

Dixie Blueberry News

Georgia Blueberry Growers Association Newsletter

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Editor: Gerard Krewer

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President's Column

by Rusty Bell

I would like to welcome all blueberry growers to the new Georgia Blueberry Grower's publication. My name is Rusty Bell and our family farm is located in Bristol where we planted our first blueberries in 1983. Back then we were told the only thing blueberries needed was a wheel barrel to carry our money in. Now we have learned to prune, spray, fertilize and a lot of praying helps in producing superior blueberries.

With start of a new association, our goals are to improve the quality of our blueberries and also collect and circulate valuable and useful information for its members. Georgia production is on the rise, as well as the rest of the world, we need to stay on top of new research so that every grower in Georgia has the best information possible.

As President, I would like to encourage good faith, goodwill and just and fair principles of business in the industry; and to make every

effort to uphold the best interests of its members. We are working on a set of by-laws, that can be viewed on the web on the web site www.smallfruits.org or call me at 912-647-2807, or rusty@sundanceboats.com for a copy. At the first business meeting in January (See Savannah meeting page 6) we hope to adopt a set of by-laws to help start our new GEORGIA BLUEBERRY GROWERS ASSOCIATION. I would also like to hear your comments on different ideas on research and promotion, so give me a call at my home, 912-647-5072, I'm available between 5:30 A.M. to 9:30 P.M..

Thank you for your time and I hope to see you in Savannah in January for our first business meeting. Hope everybody has a very happy holiday season.

Blueberry Winter Weed Control for Georgia

by Danny Stanaland

The University of Georgia

Coop. Extension Service-Bacon Co.

The primary goal of weed management is minimizing weed competition. Weeds can reduce yields by competing with the blueberry crop for water, light, and nutrients. Weeds reduce harvest efficiency as well. Maintaining a somewhat bare soil surface under blueberries can minimize losses associated with frost/freeze events in the spring. Soil surfaces free of weeds or residue are capable of absorbing heat during the day. The release of the absorbed heat at night can increase field temperature, possibly protecting the field from a light frost or freeze.

Timely weed removal, wise use of herbicides, and prevention of weed seed production are an integral part of a good weed management system. One area of weed management where I feel we fall short is winter weed control in fields with winter weeds problems. A good effective winter weed control program will eliminate the need of early weed control sprays in the spring. Delaying the spraying application would extend weed control longer into the summer months. The early summer months is when we seem to fall short on timing weed control efforts, due to harvest.

The following chemicals should be considered for fall or early winter weed control in blueberries:

simazine

(Princep Simazine) 90 DG

(Princep Simazine) 4 L

At the rate of 2 to 4 pounds active ingredient per sprayed acre, controls annual broadleaf weeds and some annual grasses. Fall applications control a broader weed spectrum than spring applications.

terbacil

(Sinbar) 80 W

Use for broad spectrum annual weed control only under plants established in the field for at least one year. Apply a single application in the fall before weeds emerge or after weeds emerge but are less than 2 inches tall. Do not exceed 0.5 lb. ai. per acre on sandy loam soils. Avoid

contact of berry foliage.

pronamide

(Kerb) 50 WP

Apply as directed. Spray in established blueberries only for early post emergence control of susceptible winter annual weeds and perennial grasses. Apply late fall or early winter at 1 to 2 pounds ai. per acre.

norflorazon

(Solicam) 80 WP

Use for control of annual grasses, some broadleaf weeds, and suppression of some perennials. Apply as a direct spray in the fall when dormant. Apply 2.0 to 4.0 pounds ai. per acre. Use only one application per year.

Prior to using a herbicide, or any pesticide, carefully read the manufacturer's label. Labels are legally binding documents and all statements on labels take precedence over any recommendation in this letter. Call your local County Agent for further help.

Results of a Preliminary Survey of Blueberry Viruses in Southern U.S. Commercial Plantings

by Phil Brannen

Extension Plant Pathologist

University of Georgia and

Bill Cline

Extension Plant Pathologist

North Carolina State

Southeastern blueberry growers are generally concerned about mummy berry and rots. However, if you were to ask them about blueberry viruses, they might not even realize that blueberries can be infected by viruses. We just don't think about viruses, because thus far, they have not been a major concern in southeastern production. However, blueberry viruses are known to cause severe yield

reductions where present!

Southeastern blueberry producers are largely unaware of the symptoms associated with blueberry viruses, and they often are attributed to insect damage or nutrient deficiencies. Symptoms include “strapping” (elongated leaves), “witches’ brooms” (shortened internodes, deformed leaves, and mosaic patterns (alternating dark and light green coloration) on the leaves. Sometimes the viruses don’t produce many symptoms at all, but they can sap yield.

Danny Stanaland, county agent in Bacon County, identified blueberry shoestring virus and strawberry latent virus in south Georgia blueberry plantings in 2000. The extent of the infections was not determined. However, it was assumed that the blueberry shoestring virus was likely present in multiple plantings. In Michigan, this virus has caused losses as great as \$3 million in some years, and the virus can result in 25% yield losses on a regular basis (Compendium of Blueberry Diseases, APS Press; 1995). The shoestring virus was also observed in the “Duplin” variety from North Carolina in 1999 – again indicating the need for a survey.

The primary objective of this survey was to determine whether or not viruses were highly prevalent in the major blueberry production regions of Georgia and North Carolina. In Georgia, a secondary objective was training of county agents in identification of blueberry virus symptoms, as well as the importance of blueberry viruses. Methodologies in GA and NC differed, in that GA samples came predominantly from grower plantings, whereas NC samples were derived predominantly from nursery stock. Seven Georgia county agents (Clinch, Ware, Brantley, Bacon, Appling, Long and Pierce Counties) were trained in identification of viral disease symptoms, to include specific viruses such as shoestring virus. Over a period of roughly three weeks, county agents reviewed blueberry plantings for viral

symptoms; when symptoms were observed, bushes were marked with colored flagging tape. On 21 May, symptomatic samples were collected from all represented counties.

The timing allowed for full expansion of leaves and viral development; later sampling would likely have resulted in false negatives, as the titer of many viruses is reduced when maximum temperatures consistently reach 90°F or greater. A sample consisted of three-four leaves which were taken from young, fully-expanded leaf tissue (current years growth). When possible, each leaf was taken from a separate main stem or cane, since the viruses can reside in only a portion of a bush. In the course of sampling, both southern highbush and rabbiteye blueberries were utilized for samples – representative of the blueberry varieties and species observed in south GA. Samples were kept cool (either refrigerated or kept on ice) till shipped. Samples were overnighted to Agdia, Inc. (Elkhart, IN) for analysis of viruses present. Agdia utilized the enzyme-linked immunosorbent assay (ELISA) technique to test for the presence of 16 viruses which occur on blueberry. Bill Cline, North Carolina State, conducted the survey of planting stock in North Carolina. Samples were shipped the following week, and similar methodologies were utilized.

A total of 55 symptomatic samples were collected from GA, and a total of 38 samples were collected from North Carolina. Without exception, none of the samples indicated the presence of blueberry viruses. While this did come as a surprise, it is encouraging. Many of the symptomatic plants may have resulted from herbicide injury; glyphosate damage can closely mimic viral symptoms. Alternatively, phytoplasmas or insects may cause similar symptoms. Assuming that the ELISA results were correct, this survey indicates that we may not have a major issue with viruses of blueberry in the Southeast -- yet. However, our southeastern propagation industry does not generally take precautions to prevent virus

intrusion, such as testing mother plants, and viral spread could be an issue for us. The recent occurrence of shock virus in the Northeast demonstrates the potential danger; new viruses can “pop up” anywhere if the proper control methods (mainly cultural as related to testing of propagation material) are not utilized. Since blueberry aphids and dagger nematodes are major vectors of many blueberry viruses, the low or nonexistent numbers of these vectors in many southeastern plantings could explain the low levels of viruses currently observed in the Southeast. Also, higher temperatures may possibly have an effect on the spread and survival of blueberry viruses in the Southeast, but this is probably mere speculation at this point.

Despite the results observed in this survey, we can not become complacent in our approach to blueberry viruses. It would be wise for propagators to at least randomly sample and test the plants from which they will take cuttings. Also, when plants show viral symptoms, it would be of value to have the plants tested immediately, assuming that no herbicide damage or other explanation is available for the symptoms. As always, contact your local county agent if you have questions on this or any other topic related to blueberry production.

New Cultivars from Florida

by Gerard Krewer, UGA Ext. Horticulturist

Windsor is a new southern highbush with a chilling requirement of about 350 hours, so it blooms early. It is recommended for **very limited** trial in south Georgia with overhead irrigation for freeze protection. Approximate ripening time in lower south Georgia should be the third week in April to early May. Berry size is the largest of any southern highbush. Berry color is a medium blue. It has good firmness and flavor, but a **variable picking scar**. On young

plants, this can be problematic, since the skin can tear during picking. On older plants, the scar is medium, with only an occasional berry that tears. Spring leaf development is very good. Windsor is vigorous, with stout stems, and is semi-spreading in growth habit. Windsor appears to have above average leaf spot resistance, but only moderate root rot resistance. Stem blight resistance is only fair. Windsor is not self-fertile, so at least two other southern highbush cultivars with a similar chilling requirement should be planted in alternate rows with Windsor. Good choices may be Star, Santa Fe, O’Neal and Millennia. Like most southern highbush, excellent soil drainage and soil very high in organic matter, soil heavily amended with pine bark, or pine bark beds are needed to grow Millennia. Millennia is patented and information regarding licensing and a list of licensed nurseries can be obtained from the Florida Foundation Seed Producers, Inc. at 904-594-4721 or seed@digitalexp.com Released from Florida in 1999.

Millennia is a new southern highbush with a chilling requirement of about 300 hours, so it blooms early in the spring. It is recommended for limited trial in south Georgia with overhead irrigation for freeze protection. Approximate ripening date in lower south Georgia should be late April and early May. Millennia berry size is large to very large on well-leafed bushes that are not overloaded. The berries are grey-blue in color and firm. Picking scar is good to excellent. Flavor is good, although it can be somewhat bland on overloaded bushes. Bush vigor is medium to high with a spreading bush habit. Millennia often sets an excessive number of flower buds so winter pruning is needed for good leaf development in the spring. Leaf spot resistance is above average for southern highbush, but stem blight and root rot resistance is only fair. Millennia is not self-fertile, so at least two other southern highbush cultivars with a similar chilling requirement should be planted in

alternate rows with Millennia. Good choices might be Star, Santa Fe, Windsor and Emerald. Like most southern highbush, excellent soil drainage and soil very high in organic matter, soil heavily amended with pine bark, or pine bark beds are needed to grow Millennia. Millennia is patented and information regarding licensing and a list of licensed nurseries can be obtained from the Florida Foundation Seed Producers, Inc. at 904-594-4721 or seed@digitalexp.com Released from Florida in 2000

Emerald is a new southern highbush with a chilling requirement of about 300 hours, so it blooms early. It is recommended for limited trial in south Georgia with overhead irrigation for freeze protection. Berries size is large to very large and firm. Emerald berries maintain good size throughout the harvest season if the bushes are well cross-pollinated. Berry color is medium to dark blue, similar to O'Neal. Berry shape is wider than tall. Emerald is a vigorous bush with a growth habit midway between upright and spreading. Spring leaf development is good. Flower bud production is medium to heavy, but fall blooming may occur. Emerald appears to be average or above average in resistance to most diseases. Emerald needs cross pollination with another cultivar with similar chilling requirement. Good choices may be Star, Santa Fe, O'Neal and Millennia. Like most southern highbush, excellent soil drainage and soil very high in organic matter, soil heavily amended with pine bark, or pine bark beds are needed to grow Emerald. Emerald is patented and information regarding licensing and a list of licensed nurseries can be obtained from the Florida Foundation Seed Producers, Inc. at 904-594-4721 or seed@digitalexp.com Released from Florida in 1999.

For information on other rabbiteye and southern highbush cultivars go to www.smallfruits.org or have your county agent print out a copy of publication 00-02

Benlate cancellation order published- potential impact on blueberry production

by Phil Brannen- UGA Ext. Plant Pathologist

As most producers are aware, on August 8, 2001, EPA published a final cancellation order for the fungicide benomyl (Benlate®). In April, Dupont, the registrant for benomyl, announced that it would no longer manufacture and distribute benomyl. The sale of benomyl by the registrant has not been allowed since August 8, 2001. However, existing stocks in the channels of trade may continue to be sold until December 31, 2002. The EPA is assuming that all end-use products will be used up in 2003.

There is currently not a good material available to replace Benlate. In blueberries, Cerexagri is currently working on a full registration for thiophanate-methyl (Topsin M) as a replacement for Benlate. Based on the mode-of-action and same active end product, it is assumed that thiophanate-methyl will be of value as a Benlate replacement, but little, "hard" research data is currently available to support this premise. Despite the rush by Ceraxagri to address this issue, one can not be sure whether this product will be registered in time for the 2002 season or beyond. Benlate, especially when combined with Captan, is effective for many rots, botrytis, and post-season leaf spot problems. It would be of value for blueberry producers to stock up on the product if they have not done so already.

Other materials, such as Switch®, may help with rots, but Switch is not likely to help us with post-season leaf spots or dieback issues. Bottom line, we are probably going to miss Benlate in blueberries for some period of time.

Deer Feeding on Southern Highbush

Deer feeding is occurring on southern highbush at this time in several counties. Deer are clipping off twig tips and flower buds. Get your electric fences up (best) and permits to shoot at night renewed.

2002 Georgia Blueberry Conference

(In conjunction with the 2002 Georgia Fruit and Veg. Grower Association Winter Conference and Trade Show)

**Savannah Civic Center (go to end of I-16 and take a left on Montgomery Street-
just a few blocks from the end of I-16)
Savannah, Georgia**

Friday, Jan. 11, 2002

Session designed for new growers

10:00 a.m- 5:00 p.m. Trade Show Open

- Moderator: Mr. David Linvill, Chatham County Agent, Savannah, Ga.**
- 1:00-1:20 p.m. Propagation, Dr. Gerard Krewer, Ext. and Horticulturist, UGA, Tifton, Ga.**
- 1:20-1:50 p.m. Planting and growing rabbiteye blueberries, Mr. Danny Stanaland, Bacon County Extension Coordinator, Alma, Ga.**
- 1:50-2:10 p.m. Planting and growing southern highbush blueberries in soil, Mr. Mike Bruorton, Clinch County Extension Coordinator, Homerville, Ga.**
- 2:10-2:30 p.m. Planting and growing southern highbush blueberries in pine bark, Mr. Bob Boland, Brantley County Extension Coordinator, Nahunta, Ga.**
- 2:30-2:50 p.m. Blueberry maggot: biology and control in the Southeast, Dr. Dan Horton, Ext. Entomologist, UGA, Athens, Ga.**

Saturday, Jan. 12, 2002

11:00 a.m-6:00 p.m. Trade Show Open

Lunch in Trade Show area. Included in registration cost.

- Moderator: Mr. James Clark, County Extension Coordinator, Appling Co., Ga.**
- 1:00-1:05 p.m. Welcome: Dr. David Bridges, Associate Director, UGA Tifton Campus, Tifton, Ga.**
- 1:05-1:25 p.m. Market and outlook for blueberries, Dr. Bill Given, Ext. Economist, Athens, Ga.**

- 1:25-1:45 p.m.** **Comparison of rabbiteye ripening time and information on new releases from North Carolina, Dr. Mike Mainland, Ext. Horticulturist, NCSU, Castle Hayne, NC**
- 1:45-2:05 p.m.** **Honeybees and mummyberry, the problem or the cure?; and new information on pollination, Dr. Selim Dedej, Entomologist, UGA, Athens, Ga.**
- 2:05-2:45 p.m.** **A balanced approach to pruning highbush, Mr. Dave Brazelton, Fall Creek Nursery, Lowell, Ore.**
- 2:45-3:05 p.m.** **Scouting for thrips, gall midges and flea beetles, Dr. Blair Sampson, Research Entomologist, USDA Poplarville, MS**
- 3:05-3:30 p.m.** **Break**
- 3:30-3:50 p.m.** **Postharvest handling, methods of reducing bruising and proper temperature for holding blueberries, Dr. Al Purvis, Research Horticulturist, UGA, Tifton, Ga.**
- 3:50-4:10 p.m.** **Benlate replacement and Indar situation, Dr. Phil Brannen, Ext. Plant Pathologist, UGA, Athens, Ga.**
- 4:10-4:30 p.m.** **Postharvest rabbiteye hedging experiences, Dr. Gerard Krewer, Ext. and Research Horticulturist, UGA, Tifton, Ga.**
- 4:30-4:45 p.m.** **‘Alapaha’ a new early ripening rabbiteye blueberry, Dr. D. Scott NeSmith,**
Research and Ext. Horticulturist, UGA, Griffin, Ga.
- 4:45-5:05 p.m.** **Greenbiar and woody weed control, Dr. Mark Czarnota, Ext. and Research Horticulturist, UGA, Griffin, Ga.**
- 5:05-5:20 p.m.** **Business Meeting: Georgia Blueberry Growers, Mr. Rusty Bell, President, Bristol, Ga.**

Registration information: Call 1-877-99GFVGA (877-994-3942) or www.gfvga.org

Registration before Dec. 21, 2001 is \$35 for Friday or \$50 per Sat. (includes lunch) or \$75 for both days.

Membership Information

To join the Georgia Blueberry Growers Association, mail a check payable to **Georgia Blueberry Growers Association** to our address:

Danny Stanaland Sec./Treasurer
Georgia Blueberry Growers Association
P.O.B. 1985
Alma, Ga. 31510

The Association annual dues depend on which membership category you fit best.

Jan. 1-Dec. 31, 2002 Membership:

1. Regular Georgia Member-\$25
2. Out-of-state member- \$25
3. Associate (industry) member-\$50
4. Education and research-\$10 (University and USDA personnel who do not grow blueberries commercially). Email newsletter free to education and research personnel. Send request to gkrewer@uga.edu

**Danny Stanaland Sec/Treasurer
Georgia Blueberry Growers Association
P.O.B. 1985
Alma, Ga. 31510**

Blueberry Products and Services

Do you have blueberry plants, equipment or related items for sale? Call 229-386-3807 and we will list it in this newsletter. There is no charge for members for this service. Up to three lines free.

Rabbiteye plants for sale, 1 to 3 gallon, Bottoms Nursery, 770-884-5661, Concord, Ga.

Rabbiteye and southern highbush plants for sale, liners to 3 gallon, Alma Nursery, 912-632-5708, Alma, Ga.