



Newsletter Extension

Fruit ICM News

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In This Issue:

[Calendar](#)

[Ohio Fruit & Vegetable Food Safety Workshop](#)

[New Strawberry Cultivar for Trial in Ohio](#)

[New FDA Guidance on Juice HACCP Regs](#)

[Organic vs. Conventional Strawberry Taste Test](#)

[Update: What's New in Gooseberries & Currants](#)

Calendar

February 4-6: Mid-Atlantic Fruit and Vegetable Convention. Hersey Lodge and Convention Center, Hersey, PA. Contact Maureen Irvin (717)677-4184.

Feb. 7-8, 2003: North American Bramble Growers' Association will meet in Leesburg Virginia. The meeting will be held at the Holiday Inn at the Historic Carradoc Hall. Contact Jason Murray, Commercial Horticulture Agent, for further information, at jamurray@vt.edu or 703-737-8978. You can view the program at <http://www.ento.vt.edu/Fruitfiles/NABGAPProgram03.pdf>

February 9-11, 2003: Ohio Grape-Wine Short Course at Wyndham Dublin Hotel in Dublin. For registration information and other details call 800-227-6972 or go online to <http://www.ohiowines.org/>

February 15-20: 46th Annual IDFA Conference in Syracuse, NY. For more information, see the International Dwarf Tree Association website: <http://www.idfta.org>

February 20-22: Viticulture 2003, Buffalo Convention Center, Buffalo, NY. Contact by e-mail: info@viticulture2003.org or web site at: <http://www.viticulture2003.org/> for more information.

March 6-7: Ohio Fruit and Vegetable Food Safety Workshop, Ohio Department of Agriculture Bromfield Building at Reynoldsburg. Contact John Wargowsky, 614-246-8286 or labor@ofbf.org, or Mary Donnell, 419- 354-6916 or donnell.8@osu.edu or visit <http://www.midamservices.org> and click on 'projects.'

Ohio Fruit and Vegetable Food Safety Workshop

Assisting Ohio's commercial fruit and vegetable growers improve the safety and marketability of the

food they produce will be the focus of the Ohio Fruit and Vegetable Food Safety Workshop. The workshop will be held March 6 and 7, 2003 at the Ohio Department of Agriculture Bromfield Building at Reynoldsburg.

The March 6 program is directed toward extension educators, crop consultants, and others who work with commercial fruit and vegetable growers, while the March 7 program is geared for fruit and vegetable growers, packers, and shippers.

Topics will include microbiology and foodborne illnesses, testing protocols, preplant and production good agricultural practices, harvest and postharvest good agricultural practices, worker hygiene and sanitation, third party food safety audits, and obtaining additional educational materials. Speakers include Dave Beck, Vice President, Center for Innovative Food Technology; Betsy Bihn, M.S., Project Coordinator, Good Agricultural Practices Program; Mary Donnell, M.S., Extension Agent, The Ohio State University and Ohio Collaborator for the Good Agricultural Practices Program; Shari Plimpton, Ph. D., Consultant, Center for Innovative Food.

Technology; Eddie Richter, Ph.D., President/Owner, Richter International, Inc.; and John Wargowsky, Executive Director, Mid American Ag and Hort Services.

This workshop is a program of the Ohio Specialty Crop Food Safety Initiative, which will help increase the awareness and adoption of Good Agricultural Practices, increase ratings on third-party audit inspections, and increase recognition by produce buyers throughout the United States of Ohio's high standards of food safety and good agricultural practices. Ohio State University Extension, Mid American Ag and Hort Services, and the Center for Innovative Food Technology are partnering to implement this initiative.

This initiative is financed in part or totally through a grant from the Ohio Department of Agriculture, the State of Ohio, and the United States Department of Agriculture under the provisions of the Specialty Crop Grant.

For more information on this workshop or the Ohio Specialty Crop Food Safety Initiative, contact John Wargowsky, 614-246-8286 or labor@ofbf.org, or Mary Donnell, 419-354-6916 or donnell.8@osu.edu, or visit <http://www.midamservices.org> and click on 'projects.' The workshop flyer/registration form is available at this web site. The workshop fee of \$12 includes lunch and materials for one day. Registrations are requested by February 28, 2003.

New Strawberry Cultivar for Trial in Ohio

Source: Richard C. Funt, Department of Horticulture and Crop Science, Ohio State University

A new strawberry cultivar for trial by Ohio growers has been released by the USDA. 'Ovation' (Lateglow x Etna) is a red stele resistant, late season strawberry. It has large, firm berries and good flavor. In 2001-2002, 'Ovation' was tested by OSU faculty at two locations as B440. Plug plants were set 12 inches apart in August 2001 on raised beds with black plastic and micro-irrigation. Fruits were harvested, weighed, and compared to standard cultivars in a non-replicated trial.

'Ovation' is later and larger in berry size than 'Allstar' (Funt, 2002). On June 11, south of Columbus, OH, 74% of 'Allstar' had been harvested, but only 23% of 'Ovation' had been. Most of 'Ovation' was harvested by June 19th. Allstar averaged 12.7 grams, while 'Ovation' averaged 15.0 grams per berry for the entire season. 'Ovation' produced nearly 75% and 94% of 'Allstar' in locations tested.

'Ovation' is a tall, vigorous plant with a large amount of foliage. On rich, high organic matter fields, 'Ovation' needs to be planted at 18 inches. If managed with high rates of nitrogen and planted closer than 18 inches, fruits will be poorly colored and low in flavor. Sunlight is necessary for good color, berry shape, and flavor. Also, it appears that 'Ovation' could be planted at 12 inches on sandy soil having 0.5 to 1.5% organic matter in August in northern Ohio. This berry has good marketability for pick-your-own, farm markets, or roadside markets because of its size, firmness, and flavor when proper cultural practices are followed.

Further, when improper management occurs, leaves remain moist during early morning and leaf diseases could be an issue, even with good fungal sprays. This cultivar appears to be suitable for plasticulture systems, particularly if two harvest seasons can be obtained. Future testing by OSU personnel and growers in 2003 should provide additional information regarding the needs of this cultivar to match its major qualities.

Source: Funt, R.C. 2002. Strawberry cultivar; performance and evaluation 2002. Ohio State University, Department of Horticulture and Crop Science. (unpublished).

New FDA Guidance on Juice HACCP Regulations

Source: James R. Cranney, Jr., USApple

The Food and Drug Administration (FDA) recently published guidance to assist processors in identifying food safety hazards that may occur in apple juice or cider, and in achieving FDA's mandated 5-log reduction of target pathogens. While FDA's previous guidance required a 5-log reduction in target pathogens, the agency had not specified how to achieve the reduction. FDA's most recent guidance provides specific information on how processors may achieve a 5-log reduction through pasteurization or ultraviolet treatments.

In addition, FDA encourages small processors, while they are still exempt from the regulation, to become familiar with the technology they have chosen to meet the 5-log reduction, and with Hazard Analysis and Critical Control Point (HACCP) procedures. To this end, FDA recently published a standardized training curriculum to assist processors in development of HACCP plans and education of HACCP personnel.

Effective January 1, 2004, FDA plans to evaluate cider processors on their ability to monitor treatment equipment performance, and to create records that demonstrate adequate performance monitoring. Additionally, FDA expects cider producers to understand the critical limits of the technology they are utilizing to achieve the 5-log reduction.

Cider producers are encouraged to consult FDA's web site at <http://www.cfsan.fda.gov/~dms/juicgui3.html> for additional information regarding FDA's most recent guidance concerning the apple juice HACCP regulation and its training curriculum.

Please contact Jim by telephone at 703-442-8850 or via e-mail at jcranney@usapple.org should you have any questions or require additional information.

Organic / Conventional Strawberries Equally Tasty, Survey Finds

Source: Joe Kovachs, Ohio State University Extension IPM Coordinator, written by Candace Pollock,

Do organic foods really taste better than their conventionally grown counterparts? According to an Ohio State University Extension survey, when it comes to strawberries, consumers can't tell the difference. The survey, in its first year of evaluations, found that based on looks, taste, and smell, consumers could not tell the difference between organically grown and conventionally grown strawberries within the same variety. Research has shown, however, that consumers can make the distinction between varieties and when other conditions are factored in, such as the length of time a product sits at the market.

"When testing within a strawberry variety, we found no consumer detectable differences between organic and conventional," said Joe Kovach, an Ohio State Extension entomologist who participated in the research. "When people say organic tastes better, it's because of things like distance to market or a different variety."

Organic production, in its simplest terms, means that a crop is grown without the use of synthetic fertilizers or growth regulators and is managed through traditional practices such as composting, crop rotation, and tillage. Other studies have reported that organic foods taste better than conventionally grown products, mainly due to the cultivation practices and the lack of fertilizers, insecticides, and fungicides that are applied to the crop.

In the Ohio State study, researchers grew the strawberries using the matted row system and applied livestock manure to the organic strawberries and synthetic fertilizers to the conventional strawberries. Kovach said the survey results shed light on how a crop is grown, how it is harvested, stored and processed, and even what markets it is shipped to.

"The bottom line is people can't tell the difference in nutrient uptake whether it comes from a synthetic fertilizer or a compost. But they can tell how long something's been sitting on a shelf," said Kovach. "When you go into a grocery store, you're going to pick up a fruit or vegetable that is home-grown, rather than something from California. Something closer to home is fresher and tastes better than a crop that was shipped halfway across the country and has been sitting in a store for days." He said the data is intended to aid Ohio growers in improving the production and marketing of organic crops.

The researchers used 'Seneca', 'Jewel' and 'Idea,' more commonly grown strawberry varieties in Ohio, for the survey. They harvested the same-sized berries in the same fields at the same time and asked a panel of 24 taste testers to identify which berries were organic and which ones were conventionally grown.

Kovach said the survey involved a triangle test, whereby participants were given three strawberries: two that were organic, one that was conventional or vice versa. "We didn't ask them to pick which one was organic and which one was conventional. We asked them to pick the one that was different, either in taste, smell or appearance. So it was a blind study," said Kovach. "If participants were able to tell the difference or took a guess, they would mark the one that was different. Analysis showed they really couldn't tell the difference between organic and conventional."

The researchers plan to conduct another survey this year and will incorporate other composts, like vermi-compost and yard waste into the study to determine if consumers can detect differences between them. They will also conduct chemical analyses among strawberry varieties to determine if chemical differences might enable some consumers to detect the difference between organic and conventional crops.

Update: What's New in Gooseberries and Currants

Source: Ed Mashburn, Northumberland BerryWorks, Northumberland, PA, Steve McKay, Cornell Cooperative Extension, Hudson, NY, Massachusetts Berry Notes, January 2003, Vol. 16, No. 1

Several years ago I spoke on gooseberries and currants for growers in this area. There have not been a great deal of new cultivars added since then, but there have been some new trials and there will be some new introductions in the near future. This is not because there is no interest in ribes, but the wheels turn slowly and development takes quite a while. I have about a dozen varieties that should be released from plant quarantine this year; they are some promising varieties from Europe. It takes about 4 to 5 years to "clear" imports from Europe.

Black Currants

The standard varieties for production at this time are Titania, Ben Sarek and Ben Lomand.

Titania: A very good variety that is fully resistant to white pine blister rust (WPBR) and powdery mildew. It is a heavy yielding variety; berries are large but lack the full flavor that is generally found in the commercial juicing berries. It is very good for PYO and fresh market.

Ben Sarek: A compact growing plant that is moderately resistant to WPBR and mildew. It is very high yielding and has very large berries. The flavor is full and this variety is used mainly for PYO and home use. It is not suitable for commercial juice production.

Ben Lomand: The "standard" for commercial juice production for many years. A large, robust plant that produces very high yields of large berries. This variety is fairly susceptible to WPBR and to mildew. The berries and production are not greatly affected by these diseases, and the fruit may be used for home use and commercial production of jam, jelly, juice and for fresh market sales.

Titania is immune to WPBR, while Ben Sarek is somewhat resistant. Ben Sarek gets the many visual and active pustules, but does not tend to become defoliated as can Ben Lomand or Ben Alder. Ben Alder is preferred by some over Ben Lomand for flavor in processing applications. It is very susceptible to WPBR, but WPBR infections can be prevented by using NOVA fungicide as directed. A new fresh market variety of black currant from Ukraine is being evaluated in England, and may become available within a number of years in the US. It has large, very sweet, palatable berries.

At the present time, there is very little commercial production of juice in this country, and most of the berries go to wine makers and to the fresh market. All the above are suitable for that. Black currants are generally used as a processed fruit, and few are used raw from the plant. Most people are not attracted to the strong flavor of the raw berries.

In the past few years there have been several varieties of Russian origin that have been much more palatable and acceptable to fresh raw use. I have trialled several of these and will start increasing two or three selections this year. They have produced large berries that are sweeter and very palatable right off the bush. I think that there is a market for these berries as fresh fruit, and they would be very good for home use and for small scale commercial production.

The Ribes breeding program from the University of Maryland has also produced some good selections that we will start increasing and trialling in some other locations. This program is in the 5th year and is going well. There are a number of other varieties of black currants available to the market, but none that are generally in use for anything other than home use. The breeding of new varieties is controlled by commercial processors of juice in Europe and they do not make the varieties available to the general

public that are not in contract production.

Red Currants

Production of Red Currants is much smaller and goes mostly to jelly and to wine. There is not a great deal of difference in the varieties except in time of ripening and to some extent in yield. There are a couple newer varieties that have very high yields and are less prone to disease than the older varieties.

Rovada: This is a late season variety that is very good; it produces large berries, high yields, and is resistant to most disease. This variety is a little slower coming into full fruit than other older varieties and the plant is a little smaller. It is an excellent variety for PYO and home use, it has large strigs of very good berries.

Detvan: A release from Slovakia that is a very large plant with very heavy production. The strigs are very long and well filled, the berries are large and mid-season. The berries are a little lighter in color but still have that very beautiful red that is common to this fruit.

Tatran: A sister of Detvan; a very large plant, very heavy production, and the berries are larger than any that I have seen on any variety of red currant. This is a very late season variety and will hold on the plant into late August. Both of the latter varieties are about one to two years later in coming into full production. There will be fair production two years after planting and full production in the 4th and 5th years. These varieties will probably out-produce any other variety at that time. Most red currants are fairly susceptible to wind damage in the second and third year. The breeding program is not presently working on red currants but there are some plans to improve the taste and to reduce the size of the seeds. Seed size is a real problem with red currants; that is why most are made into jelly instead of jam.

Red currants are popular for garnishing and fruit salads (among other uses). Rovada is the industry standard for fresh market berries. One should not forget about pink and white currants which are color variations on red currants. Pink Champagne is the pink variety available in the US. It has been very well received in the market in New York City, and would be well worth trying. Blanka is a white variety with more of a beige tint. Primus is a variety that has produced whiter berries.

Gooseberries

There is an increased interest in gooseberries everywhere. At the present time there are just a few varieties that are of real interest for commercial production.

Invicta: This is by far the best of the varieties for fresh table use at this time. It is a large, sweet berry that has a very good flavor. The plant is very thorny but is resistant to mildew and WPBR. It is a strong upright plant that can be grown without support. It is high yielding and fairly precocious, giving some production the year after planting. It is not real good for processing (e.g. wine), as the flavor is diminished in the processing.

Hinomakki Red or Lepaa Red: This is a dual use berry that is resistant to mildew and WPBR. It is a good, red color and produces large amounts of berries. The fruit is somewhat smaller than Invicta and a ruffle more tart, though they are pretty sweet when fully ripe. The berries can be processed when less than fully ripe and will retain good flavor. The plant tends to be a bit "weepy" in habit and is best supported on a wire trellis.

Amish Red: Another dual-purpose, red-fruited variety, resistant to WPBR and somewhat so to mildew.

A very productive variety with good flavor berries. These are pretty sweet and usable from the time that they color up and can be used for fresh or processing. This plant is best supported on wire also. **Pixwell:** This is a variety that I have been reluctant to recommend for any use. The flavor, when ripe, is bland and there are not many redeeming features for this variety, except that it makes very good wine. It needs to be harvested just a little under-ripe for that. The plants are erect and fairly strong and do not need support. I think that there will be several new varieties of gooseberries on the market pretty soon. The problem with getting these at this time is that there is some dispute over marketing rights and who will be the propagators.

Some of the new varieties are almost spineless and have large berries. Gooseberries are generally very susceptible to mildew and there is not much available (labeled) for that problem. I have about a dozen varieties that will become available to me this year and some will be used in the breeding program to induce resistance to mildew. There has been a real increase in interest for homemade wine production, and there is a market for fresh fruit at this time. There are a number of other varieties that are used, but none that I would consider of commercial potential at this time.

As far as gooseberries are concerned, **Invicta** has large berries, but many in NY have complained about its lack of flavor. It is also very susceptible to leaf spot (even the fruits), so a spray program is needed to control it. NOVA 40W which is used to control WPBR and mildew also takes care of leaf spot at the same time. (Invicta is immune to mildew as Ed says.)

I have found **Caprivator** to be an excellent gooseberry. The bushes are practically thornless and the fruit is flavorful and beautiful antique red and teardrop-shaped. The bushes are vigorous and somewhat disease resistant. The fruit is late to ripen.

Poorman has performed well for NY growers. It has a good quality, medium-sized red fruit. The bush is very thorny, however.

Source: Proceedings of the 2002 Mid-Atlantic Fruit & Vegetable Conference via *New York Berry News*, Vol. 1, No. 10, Dec. 22, 2002

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| [Back](#) |