

MYCOTAXON

Vol. VII, No. 1, pp. 45-54

April-June 1978

A NEW STATUS FOR THE BROWN *PARMELIAE*

THEODORE L. ESSLINGER

Department of Botany
 North Dakota State University
 Fargo, North Dakota 58102

Generic concepts in lichens have been undergoing extremely rapid change recently, especially in large and ubiquitous families like the Parmeliaceae. In his work with the large and heterogeneous genus *Parmelia*, Hale (1974 a, b, c, d; 1976) has created eight new segregate genera just since 1974. Recently (Esslinger, 1977), I published a revision of the brown species of *Parmelia* in which three major infrageneric taxa, the subgenera *Allantoparmelia*, *Melanoparmelia*, and *Neofusca*, were recognized. At the time of the original research and writing of that paper, I wavered between treating the three taxa as independent genera or as subgenera, deciding finally to follow the more conservative path of recognition as subgenera. The time span between writing the paper and its final publication proved to be rather long, however, and well before it appeared in print, I was convinced that recognition at the level of genus would have been more natural and more indicative of the remote relationships between the three taxa involved. The descriptions and/or new combinations necessitated by recognition at the level of genus are presented below. The evidence supporting the recognition of three independent taxa are presented in my original paper and will not be repeated here.

The following key outlines the major distinctions between the three genera to be recognized. As with most genera, there is no single character that will distinguish between any two of the three. Rare exceptions to almost all character differences do occur, hence the relative complexity of the key.

-Lower surface erhizinate and the upper cortex HNO_3 -; foliose to subcrustose species characteristic of rock (or rarely soil) substrates in boreal or arctic-alpine areas..... *Allantoparmelia*

- Lower surface rhizinate or the upper cortex HNO_3 + blue-green or both
- Upper cortex HNO_3 + blue-green or rarely violet (in one North American species and one South African species); foliose to commonly subcrustose or subfruticose species characteristic of rock or soil substrates primarily in temperate areas.....
..... *Neofuscelia*
 - Upper cortex HNO_3 - (rarely HNO_3 + violet in two eurasian species); foliose species of diverse substrates (including rock), most common in north temperate to boreal or arctic-alpine areas.....
..... *Melanelia*

ALLANTOPARMELIA (Vain.) Essl., stat. nov.

Basionym: *Parmelia* subgenus *Allantoparmelia* Vain.,
Ark. Bot. 8(4): 32. 1909.

Type species: *Allantoparmelia alpicola* (Th. Fr.) Essl.

Allantoparmelia almquistii (Vain.) Essl., comb. nov.

Basionym: *Parmelia almquistii* Vain., Ark. Bot. 8(4):
32. 1909.

Allantoparmelia alpicola (Th. Fr.) Essl., comb. nov.

Basionym: *Parmelia alpicola* Th. Fr., Lichenes Arctoi:
57. 1860.

Allantoparmelia sibirica (Zahlbr.) Essl., comb. nov.

Basionym: *Parmelia sibirica* Zahlbr., Catalog. Lichen.
Univers. 6: 47. 1930. (as nom. nov. for *P. nigra*
Vain., Ark. Bot. 8(4): 31. 1909).

MELANELIA Essl., gen. nov.

Thallus foliosus, laxis vel modice adnatus, lobis 0.4-1.1 mm latis, brevibus et rotundatis vel elongatis, plus minusve planis. Superne vulgo sorediatus isidiatus vel pseudocyphellatus, HNO_3 non reagens vel raro HNO_3 + violaceus. Subtus modice vel sparse rhizinosus.

Type species: *Melanelia stygia* (L.) Essl.

Synonym: *Parmelia* subgenus *Melanoparmelia* (Hue) Essl.,
J. Hattori Bot. Lab. 42: 46. 1977.

subgenus *MELANELIA*

Melanelia disjuncta (Erichs.) Essl., comb. nov. Basionym:
Parmelia disjuncta Erichs., Ann. Mycol. 37: 78. 1939.
(as nom. nov. for *P. sorediata* var. *coralloidea* Lynge,
Lichens from Novaya Zemlya: 200. 1928).

Melanelia panniformis (Nyl.) Essl., comb. nov. Basionym:
Parmelia prolixa f. *panniformis* Nyl., Synop. Method.
Lichen.: 397. 1860.

- Melanelia predisjuncta* (Essl.) Essl., comb. nov. Basionym:
Parmelia predisjuncta Essl., J. Hattori Bot. Lab. 42:
50. 1977.
- Melanelia soresiosa* (Almb.) Essl., comb. nov. Basionym:
Parmelia soresiosa Almb. in Krok & Almquist, Svensk
Flora for Skolor 2, Kryptogamer, ed. 6: 134. 1947.
(as nom. nov. for *P. soresdiata* (Ach.) Th. Fr., Lichenes
Arctoi: 56. 1860. Basionym: *Parmelia stygia* β. *P.*
soresdiata Ach., Lichenogr. Univers.: 471. 1810).
- Melanelia stygia* (L.) Essl., comb. nov. Basionym: *Lichen*
stygius L., Spec. Pl. 2: 1143. 1753.
- Melanelia substygia* (Räs.) Essl., comb. nov. Basionym:
Parmelia substygia Räs., Lichenes Fenniae Exs. 51.
1935.
- subgenus *OLIVASCENTES* (Harm.) Essl., stat. nov. Basionym:
Parmelia sect. *Amphigymnia* A. *Olivascentes* Harm.,
Lichens de France 4: 571. 1909. Type species:
Melanelia acetabulum (Neck.) Essl.
- Melanelia acetabulum* (Neck.) Essl., comb. nov. Basionym:
Lichen acetabulum Neck., Delic. Gallo-Belgic. Silvestr.
2: 506. 1768.
- Melanelia koflerae* (Clauzade & Poelt) Essl., comb. nov.
Basionym: *Parmelia koflerae* Clauzade & Poelt, Nova
Hedwigia 3: 368. 1961.
- subgenus *VAINIOËLLAE* (Gyeln.) Essl., stat. nov. Basionym:
Parmelia subgenus *Euparmelia* sect. *Vainioëllae* Gyeln.,
Repert. Spec. Nov. Regni Veg. 30: 220. 1932. Type
species: *Melanelia glabra* (Schaer.) Essl.
- Melanelia albertana* (Ahti) Essl., comb. nov. Basionym:
Parmelia albertana Ahti, Bryologist 72: 236. 1969.
- Melanelia calva* (Essl.) Essl., comb. nov. Basionym: *Par-*
melia calva Essl., J. Hattori Bot. Lab. 42: 60. 1977.
- Melanelia elegantula* (Zahlbr.) Essl., comb. nov. Basionym:
Parmelia olivacea * *P. aspidota* var. *elegantula* Zahlbr.,
Verh. Vereins Natur- und Heilk. Pressburg 8: 39.
1894.
- Melanelia exasperata* (De Not.) Essl., comb. nov. Basionym:
Parmelia exasperata De Not., Giorn. Bot. Ital. 2: 193.
1847.
- Melanelia exasperatula* (Nyl.) Essl., comb. nov. Basionym:
Parmelia exasperatula Nyl., Flora 56: 299. 1873.
- Melanelia fuscsoresdiata* (Essl.) Essl., comb. nov. Basionym:
Parmelia fuscsoresdiata Essl., J. Hattori Bot. Lab. 42:
68. 1977.
- Melanelia glabratula* (Lamy) Essl., comb. nov. Basionym:

- Parmelia olivacea* α *corticola* a. *glabra* Schaer., Lichenum Helveticorum Spicilegium: 466. 1840.
- Melanelia glabratula* (Lamy) Essl., comb. nov. Basionym: *Parmelia fuliginosa* * *P. glabratula* Lamy, Bull. Soc. Bot. France 30: 353. 1883.
- Melanelia glabratuloides* (Essl.) Essl., comb. nov. Basionym: *Parmelia glabratuloides* Essl., J. Hattori Bot. Lab. 42: 72. 1977.
- Melanelia glabroides* (Essl.) Essl., comb. nov. Basionym: *Parmelia glabroides* Essl., J. Hattori Bot. Lab. 42: 72. 1977.
- Melanelia halei* (Ahti) Essl., comb. nov. Basionym: *Parmelia halei* Ahti, Acta Bot. Fenn. 70: 38. 1966.
- Melanelia huei* (Asah.) Essl., comb. nov. Basionym: *Parmelia huei* Asah., J. Jap. Bot. 26: 194. 1951.
- Melanelia infumata* (Nyl.) Essl., comb. nov. Basionym: *Parmelia infumata* Nyl., Flora 58: 359. 1875.
- Melanelia laciniatula* (Flag. ex Oliv.) Essl. comb. nov. Basionym: *Parmelia exasperatula* var. *laciniatula* Flag. ex Oliv., Rev. Bot. Bull. Mens. 12: 69. 1894.
- Melanelia multispora* (Schneid.) Essl., comb. nov. Basionym: *Parmelia multispora* Schneid., A Guide to the Study of Lichens: 154. 1898.
- Melanelia olivacea* (L.) Essl., comb. nov. Basionym: *Lichen olivaceus* L., Spec. Pl.: 1143. 1753.
- Melanelia olivaceoides* (Krog) Essl., comb. nov. Basionym: *Parmelia olivaceoides* Krog, Norsk Polarinst. Skr. 144: 109. 1968.
- Melanelia piliferella* (Essl.) Essl., comb. nov. Basionym: *Parmelia piliferella* Essl., J. Hattori Bot. Lab. 42: 83. 1977.
- Melanelia pseudoglabra* (Essl.) Essl., comb. nov. Basionym: *Parmelia pseudoglabra* Essl., J. Hattori Bot. Lab. 42: 84. 1977.
- Melanelia septentrionalis* (Lyngé) Essl., comb. nov. Basionym: *Parmelia olivacea* var. *septentrionalis* Lyngé, Bergens Mus. Årbok 1912(10): 4. 1912.
- Melanelia subargentifera* (Nyl.) Essl., comb. nov. Basionym: *Parmelia subargentifera* Nyl., Flora 58: 359. 1875.
- Melanelia subaurifera* (Nyl.) Essl., comb. nov. Basionym: *Parmelia subaurifera* Nyl., Flora 56: 22. 1873.
- Melanelia subelegantula* (Essl.) Essl., comb. nov. Basionym: *Parmelia subelegantula* Essl., J. Hattori Bot. Lab. 42: 89. 1977.
- Melanelia subglabra* (Ras.) Essl., comb. nov. Basionym: *Parmelia subaurifera* var. *subglabra* Ras., Ann. Bot. Soc. Zool.-Bot. Fenn. "Vanamo" 2: 19. 1932.

- Melanelia subolivacea* (Nyl.) Essl., comb. nov. Basionym:
Parmelia subolivacea Nyl. in Hasse, Bull. Torrey Bot.
Club 24: 445. 1897.
- Melanelia trabeculata* (Ahti) Essl., comb. nov. Basionym:
Parmelia trabeculata Ahti, Acta Bot. Fenn. 70: 54.
1966.
- Melanelia ushuaiensis* (Zahlbr.) Essl., comb. nov. Basio-
nym: *Parmelia ushuaiensis* Zahlbr., Kungl. Svenska
Vetenskapsakad. Handl. 57: 42. 1917.
- Melanelia villosella* (Essl.) Essl., comb. nov. Basionym:
Parmelia villosella Essl., J. Hattori Bot. Lab. 42:
95. 1977.
- Melanelia zopheroa* (Essl.) Essl., comb. nov. Basionym:
Parmelia zopheroa Essl., J. Hattori Bot. Lab. 42: 96.
1977.

NEOFUSCELIA Essl., gen. nov.

Thallus foliosus vel interdum subcrustosus vel sub-
fruticosus, laxus vel arctus adnatus, lobis 0.1-5 mm latis,
brevibus et rotundatis vel lineari-elongatis, plus minusve
planis vel convexis. Superne sorediis pseudocyphellisque
destitutus, vulgo isidiatus; persaepe HNO_3^+ aeruginosus vel
atrovirens, raro HNO_3^+ violaceus vel non reagans. Subtus
plerumque rhizinosus.

Type species: *Neofuscelia pulla* (Ach.) Essl.

Synonym: *Parmelia* subgenus *Neofusca* (Gyeln.) Essl.,
J. Hattori Bot. Lab. 42: 97. 1977.

subgenus *NEOFUSCELIA*

- Neofuscelia adpicta* (Zahlbr.) Essl., comb. nov. Basionym:
Parmelia adpicta Zahlbr., Akad. Wiss. Math.-Naturwiss.
Kl., Denkschr. 104: 351. 1941.
- Neofuscelia ahtii* (Essl.) Essl., comb. nov. Basionym: *Par-*
melia ahtii Essl., J. Hattori Bot. Lab. 42: 99.
1977.
- Neofuscelia applicata* (Stizenb.) Essl., comb. nov. Basio-
nym: *Parmelia prolixa* var. *applicata* Stizenb., Ber.
Thätigk. St. Gall. Naturwiss. Ges. 1887-88: 163.
1889.
- Neofuscelia attica* (Leuckert et al.) Essl., comb. nov.
Basionym: *Parmelia prolixa* var. *attica* Leuckert et
al. in *Vězda, Lich. Sel. Ess. 1069*. 1972.
- Neofuscelia atticoides* (Essl.) Essl., comb. nov. Basionym:
Parmelia atticoides Essl., J. Hattori Bot. Lab. 42:
101. 1977.
- Neofuscelia brattii* (Essl.) Essl., comb. nov. Basionym:
Parmelia brattii Essl. in C. F. Culb. & Essl., Bryolo-
gist 79: 42. 1976.

- Neofuscelia brunella* (Essl.) Essl., comb. nov. Basionym:
Parmelia brunella Essl., J. Hattori Bot. Lab. 42: 103.
1977.
- Neofuscelia cafferensis* (Essl.) Essl., comb. nov. Basionym:
Parmelia cafferensis Essl., J. Hattori Bot. Lab. 42:
104. 1977.
- Neofuscelia caliginosa* (Essl.) Essl., comb. nov. Basionym:
Parmelia caliginosa Essl., J. Hattori Bot. Lab. 42:
105. 1977.
- Neofuscelia conturbata* (Müll. Arg.) Essl., comb. nov. Basionym:
Parmelia conturbata Müll. Arg., Flora 71: 9.
1888.
- Neofuscelia crustulosa* (Essl.) Essl., comb. nov. Basionym:
Parmelia crustulosa Essl., J. Hattori Bot. Lab. 42.
106. 1977.
- Neofuscelia delisei* (Duby) Essl., comb. nov. Basionym:
Parmelia olivacea var. *delisei* Duby, Botan. Gall. 2:
602. 1830.
- Neofuscelia dregeana* (Hampe) Essl., comb. nov. Basionym:
Parmelia dregeana Hampe in Nyl., Syn. Method. Lichen.:
398. 1858-60.
- Neofuscelia ephoboides* (Zahlbr.) Essl., comb. nov. Basionym:
Parmelia ephoboides Zahlbr., Akad. Wiss. Wien.
Math.-Naturwiss. Kl., Denkschr. 104: 353. 1941.
- Neofuscelia erythrocardia* (Müll. Arg.) Essl., comb. nov.
Basionym: *Parmelia prolixa* var. *erythrocardia* Müll.
Arg., Flora 62: 290. 1879.
- Neofuscelia fissurina* (Zahlbr.) Essl., comb. nov. Basionym:
Parmelia fissurina Zahlbr., Ann. Mycol. 34: 172.
1936.
- Neofuscelia foveolata* (Essl.) Essl., comb. nov. Basionym:
Parmelia foveolata Essl., J. Hattori Bot. Lab. 42:
111. 1977.
- Neofuscelia glabrans* (Nyl.) Essl., comb. nov. Basionym:
Parmelia glabrans Nyl., Flora 58: 15. 1875.
- Neofuscelia imitatrix* (Tayl.) Essl., comb. nov. Basionym:
Parmelia imitatrix Tayl., Lond. J. Bot. 63: 161.
1847.
- Neofuscelia incantata* (Essl.) Essl., comb. nov. Basionym:
Parmelia incantata Essl., J. Hattori Bot. Lab. 42:
115. 1977.
- Neofuscelia incomposita* (Essl.) Essl., comb. nov. Basionym:
Parmelia incomposita Essl., J. Hattori Bot. Lab.
42: 116. 1977.
- Neofuscelia infrapallida* (Essl.) Essl., comb. nov. Basionym:
Parmelia infrapallida Essl., J. Hattori Bot. Lab.
42: 116. 1977.

- Neofuscelia kenyana* (Essl.) Essl., comb. nov. Basionym:
Parmelia kenyana Essl., J. Hattori Bot. Lab. 42: 117.
1977.
- Neofuscelia lichinoidea* (Nyl. ex Crombie) Essl., comb. nov.
Basionym: *Parmelia lichinoidea* Nyl. ex Crombie, J.
Bot. 14: 19. 1876.
- Neofuscelia lineella* (Essl.) Essl., comb. nov. Basionym:
Parmelia lineella Essl., J. Hattori Bot. Lab. 42: 118.
1977.
- Neofuscelia loriloba* (Essl.) Essl., comb. nov. Basionym:
Parmelia loriloba Essl., J. Hattori Bot. Lab. 42: 119.
1977.
- Neofuscelia toxodella* (Essl.) Essl., comb. nov. Basionym:
Parmelia toxodella Essl. in C.F. Culb. & Essl., Bryol-
ogist 79: 43. 1976.
- Neofuscelia toxodes* (Nyl.) Essl., comb. nov. Basionym:
Parmelia toxodes Nyl., Flora 55: 426. 1872.
- Neofuscelia luteonotata* (J. Stein.) Essl., comb. nov. Bas-
ionym: *Parmelia luteonotata* J. Stein., Verh. K. K.
Zool.-Bot. Ges. Wien 12: 472. 1902.
- Neofuscelia martinii* (Essl.) Essl., comb. nov. Basionym:
Parmelia martinii Essl., J. Hattori Bot. Lab. 42:
123. 1977.
- Neofuscelia melancholica* (J. Stein. & Zahlbr.) Essl., comb.
nov. Basionym: *Parmelia melancholica* J. Stein. &
Zahlbr. in Zahlbr., Bot. Jahrb. Syst. 60: 507. 1926.
- Neofuscelia melanobarbatica* (Essl.) Essl., comb. nov. Bas-
ionym: *Parmelia melanobarbatica* Essl., J. Hattori Bot.
Lab. 42: 124. 1977.
- Neofuscelia minuta* (Essl.) Essl., comb. nov. Basionym:
Parmelia minuta Essl., J. Hattori Bot. Lab. 42: 125.
1977.
- Neofuscelia nakuruensis* (Essl.) Essl. comb. nov. Basionym:
Parmelia nakuruensis Essl., J. Hattori Bot. Lab. 42:
126. 1977.
- Neofuscelia namaënsis* (J. Stein. & Zahlbr.) Essl., comb.
nov. Basionym: *Parmelia namaënsis* J. Stein. & Zahlbr.
in Zahlbr. Bot. Jahrb. Syst. 60: 508. 1926.
- Neofuscelia occidentalis* (Essl.) Essl., comb. nov. Basio-
nym: *Parmelia occidentalis* Essl., J. Hattori Bot. Lab.
42: 128. 1977.
- Neofuscelia parviloba* (Essl.) Essl., comb. nov. Basionym:
Parmelia parviloba Essl., J. Hattori Bot. Lab. 42: 129.
1977.
- Neofuscelia peloloba* (Essl.) Essl., comb. nov. Basionym:
Parmelia peloloba Essl., J. Hattori Bot. Lab. 42: 129.
1977.

- Neofuscelia petriseda* (Zahlbr.) Essl., comb. nov. Basionym: *Parmelia petriseda* (Zahlbr., Akad. Wiss. Wien., Math.-Naturwiss. Kl., Denkschr. 104: 352. 1941.
- Neofuscelia pictada* (Essl.) Essl., comb. nov. Basionym: *Parmelia pictada* Essl. in C. F. Culb. et al., Bryologist 80: 131. 1977.
- Neofuscelia plana* (Essl.) Essl., comb. nov. Basionym: *Parmelia plana* Essl., J. Hattori Bot. Lab. 42: 132. 1977.
- Neofuscelia pokornyi* (Essl.) Essl., comb. nov. Basionym: *Imbricaria pokornyi* Korb. in Pokorny, Verh. K.-K. Zool.-Bot. Ges. Wien 10: 285. 1860.
- Neofuscelia prolixula* (Nyl. ex Crombie) Essl., comb. nov. Basionym: *Parmelia prolixula* Nyl. ex Crombie, J. Bot. 14: 19. 1876.
- Neofuscelia pulla* (Ach.) Essl. comb. nov. Basionym: *Parmelia pulla* Ach., Synop. Method. Lichen.: 206. 1814.
- Neofuscelia pulloides* (Essl.) Essl., comb. nov. Basionym: *Parmelia pulloides* Essl., J. Hattori Bot. Lab. 42: 138. 1977.
- Neofuscelia pustulosa* (Essl.) Essl. comb. nov. Basionym: *Parmelia pustulosa* Essl., J. Hattori Bot. Lab. 42: 139. 1977.
- Neofuscelia pyrenaica* (Essl.) Essl., comb. nov. Basionym: *Parmelia pyrenaica* Essl., J. Hattori Bot. Lab. 42: 140. 1977.
- Neofuscelia ryssolea* (Ach.) Essl., comb. nov. Basionym: *Dufourea ryssolea* Ach., Lichenogr. Univers.: 525. 1810.
- Neofuscelia scabrella* (Essl.) Essl., comb. nov. Basionym: *Parmelia scabrella* Essl. in C. F. Culb. et al., Bryologist 80: 134. 1977.
- Neofuscelia serpulina* (Essl.) Essl., comb. nov. Basionym: *Parmelia serpulina* Essl., J. Hattori Bot. Lab. 42: 143. 1977.
- Neofuscelia spesica* (Essl.) Essl., comb. nov. Basionym: *Parmelia spesica* Essl., J. Hattori Bot. Lab. 42: 143. 1977.
- Neofuscelia squamans* (Stizenb.) Essl., comb. nov. Basionym: *Parmelia squamans* Stizenb., Ber. Thatigk. St. Gall. Naturwiss. Ges. 1887-88: 164. 1889.
- Neofuscelia squamariata* (Nyl. ex Crombie) Essl., comb. nov. Basionym: *Parmelia squamariata* Nyl. ex Crombie, J. Bot. 14: 19. 1876.
- Neofuscelia stygiodes* (Nyl. ex Crombie) Essl., comb. nov. Basionym: *Parmelia stygiodes* Nyl. ex Crombie, J. Bot. 13: 333. 1875.
- Neofuscelia subhosseana* (Essl.) Essl., comb. nov. Basionym: *Parmelia subhosseana* Essl., J. Hattori Bot. Lab. 42: 148. 1977.

- Neofuscelia subimitatrix* (Essl.) Essl., comb. nov. Basionym: *Parmelia subimitatrix* Essl., J. Hattori Bot. Lab. 42: 149. 1977.
- Neofuscelia subincerta* (Essl.) Essl., comb. nov. Basionym: *Parmelia subincerta* Essl., J. Hattori Bot. Lab. 42: 150. 1977.
- Neofuscelia subverrucella* (Essl.) Essl., comb. nov. Basionym: *Parmelia subverrucella* Essl. in C. F. Culb. et al., Bryologist 80: 133. 1977.
- Neofuscelia tatimirix* (Essl.) Essl., comb. nov. Basionym: *Parmelia tatimirix* Essl., J. Hattori Bot. Lab. 42: 151. 1977.
- Neofuscelia tentaculina* (Essl.) Essl., comb. nov. Basionym: *Parmelia tentaculina* Essl., J. Hattori Bot. Lab. 42: 151. 1977.
- Neofuscelia trachythallina* (Essl.) Essl., comb. nov. Basionym: *Parmelia trachythallina* Essl., J. Hattori Bot. Lab. 42: 152. 1977.
- Neofuscelia verisidiosa* (Essl.) Essl., comb. nov. Basionym: *Parmelia verisidiosa* Essl., J. Hattori Bot. Lab. 42: 153. 1977.
- Neofuscelia verrucella* (Essl.) Essl., comb. nov. Basionym: *Parmelia verrucella* Essl. in C. F. Culb. et al., Bryologist 42: 154. 1977.
- Neofuscelia verruculifera* (Nyl.) Essl., comb. nov. Basionym: *Parmelia verruculifera* Nyl., Flora 61: 247. 1878.
- Neofuscelia waiporiensis* (Hillm.) Essl., comb. nov. Basionym: *Parmelia waiporiensis* Hillm., Repert. Spec. Nov. Regni Veg. 45: 173. 1938.
- subgenus *ATROVIRIDIS* (Essl.) Essl., stat. nov. Basionym: *Parmelia* subgenus *Neofusca* section *Atroviridis* Essl., J. Hattori Bot. Lab. 42: 157. 1977. Type species: *Neofuscelia atroviridis* (Essl.) Essl.
- Neofuscelia atroviridis* (Essl.) Essl., comb. nov. Basionym: *Parmelia atroviridis* Essl., J. Hattori Bot. Lab. 42: 157. 1977.
- Neofuscelia chiricahuensis* (R. Anderson & W. Web.) Essl., comb. Basionym: *Parmelia chiricahuensis* R. Anderson & W. Web., Bryologist 65: 234. 1962.

LITERATURE CITED

- Esslinger, T. L. 1977. A chemosystematic revision of the brown *Parmeliae*. J. Hattori Bot. Lab. 42: 1-211.
- Hale, M. E., Jr. 1974a. New combinations in the lichen

- genus *Parmotrema* Massalongo. *Phytologia* 28: 334-339.
- Hale, M. E., Jr. 1974b. Delimitation of the lichen genus *Hypotrachyna* (Vainio) Hale. *Phytologia* 28: 340-341.
- _____. 1974c. *Bulbothrix*, *Parmelina*, *Relicina*, and *Xanthoparmelia*, four new genera in the Parmeliaceae. *Phytologia* 28: 479-490.
- _____. 1974d. New combinations in the lichen genus *Pseudoparmelia* Lynge. *Phytologia* 29: 188-191.
- _____. 1976. Synopsis of a new lichen genus, *Everniastrum* Hale. *Mycotaxon* 3: 345-353.