



Berry Notes

Prepared by the University of Massachusetts Fruit Team

June 24, 2003, Vol. 15, No. 10 Summer Issue #5
<http://www.umass.edu/fruitadvisor/berrynotes/index.html>

Volume 15-- 2003

Berry Notes is edited and articles written by Sonia Schloemann except where other contributors are noted. Publication is funded in part by the UMass Extension Agroecology Program. Questions can be directed to Sonia Schloemann at 413-545-4347, sgs@umext.umass.edu. Please cite this source if reprinting information

Crop Conditions:

Strawberry harvest is progressing but quality will suffer under this week's heat and humidity. Sun scald and water logged fruit may be common. Regular and thorough harvest will help. New plantings are runnering. Be sure to keep up with setting,, sweeping or cutting runners as well as with weed control in new beds. **Blueberry** fruit are sizing well. See information below on managing fruitrots, especially those that can emerge post-harvest like anthracnose and alternaria. **Raspberries** and other brambles are post-bloom. Watch for infestations of two-spotted spider mites and for the emergence of Japanese beetles. **Grapes** are in bloom in many areas. Shoot positioning is an important activity now. Fruitset on **Currants** and **Gooseberries** is extremely high. Fruit is coloring and early varieties will be approaching harvest in about 10 – 14 days. Watch for gooseberry aphid and powdery mildew.

Environmental Data

STATE WEATHER SUMMARY For the Week Ending Sunday, June 22, 2003

Prepared by AWIS, Inc. (available at <http://www.nass.usda.gov/weather/cpcurr/new-eng-crop-weather>)

STATE	AIR TEMPERATURES			PRECIPITATION		
	LO	HI	Avg	DFN	LO	HI
ME	34	86	61	-2	0.00	1.24
NH	30	86	61	-3	0.00	0.73
VT	34	85	62	-2	0.00	0.71
MA	39	82	62	-5	0.26	2.23
RI	44	80	61	-6	0.08	1.83
CT	47	83	64	-5	0.41	2.24

(Source: New England Ag. Statistics Service, Weekly Crop Weather Report, Volume 23, Number 10, June 23, 2003)

Strawberry

Strawberry Anthracnose

Bill Turechek, Dept. of Plant Pathology, Cornell University, Geneva, NY

Anthracnose is a serious disease of strawberry that can affect foliage, runners, crowns and, most importantly, the fruit. In the Northeast, the disease is caused by the fungal pathogen *Colletotrichum acutatum*. Although the pathogen is endemic to the Northeast, it is believed that the pathogen is introduced into plantings on infected nursery plants. Anthracnose is considered to be a warm-weather disease with an optimum temperature for development near 80 °F. Consequently, the disease is generally not a problem in the Northeast unless warmer temperatures and rainfall prevail during fruit set and harvest. The spores of the pathogen require free water on the plant surface to cause infection, and splashing water is required to disperse spores. Once the pathogen is established in the field, the fungus can survive the winter on plant debris and mummified fruit where it may become a problem in subsequent years if the weather is warm and wet.

In research plantings here at Geneva, NY, we have found anthracnose infected berries. Although temperatures haven't been exceptionally warm over the past few weeks, it has been exceptionally wet for long periods of time with moderate temperatures. These conditions, apparently, also favor the development of disease. It is important to realize that anthracnose can spread rapidly, and if you can find it in your planting prior to peak harvest, you need to be prepared to protect your berries prior to any significant rain event.

Symptoms. The pathogen attacks the fruit, runners, petioles, and the crown of the plant; however, we have not been able to establish crown infections from greenhouse inoculation with New York isolates. On the petioles and runners, dark elongated lesions develop which often girdle the stem (Fig. A). When petioles or runners become girdled, individual leaves or entire daughter plants may wilt and die. On fruit, symptoms first appear as whitish, water soaked lesions up to 3 mm in diameter. As lesions develop, they turn a light tan to dark brown and eventually become sunken and black with in 2 to 3 days (Figs. B and C). This is known as black spot. After several days, lesions may be covered with salmon-colored spore masses. Infected fruit eventually dry down to form hard, black, shriveled mummies. Fruit can be infected at any stage of development. Both ripe and unripe fruit can be affected. When crown tissue becomes infected, the entire



plant may wilt and die. The internal tissue of infected crowns will be firm and reddish brown (seen by slicing through the crowns. Crown tissue may be uniformly discolored or streaked with brown, and infected tissues may also produce salmon-colored spores. Leaves can also become infected and advanced lesions appear similar to those caused by *Phomopsis*.

Disease management. In plantings with a history of the disease, control measures must begin early and continue throughout the season, particularly when warm and rainy weather occur at prior to harvest. Anthracnose first develops on petioles and/or as latent infections (invisible) on leaves where the lesions produce spores that serve as the source of inoculum for fruit infection. Anthracnose fruit rot is very difficult to control when disease has been left to develop unchecked prior to fruit development and environmental conditions are favorable for infection during harvest. If you suspect that the disease is in your field once the plants are established, it is recommended that you minimize the amount of splashing/water movement since the pathogen is splashed dispersed. Cultural methods that reduce splashing, such as the use of drip irrigation rather than overhead, and mulching with straw, are recommended. In fields with anthracnose, additional straw mulch can help reduce the spread of the disease. Fungicides are only partially effective at stopping an epidemic once the disease has become easily noticeable in the field; therefore, fields should be scouted regularly, particularly during fruit set. Quadris 2.08F, Captan 50WP or 80WP, and, possibly, Switch 62.5WG are the most effective fungicides against anthracnose. Optimally, fungicides should be applied to maintain continuous coverage ("calendar applications") or they should be applied before an expected rain event. If applications are planned around rain events, fungicides should be applied to give enough time prior to wetting to allow the fungicide to dry completely on the foliage and fruit; I recommend 3 to 8 hours prior to wetting. During fruit development and through harvest, Quadris 2.08F (12 fl oz/A) is the most effective fungicide against anthracnose. Captan is also effective but must be applied on a calendar schedule. Using Captan in this manner can leave residue, generally something growers wish to avoid during harvest. Switch 62.5 WG is an excellent gray mold fungicide with some activity against anthracnose. We generally will recommend its use during bloom only, since its efficacy against fruit rot is marginal relative to Quadris. (*Source: New York Berry News, Vol 2., No. 6*)

Blueberry

Blueberry Fruit Rots

Bill Turechek, Dept. of Plant Pathology, Cornell University, Geneva, NY

As we are nearing the beginning of blueberry harvest, this article will summarize the most common berry rots growers can expect to see during harvest. Mummyberry, anthracnose, and alternaria fruit rot are the most common fruit rots occurring in New York. Gray mold or botrytis fruit rot can also occur, however the fruit rot phase is generally less important than the blossom and twig blight phase of the disease.

Botrytis blossom and twig blight is a disease that is common in years when rainy weather occurs during bloom. Virtually all young and tender tissues are susceptible to attack; older tissue is resistant to infection. Infected blossoms and young shoots turn brown and become covered with a fuzzy gray mass of spores. This year I have seen several plantings with blossom blight. Mature fruit can become infected, however, symptoms do not typically develop until after the fruit have been harvested. Managing this disease effectively requires the application of fungicides during bloom. After bloom, fungicides used to manage anthracnose and alternaria fruit rots should keep botrytis in check.

Mummyberry is the most serious fruit rotting disease of blueberry in NY. In early spring, infected berries produce a mushroom-like structure called an apothecia in which the primary inoculum (i.e., ascospores) are formed. Ascospores are disseminated by wind and rain and infect emerging leaf buds and shoots. Infected shoots and leaves wilt, turn brown and die; this is the shoot blight phase of the disease. Its appearance is similar to, and sometimes confused with, frost damage. Infected shoots produce conidia (a second kind of spore) that infect the blossoms. Blossom infections are not evident until the fruit begins to ripen later in the season when the berries begin to shrivel and turn a pinkish color. These are "mummyberries" and they have been colonized by the mummyberry fungus. Infected berries eventually fall to the ground, shrivel, and turn dark brown in which they will serve as the source of primary inoculum the following spring.



Anthracnose, also known as 'ripe rot', occurs less frequently than mummyberry in New York. The disease is caused by the same fungus that causes anthracnose on strawberry. The fruit rot appears just as the berries start to ripen at harvest and often begins as a softening and sinking of the berry at the blossom end of the fruit. During warm and wet weather, salmon to orange-colored spores can ooze from infected berries and these are disseminated by splashing water where they can infect healthy berries. The fungus is also capable of infecting leaves where it causes brown-black necrotic lesions that vary in size and shape from small and circular to large and irregular. It has been suggested that at least 12 hours of continual wetness is required at temperatures of 59 to 85 F in order for these spores to germinate and cause infection. In my opinion, a 12 hour wetting period is probably a good estimate of what is required for infection to occur at cooler temperatures. However, when temperatures exceed 80 F the wetting period needed for significant infection is probably much shorter. Based on studies done with strawberry, a 3-6 hour wetting period when temperatures are in excess of 80 F could lead significant infection.

Alternaria fruit rot is not as common as anthracnose. Berries infected with *Alternaria* tend to develop a soft, watery rot as the fruit begins to ripen and a green to black mat of fungus forms at the calyx end of the fruit. The fungus can also infect leaves causing irregularly shaped, brown to gray spots 1-5 mm in diameter. Spores produced on the leaves are probably the primary source of inoculum for fruit. However, once the disease appears on fruit, they are an equally if not more important source of inoculum because of the fruit to fruit contact.

Ideally, management of the fruit rots begins at bloom and continues up to harvest. An application of Topsin-M 70WSP (1 lb/A) or Topsin-M (1 lb/A) PLUS Captan 50WP (5 lb/A) or 80WP (3 lb/A) is a good tank mix that targets the three fruit rots. Topsin-M has protectant activity against the blossom blight phase of mummyberry (it is ineffective against the shoot blight phase targeted in early spring); Topsin-M also has some activity against *Phomopsis* twig blight. This year a section 18 for Topsin-M has been granted for New York [**but not in Massachusetts**]. You can obtain a copy of the section 18 by visiting: <http://www.nysaes.cornell.edu/pp/extension/tfabp/pestnews.shtml>. Captan should be used strictly as a protectant. Captan can be applied up to the day of harvest, however, it has 96 hour reentry interval. Abound 2.08F was labeled for use on blueberry last year and is the most effective fungicide against anthracnose. However, caution needs to be exercised when using Abound because it is extremely phytotoxic to certain apple varieties. **Abound** should

NOT be sprayed where spray drift may reach apple trees, when conditions favor drift beyond intended area of application, and do not spray Abound with spray equipment intended for use on apple trees. (Source: New York Berry News, Vol 2., No. 6, June 18, 2003)

New options for control of fruit rots in blueberries

Annemiek Schilder, Plant Pathology

Fungal fruit rots, especially anthracnose caused by *Colletotrichum acutatum*, continue to be of economic concern in blueberries. Losses can occur before as well as after harvest. The cultivars Jersey, Bluecrop, Rubel, and Blueray are very susceptible to anthracnose fruit rot, whereas Elliott is resistant. Alternaria fruit rot is commonly found on Bluecrop fruit before harvest and affects most varieties after harvest. Botrytis fruit rot is not as common in Michigan, but may be a problem in years when cool wet weather prevails during the flowering and fruit development period. These rots can be distinguished to some extent with the naked eye: anthracnose is characterized by wet, pink to orange spore masses; Alternaria fruit rot by dark olive-green mold growth, and Botrytis by fluffy, tan to gray mold growth on the berry surface. A fact sheet for identification of blueberry fruit-rotting fungi will be published soon by MSU Extension.

The anthracnose fungus overwinters in dead fruiting twigs, but has also recently been found to overwinter in live, dormant buds. The infected buds typically die in the spring and support sporulation of the fungus. A twig blight, which is difficult to distinguish from Phomopsis twig blight, can also result from bud infection. With anthracnose there are two important periods when the infection risk is high because of peak spore release: 1) from pre-bloom to about pea-size berry (due to overwintering inoculum), and 2) from first blue fruit until the end of harvest (due to sporulating berries that infect surrounding berries). Fungicide spray programs should focus on these periods.

There are several new fungicide options for control of blueberry fruit rots. The strobilurin fungicides **Abound** (azoxystrobin) and **Cabrio** (pyraclostrobin) are excellent at controlling anthracnose fruit rot. They are both surface-systemic, meaning that they redistribute locally in the wax layer, and considered "reduced risk". They may be applied around bloom and early fruit development (to prevent the primary infections) and at first blue fruit or pre-harvest (to prevent secondary infections). **Switch** (cyprodinil and fludioxonil) is a systemic fungicide with a unique mode of action. Switch has activity against anthracnose, Alternaria fruit rot, and Botrytis fruit rot, and would be the better option if Alternaria fruit rot is a major objective of control efforts. **Elevate** (fenhexamid) is primarily a Botrycicide with suppressive activity against mummy berry.

Another exciting option for control of anthracnose is choosing a new variety from the MSU Blueberry Breeding Program. Several of the new late varieties, e.g., Draper, are resistant to fruit rots and also have excellent shelf life. AND they taste better than Elliott. So look ahead when planning new plantings. (Source: Michigan Fruit Crop Advisory Team Alert, Vol. 18, No. 10, June 17, 2003)

Blueberry Cane Death

Gary C. Pavlis, Rutgers University

Farm visits over the last couple of days have turned up a number of canes dying from what used to be called winter damage. We now recognize that this wilting and death of individual canes during the summer can also be due to Phomopsis. Under severe disease conditions, several canes may be affected on a single bush. This fungus overwinters in infected twigs and canes, and produces infective spores. The greatest number of spores are released during bloom and petal fall and enter twigs or canes through injury sites, particularly those caused by winter damage, mechanical harvesters or early spring frosts.

Samples have been taken from canes suspected of having Phomopsis at several farms. As expected, Phomopsis was confirmed however stem blight, Botryosphaeria, was also confirmed. Like Phomopsis, this fungus enters the plant through wounds and causes rapid death of individual canes and entire bushes. This disease is especially severe on 1 and 2 year old plants of susceptible cultivars. In the field, the most obvious symptom is called 'flagging', stems recently killed by the fungus do not drop their leaves. It should be noted that stem blight has recently been found most often in the 'Duke' variety.

Control of Phomopsis and Botryosphaeria depends largely on cultural methods. It is important to discourage late-season growth and promote early hardening off thus late-season fertilization, late-season weed cleanup and late-season irrigation should be avoided. Pruning to remove infected stems is the best method of reducing disease in established fields. Pruning

serves two functions: 1) removes infections from bushes, preventing eventual death of the plant, and 2) reduces the number of spores released in the field by removing dead, spore bearing stems. Pruning can be done at any time infected stems are observed, but care should be taken to cut well below the infected area. After a stem is removed, examine the cut end of the remaining stem. If any brown areas are visible in this cross-section, a cut must be made further down the stem until all infected tissue is removed. (*Source: Page 2 Blueberry Bulletin Vol. XIX, No. 10*)

Grape

Grape Leaf Phylloxera:

Bruce Bordelon, Purdue University

I've had several calls recently about the leaf or aerial form of phylloxera on grapes. We treated some of our plots where we've had serious infestations in the past but left others untreated. Untreated plots are showing fairly heavy infestation. The aerial form of phylloxera causes galling of grape leaves. The damage is usually minor and insecticide control is usually not justified. If chemical control is desired, timing is critical. First application should be made at bloom with a second application made 10 days later. It's too late this year for effective chemical control. Danitol and Thiodan are the labeled products effective against phylloxera. Thiodan can cause phytotoxicity on certain varieties so Danitol is probably the product of choice for most growers. Evaluate your plantings and make notes of infested areas to treat next year. (*Source: Facts for Fancy Fruit Vol. 03, No. 07, June 20, 2003*)

Shoot Positioning in Grapes

Bruce Bordelon, Purdue University

Shoot positioning in grapes is done to reduce shading of the renewal zone for improved fruitfulness next year, and to improve sunlight exposure of fruit clusters. Varieties differ in their need for shoot position due to their growth habit and vigor. Some varieties such Vignoles and Chancellor tend to have relatively short shoots that stand up well on their own, so shoot positioning is seldom needed. Other varieties such as Traminette, Foch and all the American varieties produce horizontally growing shoots that tend to run along the top of the trellis and cause significant shading of the fruit and renewal zone. Shoot positioning is very important with these varieties. The need for shoot positioning on other varieties vary depending on vigor of the particular site. For high cordon systems, shoots are positioned downward on both sides of the row to improve sunlight exposure to the fruit and renewal zone. The first positioning can usually be done just after bloom. Wait a week if significant shoot breakage occurs. Repeat the positioning about 2 weeks after the first round. If you wait too long, the tendrils will begin to attach, and significant shoot breakage can occur. Timing is very important to reduce shoot breakage and accomplish reduced shading in the renewal zone in time to improve fruitfulness. Fruit bud development begins about bloom so shading during this time can reduce fruitfulness for next year. With mid-wire cordon, vertically shoot-positioned (VSP) training, the shoots are vertically trained upright above the cordon (or cane). Catch wires are used to support the shoots which are manual tucked into position. Shoot positioning on VSP is done as shoot length warrants. The first set of catch wires is typically at 8 to 12" above the cordon. When the majority of shoots are at or above this point, the first round of positioning is done. If positioning is delayed too long the cordon (or cane) may rotate and shoots will be pointing down or to the side. It is difficult to turn shoots back up to a vertical plane once they've fallen. The same problem can occur if the first set of catch wires is placed too high above the cordon. Some growers use movable catch wires to help position shoots. The wires are released from their holders and kept beneath the cordon during the winter. Pairs of wires, one on each side of trellis posts, are brought up to a fixed position above the cordon, bringing the shoots into a vertical plane in the process. Various shoot "taping" or tying systems are commercially available to attach shoots to the trellis wires if necessary. (*Source: Facts for Fancy Fruit Vol. 03, No. 07, June 20, 2003*)

Effect of Rain on Fungicide Wash-Off:

Bruce Bordelon, Purdue University

I've had several calls this year (and in years past) from growers wanting to know what they should do about spraying their grapes with all the rain we've had lately. They "can't spray because it's always raining" is the common complaint. That reminded me that we ran a article about this time last year written by Jim Travis, Plant Pathologist at Penn State. Jim noted that if you are using protectant fungicides, you need to consider the effect of rain on wash-off of the materials.

The strobilurin (Abound, Sovran, Flint) and sterol inhibitor (Nova, Procure, Rubigan) fungicides are absorbed into the leaf and fruit tissue after application (once the residue has dried) and are not affected by rain wash-off. The protectant (Dithane, Manzate, Penncozeb, Captan, Ziram, Thiram, Polyram) fungicide residues can be affected by rain. A general rule-of-thumb for the effect of rain on washing-off protectant fungicides follows:

- Less than one inch of rain since the last spray will not significantly affect residues.
- One to two inches of rain will reduce the residue by one half. Reduce the number of days until the next spray by one half.
- Over two inches of rain since the last spray will remove most of the spray residue. Renew the fungicide deposit as soon as possible.

So, during all this rainy weather, growers have a couple of options. They can use the new strobilurins or sterol inhibitors and time sprays so that residues dry on the plants before the next rain event, or they can continue to use protectants and monitor rainfall to determine appropriate timing of the next spray. NOT spraying because of frequent rainfall is not an option unless you want to have a major disease outbreak. We are still in the critical period for control of black rot. The first two post-bloom sprays are critical. So don't let a little rain stop you from getting your job done. (*Source: Facts for Fancy Fruit Vol. 03, No. 07, June 20, 2003*).

Pesticide Updates

Esteem® supplemental label for bushberry crops

John Wise, Michigan State University

Esteem® 35WP (pyriproxyfen) just received a supplemental label for the bushberry crops, which includes blueberry. Esteem is an Insect Growth Regulator (IGR) insecticide that acts by suppressing embryo-genesis within the insect egg and by inhibiting metamorphosis and adult emergence of target insects. Esteem has no direct lethal activity on adult insects, but hatching of eggs laid by treated adults will be suppressed.

Esteem is now registered for use in blueberries for the control of cranberry and cherry fruitworms and lecanium scale. For cranberry fruitworm, Esteem is best targeted for the egg laying stage, using 5 oz per acre and good crop coverage. Esteem is restricted to two applications per season and has a 7-day pre-harvest interval. Esteem may be used in alternation with other IGR materials possessing dissimilar modes of action and/or other chemical classes of insecticides. (*Source: Michigan Fruit Crop Advisory Team Alert, Vol. 18, No. 10, June 17, 2003*)

Imidacloprid “Super-Tolerance” coming from EPA

John Wise, Entomology

The EPA has granted a “Super Tolerance” for the insecticide Imidacloprid (Provado® and Admire®), which will result in Federal labels for over 10 crop groups, including stone fruits, bushberry (excluding blueberry), cranberry and strawberry. This has been posted on the Federal Registry, but awaits State registration. Once the State of Michigan grants the labels, Provado 1.6 will be available for use in stone fruits including apricot, nectarine, peach, plum and cherry. Admire 2F will be labeled for use in cranberry. Both the Provado 1.6 and Admire 2F formulations will be labeled for use on strawberries. (*Source: Michigan Fruit Crop Advisory Team Alert, Vol. 18, No. 10, June 17, 2003*)

General

Farm Safety for Children - Part I

*Adapted from Ohio State University Extension Fact Sheet AEX-991
http://ohioline.osu.edu/aex-fact/0991_1.html*

What Parents and Grandparents Should Know

Fact: Injuries are the leading cause of childhood death in the United States.

Fact: Farm machinery causes 85 percent of all machinery-related deaths to children.

Fact: The main sources of childhood farm-related injuries and deaths can be prevented.

Fact: Nearly all childhood farm-related injuries and deaths can be prevented.

The farm is a dangerous place for children because they live where work is performed. It is difficult for children to separate their play from farm hazards. Children on their own cannot recognize farm hazards. They must be taught how to recognize farm dangers and how to avoid them. The following are dangers that should be discussed with children:

1. Animal behavior
2. The harmful gases released by manure and silage
3. Electricity
4. Chemicals and pesticides
5. Riding and playing on equipment

Young children learn primarily by touch and sight. Many times these two senses put a child into a dangerous situation. For example, fascination with a quickly moving PTO can result in disaster. However, these senses can also be used to teach children about farm hazards. For example, bright safety emblems can be used as flash cards to teach children farm hazards. Models of farm equipment can also be used to demonstrate and prevent possible accidents.

Parents and grandparents should use precautionary safety measures to prevent accidents. They can set and enforce safe limits and be good role models for children by promoting farm safety.

The following are key steps to farm safety:

1. Children should not be extra riders on equipment.
2. Children should not play with idle machinery.
3. Equipment that might fall, such as front-end loaders, should be left in the down position.
4. When parked, self-propelled machinery should be locked and keys removed from the ignition.
5. A tractor PTO should be in neutral when not in use.
6. Know where children are whenever starting machinery, and especially when backing up equipment.
7. Machinery should be kept in good repair, particularly protective shields, ROPS, and seat belts.
8. Children should not operate machinery until they complete safety training.
9. All ATV riders should wear helmets.
10. Farm ponds and manure pits should be fenced.
11. Fixed ladders should be out of reach, or fit with a special barrier.
12. Portable ladders should be kept away from danger areas such as wagons and silos.
13. Dangerous machinery components should be kept out of reach of small children.
14. Electrical boxes should be kept locked.
15. Warning decals recognizable to children should be on all grain bins, wagons, silos, barns, and trucks.
16. Chemicals and pesticides should be stored in a locked area.
17. All equipment used on roads should have working lights, reflectors and a slow-moving vehicle emblem.
18. Set regular times for family safety instructions (for example, monthly family safety days).

Farm-related injuries occur while children are both at play and at work. The majority of children over the age of seven are participating in farm labor when injured. Children perform a lot of duties on farms and are a valuable resource, but children working on farms have a high rate of injury. Proper safety training can minimize the risk of injury to your child.
(Submitted by Craig Hollingsworth, UMass Extension)

Potato Leafhopper

Rick Foster, Purdue University

We are seeing large numbers of potato leafhoppers on a variety of crops, as well as flying around porch lights at night. Potato leafhoppers can be a pest of a number of fruit crops. They use their sucking mouthparts to remove plant juices and can cause hopperburn to the leaves as well. Potato leafhoppers tend to be more serious on non-bearing trees and on young, tender foliage. On apples you can distinguish potato leafhoppers from white apple leafhoppers because potato leafhopper nymphs tend to crawl sideways rather than straight ahead. Excellent control of potato leafhoppers can be

achieved with a number of insecticides, including Imidan, Guthion, Lannate, Provado, Actara, and Assail. Be sure to choose an insecticide that is labeled for the crop(s) you are treating. On apples, I would prefer to not use Lannate because of the potential for flaring mite problems (*Source: Facts for Fancy Fruit 03, 07, June 20, 2003*).

Meetings

NAFDMA conference heads to California in February 2004

Farm direct marketers from around North America and beyond will gather in Sacramento, Calif., for the North American Farmers' Direct Marketing Conference and Trade Show.

The conference, one of the premier farm direct marketing events in the world, will be held Feb. 2-8, 2004, at the Sheraton Grand Sacramento Hotel and the Sacramento Convention Center. The theme of the 19th annual conference of the North American Farmers' Direct Marketing Association (NAFDMA) will be "A Bounty of Golden Ideas." Conference organizers expect that around 1,000 farm direct marketers from around the world will travel to Sacramento for the conference. In the past, attendees have come from as far as England and Australia for the event.

"The excitement of the NAFDMA conference being held in California is the opportunity to help merge the expansive agricultural venues of California with farm direct marketing innovations from across North America," says Charlie Touchette, NAFDMA executive director.

California is world-renowned for its agricultural production. The state is advanced when it comes to the development of farmers' markets, and it also has much to offer when it comes to direct marketing on the farm. Some farms like Bishop's Pumpkin Farm in Wheatland, Calif., and clusters of roadside stands such as those on Apple Hill in El Dorado County are excellent examples of on-farm direct marketing and will be stops during the pre-conference bus tour.

In addition to the increasingly popular pre-conference bus tour (400 people and eight buses went on the 2003 tour in North Carolina), the conference offers a relaxing post-conference bus tour, an outstanding trade show featuring around 100 vendors, and a top-notch slate of speakers.

The pre-conference bus tour will be held Feb. 2-4, 2004. A day of workshops will be held Feb. 5. Conference sessions and the trade show will be held Feb. 6-7, and the post-conference tour will be held on Feb. 8.

For conference information, visit www.nafdma.com. Or, e-mail Marcia@WhiteLoafRidge.com or call Marcia Touchette at (413) 529-0386. The pre-registration deadline is Jan. 6.

The North American Farmers' Direct Marketing Association is the leading farm direct marketing association in the world. It promotes and fosters the growth of farm direct marketing throughout North America. Its members support their family farms by selling millions of dollars worth of farm-grown produce directly to consumers at farm stands, farmers' markets, pick-your-own farms, consumer-supported agriculture, agritourism venues, and other ever-growing innovations in direct producer-to-consumer agricultural marketing methods. Find out more about the organization at www.nafdma.com.

Massachusetts Berry Notes is a publication of the University of Massachusetts Extension Fruit Program which provides research based information on integrated management of soils, crops, pests and marketing on Massachusetts Farms. No product endorsements over like products are intended or implied.