

FRED CALAI-1000 POUND PUMPKIN GROWER
Ohio Valley Giant Pumpkin Growers
Alan Gibson

Fred Calai is a retired sheet metal worker from Canfield, Ohio. His wife, Mary, and he have three sons and nine grandchildren. Fred and Mary can be found at the grandchildren's many sporting events as well as tailgating at the Youngstown State football games. A large garden and some travel-sounds like a full life in retirement.

But wait a moment! Fred is an avid fisherman (including ice fishing). Walleye on larger local lakes in NE Ohio plus Lake Erie are the prize. Fred's largest walleye is 12 lbs. 4 oz. caught six miles out on Lake Erie on his birthday (Jan. 21). Fred has only gone in the frigid water one time and been caught on a Lake Erie ice floe one time in all his years of ice fishing. Not bad. Fred used to fish 200 days per year but since he caught the giant pumpkin fever is down to a mere 100 days per year.

Fred has been a director of the Ohio Valley Giant Pumpkin Growers the past several years and was largely responsible for our two mechanical lifting devices. He has donated his world famous Calai 846 seeds to our auctions and other worthy causes. He is a tireless worker and good friend to all who know him.

Fred Calai started to grow the giants in 1994. He had noticed the display at the Canfield Fair and secured seeds and plants from Dale Lanterman. 200 pounds was his starting weight that year.

In 1995 the Ohio Valley Giant Pumpkin Growers was formed and Fred attended our first seminars taught by Tim Parks. That year Fred grew a 400.5#er. The next three years produced: 1996-611#, 1997-552# and 1998-522.5#. Not bad, but not good enough to suit Fred. He was using city water with a pH of 12.4. He applied sulphur to lower his soil's pH and used runoff rain water instead of the city water.

1999 saw Fred grow the now famous 846#er (Stelts 801.5 female x Lloyd 876.5 male). A new Ohio state record and 12th place in the Great Pumpkin Commonwealth.

In 2000, Fred was second at our weighoff with an 869.5#er (1st place-Dave Stelts-1140# World Record). After witnessing Todd Skinner's 1109#er at Barnesville (grown from the Calai 846), Fred was heard muttering to himself about the Ohio state record moving from 800# plus to 1100# plus in one year.

In 2001, Fred's pumpkin weighed light and went 786.5#. More work to do. Fred fumigated his soil with Basamid that fall and the following season applied Subdue, Cleary's 3336 and M-Roots (mycorrhiza). The results were astounding. An 884#er (uow-blossom end split) at the Canfield Fair (Calai 846). At the OVGPG weighoff (GPC) held on October 5th, Fred's results were:

Pumpkin	Squash
1074#-2 nd (Stelts 801.5)-12 th GPC	1056.5#-1 st (Bobier 723)-1 st GPC
1049.5#-3 rd (Parks 720)-14 th GPC	947#-2 nd (Holland 879)-3 rd GPC

Fred was the first grower to ever exhibit three fruits over 1000# at the same weigh-off.

Fall Preparation

Fred's patch is 5000 square feet and he usually grows six plants. He has a large compost pile of horse manure and leaves. Four inches of finished compost is applied in the fall and tilled in. This past fall Fred also spread 22 cubic yards of peat moss.

Usually a winter rye cover crop is grown. His soil test results this spring were: organic matter-13%, phosphorous and potash-high, pH-7.2 and soluble salts-low. Fred's patch is slightly raised (fair drainage), 6" clay-loam topsoil before amendments and 10% shaded.

Soil Fumigation

Basamid was used in October, 2001 for the 2002 crop. 10#/ 1000 square feet (low rate) was applied and covered with plastic but not watered in. Fred had fair results with his May, 2002 test results showing: fusarium (high), phythium (medium), rhizoctonia (low) and phytophthora (zero).

In preparation for the 2003 crop, Fred applied Basamid at 20#/ 1000 square feet, watered in and covered with plastic. He will test with Ribeiro Labs next May to see if he got better results.

Spring Preparation and Planting

The sites are 25' x 30'. When the soil reaches 50 degrees F (early May), Fred applies 10-20#/ 1000 square feet M-Roots. At planting time, he applies Subdue Granular (3#/ 1000 square feet) and Cleary's 3336 Granular (12-20#/ 1000 square feet) and tills in. This is repeated 30 days later and helps to control the soil diseases.

Seeds are started inside (bottom heat-90 degrees F) on May 6th. They are moved to the enclosed porch at emergence. Normal transplanting is May 17th but were kept in his greenhouse an extra week due to cold May weather. He uses 4' x 6' plastic huts.

Weed-Insect-Disease Control

Weeds are controlled by tillage four days ahead of the plants. Basamid should keep weeds down this year. Fred had very few cucumber beetles this year but does spray weekly with Scimitar CS and adds Bayer Advantage every few weeks for aphids. A 25 gallon pull-behind sprayer is used. Daconil is added weekly to control fungal diseases. Nova is added in August-September for powdery mildew control.

Fertilizer Program

Dry fertilizer applied to the whole patch in 2002 was: 6-24-24 (50#), ammonium sulphate (15#), urea (25#) and micronutrient premix (5#). Water solubles used weekly were: 15-30-15 starter (May), 20-20-20 (summer) and 13-0-42 (late). Fred also used Neptune's fish emulsion but will use Neptune's kelp product this year. Liquid calcium was foliar applied.

Wind Protection

Pine trees and woods provide wind protection. All vines are trenched and buried.

Irrigation

Fred has two used swimming pools (15,600 gallons storage) that collect runoff rain water. These are covered to prevent algae growth. An electric pump runs the whiz heads. Fred hand waters to conserve water.

Misc.

Fred uses 8' x 10' blue tarps for shade and hail protection. White sheets are also kept directly on the fruit throughout the growing season. He also had to shade vine ends to prevent tip burn.

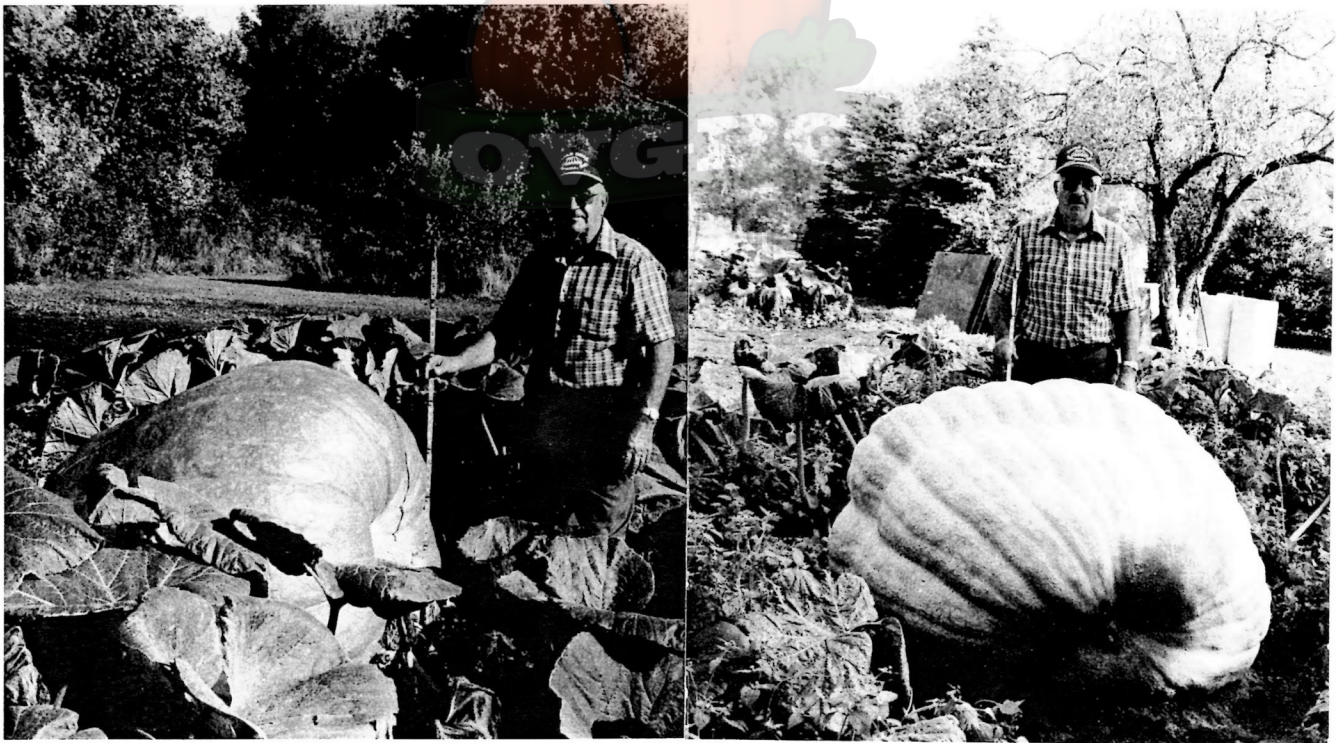
Fred used Reemay on his best two plants starting about mid-September for frost protection. His final four pumpkins grew about 250# each in September.

He ends the main vine at 30". Bottoms are kept flat with sand or white ground covers. Captan and bleach are used as needed. The final four fruit had no problems. The 884 (ex) had a blossom end split due to rapid growth or uneven temperatures in mid-August.

Fred's killer lineup for 2003: Calai 846 (2), Bobier 723, Stelts 801.5, Calai 1074 and Parks 720.

Good luck to Fred and Mary Calai this growing season!

Pictured below: (L) Fred Calai with his 1074# beauty (R) 1056.5# Ohio state record squash-1st place GPC



SOIL FUMIGATION WITH BASAMID

Alan Gibson
Ohio Valley Giant Pumpkin Growers

Commercial fruit and vegetable growers have long used soil fumigation as a tool to increase yields and improve quality. Methyl bromide was custom applied to eliminate soil diseases (fusarium, phythium and phytophthora), germinating weed seed and nematodes.

Vapam was another soil fumigant used by the Gancarz Bros. of New Jersey who had the world record pumpkin in 1986 (671#) and 1990 (816.5#).

This past year the world record pumpkin patch might have been fumigated with methyl bromide. Methyl bromide is not available in Ohio unless you are a large-scale commercial grower.

Basamid is a dry granular soil fumigant from the BASF Corporation. It is not a RUP (Restricted Use Pesticide). It can be special ordered from most agricultural dealers in North America. Locally, it can be ordered from Parks Garden Center. Cost is \$170.-200. per 50# bag. A 50# bag treats 6250 square feet at the rate of 8# per 1000 square feet.

While this product is available to all growers, please be sure to read the label several times for safety precautions. Wear protective clothing including coveralls and waterproof gloves.

The granular Basamid turns to a gas in the soil when watered in. September and October are the best months to fumigate in preparation for the next growing season. Use a soil thermometer (meat thermometer) to measure the soil temperature at a depth of 4" in bare soil. The best results are obtained at soil temperatures of 54-64 degrees F.

Soil should be well cultivated with some moisture. All plant materials should be turned under at least one week prior to fumigation. Wait for several weeks after the gases are released (by tillage) before adding more organic matter.

Spread 8# Basamid per 1000 square feet on the bare soil. Mark off a small area and weigh out the product. It is very fine and can blow on a windy day (a drop spreader might help).

Till the basamid into the soil and water in per the label. Now the soil surface must be sealed for at least one week. This can be done with plastic sheets or rolling the soil with daily irrigation to maintain the seal.

The three most critical factors for a successful fumigation program are: (1) soil preparation-fine tilth (2) soil temperature-medium to warm (3) soil moisture-water.

After 1-2 weeks, cultivate the soil to the original depth to release the gases. A fall fumigation should be well aired-out by May pumpkin planting with an additional spring tillage or two.

Do not: (1) use when soil temperatures are below 43 degrees F. (2) apply within 3-4 feet of any growing plants or near the drip line of trees.

Soil borne diseases can potentially cause a root rot problem, particularly if the soil stays excessively wet or there is an excess of nitrogen in the soil. Soil fumigation reduces the amount of beneficials (mycorrizza) but they quickly multiply.

SOIL FUMIGATION WITH BASAMID (continued)

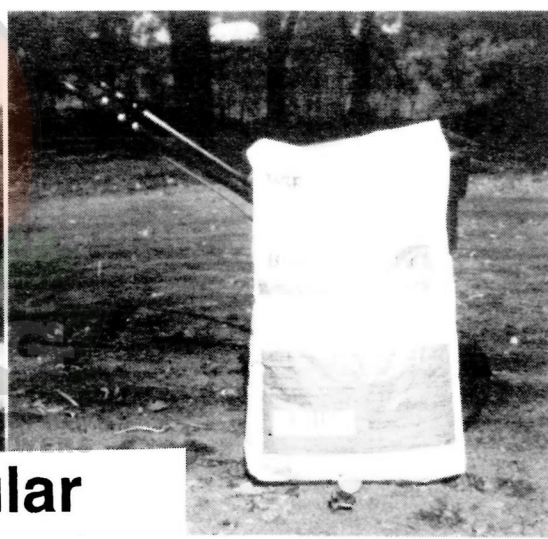
You might want to invest \$85. in a soil test (plant pathology-lab report) to determine your patch's level of soil borne diseases. This is available from: A and L Labs 1311 Woodland Ave. Modesto, California 95351 Phone: (209) 529-4080. A and L is the best lab for soil and tissue tests also.

Dave Stelts had this test done this year. His test came back at very high (phythium), high (fusarium) and zero (phytophthora).

Dave treated his soil during the growing season with Ridomil (Subdue) and Terrazole. Even with these fungicides, Dave pulled 9 of 12 plants. His 3 remaining plants produced 1053.5#-955#-911#. Without this test and fungicide program, Dave would have produced nothing.

This past fall the following growers used Basamid on their patches: Dave Stelts, Fred Calai, Alan Gibson, Tim Parks and Jack Lanterman. We will let you know the results. Good luck in 2002!

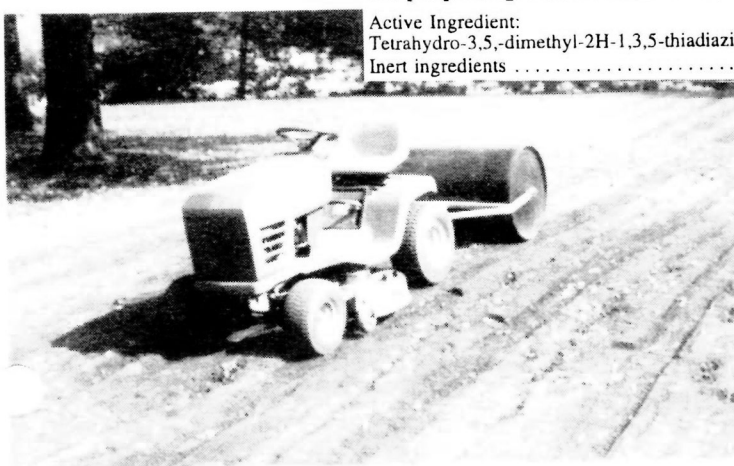
Pictured below (clockwise): (1) Basamid granular fumigant (2) Tillage (3) Rolling to seal (4) Dave Stelts patch after fumigation (note: plastic cover).



Basamid[®] Granular

soil fumigant
For pre-planting control of most weeds, nematodes, and soil diseases

Active Ingredient:	
Tetrahydro-3,5,-dimethyl-2H-1,3,5-thiadiazine-2-thione	99%
Inert ingredients	1%





Bill Fornof of Conneautville, Pa. passed away on December 14, 2001. Bill is pictured here with his 708.5# pumpkin which took 2nd @ the OVGPG weigh-off in 1997. The article below was written in 1995.

BILL FORNOF/ GROWING PUMPKINS IN SAND

Alan Gibson

Bill Fornof, 80 year young pumpkin grower from Meadville, Pa. was the first member of the OVGPG. His gift memberships and contribution helped us to publish our first newsletter. Bill is also contributing 200 seeds to our seed sale. THANK YOU, BILL!

In late September, I had the opportunity to visit Bill's patch. Several early frosts had hit by then, so Bill and helper John Deeter had all of the vines cleaned up. What I saw was a 90' x 100' patch (black plastic covering the area with 90 tons of sand spread on top) with nine beautifully colored specimens lying here and there. What a sight!

The sand was 4-6" deep but Bill plans to add 40 more tons this year. Each of the nine sites has a 4' x 4' frame (filled with more sand). The plant is actually grown in a large nursery tub (bottom cut out) filled with soil and compost. The tub is set 6" into the sandbox.

Water is supplied by drip irrigation (6 emitters into each pot and 4 more into the sandbox. Overhead sprinklers are also used. Bill has 1500 gallons of water storage (steel livestock tanks) which are filled daily and used the next day (heated water). The usual water soluble fertilizers and calcium nitrate are run through the irrigation system.

There is never a need to rototill the sand, there are no weeds and the fruit seemed to be clean (perhaps less insect and disease problems due to better drainage and no soil splashing on the fruits etc.).

Water and fertilizer must be "right on" with this all sand system. Bill has grown large pumpkins the past three years, but had many years experience with thousands of mums. The mums were also grown with the small pots arranged on beds of sand/gravel with similar irrigation and fertilizer techniques used.

Bill's all sand system would be useful where 1) the soil is very poor 2) lack of compost and expense to build up conventional soils 3) grower wants to cut down on labor of weeding and tilling. Compost has to be added every year in large quantities (conventional system) but once the sand is in place (all sand), you're done with soil preparation.

Bill did mention orthonex as an alternative to sevin as it is systemic through the leaves.

In 1994, Bill was mentioned in Howard Dill's seed catalog for growing two 600#ers.

This year, he had one over 825# that went down in August plus the 816#. He also had two over 700#, two over 600# and several more in the 400-500# range.

All of these weights are estimated as Bill has never been able to show them. Next year we hope he can make it to the GPC weigh-off at Canfield.