, and G.B. Martin. 2001. *Arabidopsis* genome sequence as a tool for functional genomics in tomato. *Genome Biol.* 2: 1003.1-1003.4.
- 3337 Renwick, J.A.A. 2001. Variable diets and changing taste in plant-insect relationships. *J. of Chem. Ecol.* 6: 1063-1076.
- 3338 Monde, R., G. Schuster, and D.B. Stern. 2000. Processing and degradation of chloroplast mRNA. *Biochimie.* 82: 573-582.
- 3339 Huang, Z., Y. Han, and S.H. Howell. 2001. Effects of movement protein mutations on the formation of tubules in plant protoplasts expressing a fusion between the green fluorescent protein and Cauliflower mosaic virus movement protein. *The Am. Phytopath. Soc.* 14: 1026-1031.
- 3340 Lung, O., and M.F. Wolfner. 2001. Identification and characterization of the major *Drosophila melanogaster* mating plug protein. *Insect Biochem. & Mol. Biol.* 31: 543-551.

- 3341 Staples, R.C. 2000. Research on the rust fungi during the twentieth century. *Ann. Rev. Phytopath.* 38: 49-69.
- 3342 Barry, C.S., E.A. Fox, H-C. Yen, S. Lee, T-J. Ying, D. Grierson, and J. Giovannoni. 2001. Analysis of the ethylene response in the epinastic mutant of tomato. *Pl. Physiol.* 127: 58-66.
- 3343 Esposito, D., A.J. Hicks, and D.B. Stern. 2001. A role for initiation codon context in chloroplast translation. *The Pl. Cell.* 13: 2373-2384.
- 3344 Comstock, J.P. 2001. Steady-state isotopic fractionation in branched pathways using plant uptake of NO₃ as an example. *Planta.* 214: 220-234.
- 3345 Lin, G., and G.W. Blissard. 2002. Analysis of an *Autographa californica* nucleopolyhedrovirus lef-11 knockout: LEF-11 is essential for viral DNA replication. *J. of Vir.* Vol 76: 2770-2779.
- 3346 Lin, G., G. Li, R.R. Granados, and G.W. Blissard. 2001. Stable cell lines expressing baculovirus P35: Resistance to apoptosis, and nutrient stress and increased glycoprotein secretion. *In Vitro.* Vol. 37: 293-302.
- 3347 Slack, J.M., and G.W. Blissard. 2001. Measurement of membrane fusion activity from viral membrane fusion proteins based on a fusion-dependent promoter induction system in insect cells. *J. of Gen. Vir.* 82: 2419-2529.
- 3348 Yang, W.Q., R. Murthy, P. King and M.A. Topa. 2002. Diurnal changes in gas exchange and carbon partitioning in needles of fast- and slow-growing families of loblolly pine (*Pinus taeda*.) *Tree Physiol.* 22, 489-498.
- 3349 Vrebalov, J., D. Ruezinsky, V. Padmanabhan, R. White, D. Medrano, R. Drake, W. Schuch, J. Giovannoni. 2002. A MADS-Box gene necessary for fruit ripening at the tomato ripening-inhibitor (*Rin*) Locus. *AAAS.* Vol. 296: 343-3460.
- 3350 M.J. Jaffe, A.C. Leopold, and R.C. Staples. 2002. Thigmo responses in plants and fungi. *Am. J. of Bot.* 89(3): 375-382.
- 3351 Kim, Y.J., N-C. Lin, and G.B. Martin. 2002. Two distinct *Pseudomonas* effector proteins interact with the Pto kinase and activate plant immunity. *Cell.* Vol. 109, 589-598.
- 3352 Woodbury, P.B., R.M. Beloin, D.P. Swaney, B.E. Gollands, and D.A. Weinstein. 2002. Using the *ECLPSS* software environment to build a spatially explicit component-based model of ozone effects on forest ecosystems. *Ecol. Modelling* 150. 211-238.
- 3353 Jackson, R.W., J.W. Mansfield, H. Ammounh, L.C. Dutton, B. Wharton, A. Ortiz-Barredo, D.L. Arnold, G. Tsiamis, A. Sesma, D. Butcher, J. Boch, Y.J. Kim, G.B. Martin, S. Tegli, J. Murillo, and A. Vivian. 2002. Location and activity of members of a family of *virPphA* homologues in pathovars of *Pseudomonas syringae* and *P. savastanoi*. *Mol. Pl. Path.* 3(4) 205-216.

- 3354 Fouts, D.E., R.B. Abramovitch, J. R. Alfano, A.M. Baldo, C.R. Buell, S. Cartinhour, A.K. Chatterjee, M. D'Ascenzo, M.L. Gwinn, S.G. Lazarowitz, N-C. Lin, G.B. Martin, A.H. Rehm, D.J. Schneider, K. van Dijk, X. Tang, and A. Collmer. 2002. Genomewide identification of *Pseudomonas syringae* pv. Tomato DC3000 promoters controlled by the HrpL alternative sigma factor. PNAS Vol. 99(4): 2275-2280.
- 3355 Xu, P., M.L. Narasimhan, T. Samson, M.A. Coca, G-H. Huh, J. Zhou, G.B. Martin, P.M. Hasegawa, and R.A. Bressan. 1998. A nitrilase-like protein interacts with GCC Box DNA-binding proteins involved in ethylene and defense responses. Pl. Physiol 118: 867-874.
- 3356 Y-Q. Gu, M.C. Wildermuth, S. Chakravarthy, Y-T. Loh, C. Yang, X. He, Y. Han, and G.B. Martin. 2002. Tomato transcription factors Pti4, Pti5, and Pti6 activate defense responses when expressed in *Arabidopsis*. The Pl. Cell. Vol 14, 817-831.