



BRAMBLE

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THE NEWSLETTER OF THE NORTH AMERICAN BRAMBLE GROWERS ASSOCIATION, INC.

Greetings!

My name is Debby Wechsler and I am NABGA's new Executive Secretary. I am pleased to be working for NABGA and look forward to serving its members and helping to build the organization. Richard Fagan is kindly helping me with the transition and has volunteered to answer questions whenever needed!

A bit of introduction: I grew up in Maryland, but have lived in North Carolina for about 25 years, mostly working for farm organizations and writing magazine articles about farming and gardening. I've worked on apple orchards and a demonstration farm, and for several years I was a market gardener, with cherry tomatoes as my main crop. Currently, I am also Executive Secretary for the North Carolina Strawberry Association — some of you may know me from that role or may have met me when NABGA came to North Carolina in February 2002 for the North American Berry Conference. I also do writing, editing, and publications layout for a number of other farm organizations. Working with NABGA seemed a natural fit with my skills and what I was already doing.

I live on a dead-end gravel road about a half-hour from Chapel Hill, NC, and work out of my home. If you call, you'll probably hear my roosters crowing, and you may end up talking to my husband, Jack, who runs a yardwork business and plays serious chess, or one of our sons: 16-year-old Michael or 12-



Richard Fagan, long-time Executive Secretary of NABGA, is retiring after many years of service to the organization. At the Annual Meeting in Tampa, NABGA's officers presented him with a beautiful, handmade box in appreciation of his work. Shown from left to right, NABGA vice president Ervin Lineberger, Betty Fagan, Richard Fagan, and NABGA President Mark Ciotoli. (See Richard's note on page 2)

year-old Joshua. They already take lots of calls from strawberry growers and will take bramble queries in stride.

This issue of the *Bramble* is my first project for NABGA. You'll see some obvious changes. There's no color on the front page, since I'll be getting it commercially copied and the cost would have been prohibitive. The three-column format allows me to fit more information in fewer pages. With NABGA's members so far-flung, I see the newsletter as an important benefit of membership that really reaches everyone.

The other project I will be concentrating on is rebuilding NABGA's website to add more features that make it useful to growers and to give it a "consumer face" with information about caring for bramble fruit, their nutritional benefits, and lots of recipes. This will take awhile to accomplish, but I'll keep you posted.

I'll also be working on increasing NABGA's membership by contacting

past and prospective members. And I'll be carrying out all the regular maintenance tasks of an organization—answering the mail, processing renewals, working on the annual conference, and managing the finances.

Please help!

Here are a few ways you can help me:

- Send your ideas and suggestions for how NABGA can better serve you.
- Send news, notices of bramble-related events, and articles for the newsletter. If you've done or seen something interesting on your farm or in your research, share it. Point me towards growers with particularly successful or innovative production and marketing and I'll write them up myself.
- Send raspberry and blackberry recipes and photographs that we can use on the website.

I look forward to meeting and working with NABGA's members. Please feel free to contact me.

—Debby Wechsler

New Contact Info for NABGA

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Pittsboro, NC 27312

Phone: 919-542-3687

Fax: 919-542-4037

Email: nabga@mindspring.com

In Memoriam: Herbert D. Stiles

Herbert Donald Stiles, a leader in bramble research and extension, died on Saturday, February 21, 2004 in Blackstone, Virginia. NABGA expresses its condolences to his wife, Anne Plum Stiles, and their family.

Dr. Stiles was born December 15, 1942 at Easton, Pennsylvania. He grew up in Dias Creek, New Jersey and earned Bachelor and Master of Science Degrees in Horticulture at Rutgers University. After serving as Staff Sergeant in the 101st Airborne Infantry Division, U.S. Army (1968-1969), he earned a Ph.D. Degree from the University of Florida Department of Fruit Crops in 1974.

He was Assistant Professor at the University of Maryland from 1974 until 1978, then Assistant Professor and later Associate Professor at Virginia Tech, stationed at the Southern Piedmont Agricultural Research and Extension Center in Blackstone from 1978 until his retirement on July 1, 2002.

Dr. Stiles was a charter member of the North American Bramble Growers Association, the North American Strawberry Growers Association, and the Farmers' Direct Marketing Association of Virginia. He was also a member of the American Society of Horticultural Science and several other professional scientific groups.

While teaching and doing research in the Department of Horticulture at the University of Maryland, Dr. Stiles



Herb Stiles at a field day in 2002, shortly before his retirement. Photo by Tony Bratsch.

cooperated with USDA breeders to develop disease resistant strawberry varieties. As cooperator in a Maryland Department of Agriculture program, he devised techniques to improve “virus-free” strawberry and raspberry transplant production by Maryland nurseries.

At Virginia Tech’s Southern Piedmont Agricultural Research and Extension Center, he served as both a researcher and extension horticulturist. Virginia Extension Horticulturist Tony Bratsch comments, “Herb will be remembered for his patented development of the ‘Shift Trellis’ for brambles, which effectively separates primocane and floricanes (bearing) shoots. The trellis allows much greater ease of harvest, and better quality fruit with more protection from sunburning. Herb was also involved with the collaborative Five Aces bramble breeding project

with Maryland and New Jersey, which resulted in several highly adapted raspberries for the Mid-Atlantic: Caroline, Anne (named after Herb’s wife), Josephine, and Jacklyn. These cultivars represent significant improvement of fall-bearing raspberries, and hold great potential for the industry. His most recent research involved characterization of viruses in brambles, working collaboratively with the NC State University Micropropagation Unit (Zvezdana Pesic-VanEsbroeck), and Gina Fernandez, of the NCSU Dept. of Horticultural Science.

“Herb enjoyed working with bramble and other small fruit growers. His annual field day at the VT Southern Piedmont AREC in Blackstone was widely attended, with well over 100 growers from Virginia and neighboring states coming to view his research in progress and demonstration plantings of cultivars on shift trellis at harvest.”

During Saturday’s general session at the NABGA Conference in Tampa, Harry Swartz alerted members to Dr. Stiles’s precarious health situation and asked everyone to hold him in their thoughts for a moment of silence. Dr. Stiles died later that same day.

A memorial service was held on February 26 in Blackstone. Memorial contributions may be made to Helyar House Scholarship Funds, Rutgers University Foundation, Winants Hall, 7 College Avenue, New Brunswick, N.J. ❀

Thanks and Farewell,

I would like to thank all the NABGA members, especially those that served as officers, for all the help with keeping NABGA afloat over the past 15 years. It was a real learning experience for me. I have learned a lot about growing and marketing brambles, in addition to working with the computer and going through all the changes that have occurred in computing—like going from the old Apple 11E to the Windows XP. One thing for sure, the more you get involved the more you learn. I will miss seeing and talking with all the wonderful people I met through NABGA but it is time for me to retire. I know you all will give Debby the same cooperation you gave me.

*Sincerely,
Richard Fagan*

NABGA Holds Successful Conference

About 65 people attended NABGA's 2004 conference in Florida in February. It was a small crowd, but all who attended enjoyed the balmy weather and the excellent program. Comments Executive Council member Bob Blain, "A conference of this magnitude and quality doesn't just happen. A huge thanks especially to Ervin Lineberger for the many hours, telephone calls, and devotion to NABGA he committed to make this conference both a learning and enjoyable experience for all who attended."

Proceedings from the conference are being assembled and will be sent shortly to all NABGA members. Several articles in this newsletter summarize other meetings and sessions from the conference.

Plans for next year: NABGA is tentatively planning to meet jointly with the North American Strawberry Growers Association in Nashville, Tennessee. Watch for more information!

Three Bramble Growers

This article summarizes the remarks of three growers spoke on Saturday, February 21 at the 2004 NABGA Conference.

Steve and Tim McMillan started raising small fruit to diversify their Southern Grace Farms, located in southern Georgia, about 65 miles north of Florida, when changes in the tobacco program reduced their tobacco quota by almost 75% in 1998. They planted strawberries for PYO and two acres of blackberries to compliment the strawberry operation. Since a quarter acre would have been enough for PYO, they turned to wholesaling their fruit in Atlanta about 3.5 hours away, and then began to market through Sunnyridge Farm, a grower and shipper of blueberries, bramble fruit, and citrus with offices in Florida, Canada, and South America and its own farms in Florida and Georgia. (Keith Mixon from Sunnyridge also spoke at the Conference.)

By 2001 the McMillans had increased their blackberry acreage to seven acres. Their market window, however, is strongly affected by the timing of the Mexican blackberry crop. In 2001–2002, they were fortunate that their early crop of Arapaho berries came in just as Mexico dropped out of the market. Based on those profitable years, they planted 13 more acres of blackberries, but in 2003, Mexico stayed in the

market two weeks longer, so they couldn't get a good price on their Arapahos, and then rain affected their later harvests.

Very little research and information on blackberries for their area is available for them, so, says Steve, they find themselves reacting to problems rather than being proactive. Without recommendations of the best varieties to plant, they've had to experiment, and have had problems with white drupelets on some varieties. Another problem was a parasitic algae.

However, their marketing through Sunnyridge is helping them grow—they are up to 30 acres and planning on 6 more, aiming for a balance of half early varieties and half late varieties.

Contact Steve and Timothy McMillan at Southern Grace Farms, Rt. 1, Box 28-A, Enigma, GA 31749, phone 299-533-8585, sgrace2@planttel.net. Contact Sunnyridge Farm at P.O. Box 3036, Winter Haven, FL 33885, phone 863-294-8856, www.sunnyridgefarm.com

Bob Blain farms in Martinton, Illinois, about 70 miles south of Chicago, on the farm where he grew up. After early retirement from careers in school administration and teaching he and his wife, Coleen, started raising raspberries as a business, building on successful small-scale marketing of surplus raspberries from their home garden. They are now in their eleventh year raising raspberries at River Front Berry Farm. Trying to reach a goal of having berries for sale from the

NABG Research Foundation Makes 2004 Grants

At its meeting on February 21, 2004 the NABG Research Foundation made the following grants. While there was \$12,200 in the Research Foundation account, the committee agreed to limit the total of grants to \$6,000, saving some funds back for next year, in case income was low—the one year that NABGA had no funds made an unfortunate break in momentum and confused researchers.

• **SSR markers for brambles** (Lewers): requested \$2800, \$1500 awarded.

• **Evaluation of red raspberry seedling progenies for heat tolerance, resistance to variable winter temperatures, and horticultural characteristics** (Ballington): \$2700 requested, \$2500 awarded.

• **Development of a simple system for blackberry shelf-life evaluation** (Perkins-Veazie & Clark): \$2000 requested, \$2000 awarded.

• **Raspberry cultivar development for the Midwest grower** (Smith): \$2770 requested, \$1500 awarded.

The committee decided that award letters should stipulate that any cultivars released or methodology that is implemented that is a result of this research be publicly available.

Priorities mentioned for next year include crown borer control and breeding raspberry varieties for PYO that are large and flavorful.✱

second week of June through the first hard frost, they now have ten varieties. They have not yet achieved this goal though—there is still a gap in production around the second and third weeks in July between the summer and fall fruit. "We thought we had a good solution with Tulameen, but it was not cold-hardy enough," says Bob. Their most successful early red raspberry is Encore. In black raspberries, they raise Allen and Jewel and are still searching for varieties to extend their season.

Bob and Coleen sell at an on-farm

Continued next page

Three Bramble Growers

Continued from previous page

market and also take fruit to a local farmers' market. To package the fruit, they use two-piece plastic clamshells selling for \$3 pint at the farm and \$3.25 at the farmers' market ("probably too cheap," comments Bob). Like many growers, they find that the quantity each customer buys at one time is decreasing, as the older generation of jam makers is dying off. "We're fortunate that we normally sell out each day in the summer," says Bob, "but fall is a different story. When school starts, business at the farm drops way off, even among customers who don't have school age kids." At that point, they start to take fruit to the farmers' market. "We have an unwritten rule," Bob says, "that no berry will stay in the cooler more than two days." After two days they freeze the fruit in two-pint plastic bags and sell it frozen. "We sell out of the frozen fruit, too, before closing the on-farm market after the first hard frost.

The Blains find that the demand for

the black raspberries is particularly high. Customers often put in requests way in advance and they use a telephone list to notify customers that their order is ready. In the future, they plan to expand production of black raspberries and summer red raspberries. Contact Bob and Coleen at 2799 N 1700 East Rd., Martinton, IL 60951, telephone 815-428-7382, boco@dlogue.net.

Jim and Barbara Jones operate the first blackberry nursery to be certified by the North Carolina Crop Improvement Association, Inc. They use virus-indexed micropropagated mother plants from the NC State University Micropropagation Unit (MPU) and raise their Certified plants on sterilized soil in greenhouses and screenhouses that are specially designed and equipped so that pests such as thrips, aphids, and whiteflies can't enter. This is their first year selling plants.

Barbara and Jim got into raising Certified blackberry plants through their connections with the MPU as growers of Certified sweet potato plants. Currently they have several greenhouses

devoted to the Certified sweet potato program as well as 27 acres of plant beds for cutting slips for their own sweet potato fields and sales to the public. "Working with sweet potatoes, we saw the benefits of a high quality plant supply," says Jim. "How you start determines how you end up. We saw a tremendous difference in yield and quality. I am convinced that this program is going to mean the same for blackberries."

Jones Farm has ten blackberry varieties for sale, and just acquired the new Ouachita variety, but they will need to grow it out before there are enough plants for sale. They have planted a row of 90-100 plants of each variety, partly as test plots for the university, but also so they themselves can learn the characteristics of each so they can better advise their customers. As a result, they will soon find themselves, at least on a small scale, in the fruit marketing business as these plots start to bear.

Contact Jim and Barbara at 7094 Honeysuckle Lane, Bailey, NC 27807, home phone 252-235-3248, mobile 252-399-9844, jonesfarmsnc@aol.com.✻

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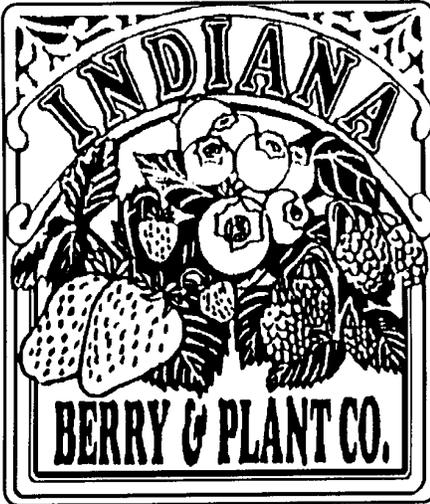
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Highlights of the NABGA Executive Council Meeting

February 21, 2004

Present were Mark Ciotoli, Bob Blain, Sue Loomis, Ervin Lineberger, Richard and Betty Fagan, Tom Walters, Jim Burda, Gina Fernandez, and Debby Wechsler

The meeting was called to order by Mark Ciotoli. Ervin Lineberger introduced Debby Wechsler and explained that she had been approached to take over the job of Executive Secretary, since Richard wanted to retire

Ervin Lineberger also said it was important for the organization to set its priorities and directions. He proposed that these be:

1. Acting as spokesman, the voice of the bramble industry, especially on a national level.

2. Communicating with members (via the newsletter, website).

3. Holding an annual conference.

Debby explained her experience, qualifications, and interest in NABGA. Ervin then moved that NABGA hire Debby on a one-year contract. The motion passed.

Next year's meeting: Rudy Heeman, Conference chair of NASGA, has expressed interest in a joint meeting with NABGA in 2005, when NASGA meets in Nashville. Charles Hall of the Georgia Vegetable and Fruit Association has also invited NABGA to join in the Southeastern Fruit & Vegetable Conference in Savannah. Gina Fernandez suggested the Pacific Northwest as another possible site, since it is such a

center of bramble production and the last meeting there was very successful. Meeting in the upper Midwest was also suggested. There is concern that a joint NASGA meeting may be expensive, especially for smaller growers.

The following order of options was decided: First choice, Nashville, concurrent with NASGA. (A regional meeting could be held in Savannah). Second choice, Savannah. Third choice: Combining with a Midwestern berry/marketing meeting. Ervin planned to meet with NASGA on Sunday and will discuss concerns about fees. Program organizers from Tennessee, Ohio, and/or Arkansas will be sought.

2005 Budget & Finances: The proposed budget prepared by Richard Fagan was accepted, with the adjustment of a small increase in salary for the Executive Secretary. Richard and Debby's terms will overlap by one month. Debby asked about the newsletter subscriptions NABGA offers and the council agreed that we should try to make a few dollars each on these in the future. Ervin noted that NABGA is probably not going to make a profit on this conference, since registration is low. NABGA has reserves in the form of a \$15,000 two-year CD plus a standing carryover balance of about \$4,000.

Regional meetings: Ervin reported that the Regional Meeting in Virginia was very successful. It brought in members, raised funds for research, and is a good example of how a regional meeting should be carried out.

Nominations: Nominations were needed for the even-numbered regions. The following nominations were made: Region 2- Nate Nourse, Nourse Farms, replacing Rudy Valonen. Region 4 – Mark Ciotoli agreed to serve again. Region 6 – Bob Blain agreed to serve again. Region 8 – Tom Walters agreed to serve again.

Note: These nominations were confirmed by the membership in the Annual Meeting later that day. All Council addresses may be found on back page.

Membership: Debby will send renewal notices to recently expired members and notices to other past members urging them to rejoin. Tom Walters mentioned that Sakuma—and other nurseries—could put membership applications in its mailings to customers. Debby will develop an introductory packet to give to new members.

Research Foundation: Gina Fernandez reported that a Request for Proposals has been sent out every year since 1999, which was the first year that proposals were funded, except in 2002 when there were no funds. This year four proposals were submitted, with \$10,600 available in the Foundation account. She said it is important for NABGA to articulate its research priorities and objectives, both general and specific. Besides focusing our own funding, these priorities help researchers applying for USDA funding, which requires input from stockholders. ✱

New Guthion label

EPA has announced the new label for Guthion, effective August 21, 2003. Grapes and strawberries are now deleted from the label. Guthion remains available for *caneberries, nectarines and peaches until 2005*. Guthion Solupak will be the only formulation available. Raspberry crown borer soil treatment has returned to the Guthion label; both soil and foliar treatments remain on the Sniper and Azinphosmethyl 50 labels. All caneberry labels are still scheduled for elimination after 2005. The Preharvest Interval for U-pick operations has been extended to 30 days. This info is from Doug Pfeiffer, Virginia Tech at <http://www.ento.vt.edu/Fruitfiles/HotBramble.html>. The new label can be accessed at <http://www.cdms.net/ldat/ld6AM002.pdf>

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Evaluation of blackberry germplasm for virus resistance

By Dr. Rose Gergerich, Department of Plant Pathology, and Dr. John Clark, Department of Horticulture, University of Arkansas

During the past several years an increase in the number of plants with virus-like symptoms and decline in berry and yield quality in cultivated blackberry genotypes was observed by researchers and growers in blackberry plantings in North Carolina, South Carolina, Arkansas, Virginia, and Mississippi. In some cases, severe symptoms and plant decline were observed in plantings 2-4 years after establishment.

Virus and virus-like diseases have an enormous impact on berry production throughout the world. They are responsible for many of the special management methods used by nurseries to provide growers with certified planting stock from virus-tested sources. In the

U.S., the majority of research concerning virus identification on the species of the genus *Rubus* has been done in the Pacific Northwest and mainly on raspberries. The incidence and identification of blackberry viruses in the eastern and southern regions of the U.S. can be considered relatively uncharacterized.

Knowledge of viruses that infect blackberry and their epidemiology and control are important when considering establishment of blackberry plantings in areas where certain viruses are known to be prevalent. To identify viruses and their incidence in blackberry cultivars commonly grown in the region, surveys were conducted in 2001 and 2002 at grower locations and at research stations in North Carolina, South Carolina, and Virginia. *Tobacco ringspot virus* (TRSV), *Tomato ringspot virus* (ToRSV), *Raspberry bushy dwarf virus* (RBDV) and *Impatiens necrotic spot virus* (INSV) were detected by a serological assay (ELISA) in one or more of the following twelve cultivars: Apache, Arapaho, Black Satin,

Choctaw, Chickasaw, Chester, Kiowa,

Each research project funded by the NABG Research Foundation submits a progress report to the Foundation at the end of the year. This report was received in December 2003 for a project funded in February of that year. Reports on the other projects will be printed in the *Bramble* over the course of the year.

Lochness, Navaho, Rosborough, Shawnee, and Triple Crown. TRSV and INSV were the most prevalent viruses, and INSV was also detected in blackberry cultivars in all three states. Incidence of TRSV in Arapaho and Apache was 50% or higher in most locations. Similar surveys conducted in blackberry plantings in Arkansas in 2001 detected TRSV and RBDV. However, many symptomatic blackberry leaf samples were negative in laboratory tests for TRSV, RBDV, ToRSV, INSV, and other viruses that have been described in blackberry such as *Cucumber mosaic virus*, *Tobacco streak virus*, and *Raspberry ringspot virus*.

Progress Report

Objective: To characterize and develop a method for detection of a newly

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Choctaw

Chester thornless

Illini Hardy

Kiowa*

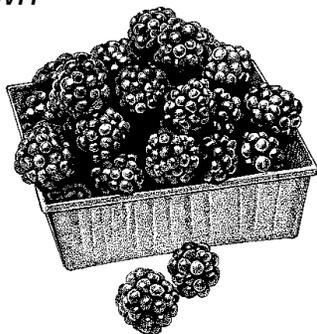
Navaho* thornless

Ouachita* (plants available for fall planting)

Shawnee

Triple Crown thornless

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identified potyvirus in symptomatic commercial blackberries in Arkansas, and to evaluate diverse blackberry germplasm for resistance to this virus.

Preliminary analysis of the symptomatic samples that were negative in laboratory tests for known viruses revealed microscopic evidence suggestive of infection by a potyvirus. However, tests in our laboratory using diagnostic assays (ELISA and RT-PCR) developed for potyviruses were negative. Double-stranded RNA analysis (conducted by Robert Martin, USDA Small Fruits Lab) of this material revealed the presence of ds-RNA, a diagnostic test for virus infection, further confirming the presence of virus in these samples. Nucleotide sequence analysis of the ds-RNA revealed that the sequence was similar to that of criniviruses, a group of viruses typically transmitted by whiteflies. These results suggested that a whitefly-transmitted crinivirus was present in the symptomatic blackberry leaves from the local producer's field. Our initial hypothesis is that a whitefly-transmitted crinivirus is responsible for the symptoms in Chickasaw blackberry in this field.

Whitefly populations were monitored in a symptomatic Chickasaw blackberry planting in northwest Arkansas during the spring and summer of 2003. Yellow sticky traps (10) were placed near symptomatic blackberry plants to attract and capture whiteflies. The traps were replaced every two weeks, and the number of whiteflies were counted on each trap for each time period. The greenhouse whitefly (*Trialeurodes vaporariorum*) was identified on field-grown blackberries in northwest Arkansas and whiteflies were trapped on yellow sticky traps in the

blackberry field throughout the summer (Table 1). All life cycle stages of the greenhouse whitefly were identified on blackberry plants in the field. The greenhouse whitefly was also observed on many types of weeds near the blackberry planting. The results of this experiment indicate that the greenhouse whitefly is present and multiplying on blackberry plants during the growing season, and that it may serve as a vector of the crinivirus in the field.

To determine whether the virus affecting the symptomatic Chickasaw blackberry plants in the grower's field was being spread in the field, healthy sentinel Chickasaw blackberry plants (10) were placed on pedestals near the sticky traps and replaced with new plants every two weeks. After removal from the field, the sentinel Chickasaw blackberry plants were maintained in the greenhouse and observed for virus symptoms. Symptoms of virus infection were observed on some of the sentinel plants that had been in the field in late June, July and early August (Table 2), but not on sentinel plants that were maintained in the greenhouse or on

sentinel plants that were placed in the field in May and early June. The symptoms observed on the sentinel plants were similar to those observed on the infected blackberry plants in the field. At the end of the growing season, the sentinel plants were allowed to go dormant. During the spring of 2004, these plants will be observed for virus symptoms and tested for the presence of the crinivirus using an RT-PCR procedure that has been developed for this virus.

We have established colonies of the greenhouse whitefly and the green peach aphid, and this winter we will conduct whitefly and aphid transmission trials in the lab using symptomatic blackberry plants (from the field) as a source of virus to determine if the virus is transmitted by these insects to healthy blackberry plants. Aphids as well as whiteflies will be used in these transmission tests because we have not eliminated the possibility that an aphid-transmitted potyvirus is also present in the symptomatic field plants, and because there are viruses closely related to criniviruses that are transmitted by aphids.

Our research results indicate that the symptoms in Chickasaw blackberry may be caused by a virus in the crinivirus group, and that the virus that is causing these symptoms can be spread to healthy blackberry plants by an air-borne vector that occurs in northwest Arkansas. We were surprised to find the greenhouse whitefly present and