New York Berry News

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What's Inside

There is a lot happening this time of year so we've kept this issue short and sweet, for faster perusal. There's still plenty to sink your teeth into, however, in terms of small fruit news, information, and educational opportunities. So take a break from all that work with a tall glass of ice tea in that lawn chair on the patio, put your feet up and enjoy this month's issue of NYBN.

For those of you weather aficionados out there, my apologies for the missing weather data for this past month, which is apparently lost in email heaven somewhere between the NASS and my email box. I will upload a revised version with the data as soon as I get the new copies from them...

UPCOMING MEETINGS

October 14-15, 2005. *National Blueberry Conference and Exposition*, Amway Grand Plaza Hotel and DeVos Place, Grand Rapids, Michigan. . **Contact**: Gretchen@blueberries.com.

October 14-15, 2005. *Passive Solar Greenhouse Workshop*. 1522 Lefever Lane, Spring Grove, Pennsylvania. **Contact:** Steve and Carol Moore (717) 225-2489.

October 14-15, 2005. *Highbush Blueberry Council (USHBC) Fall Meeting*, Amway Grand Plaza Hotel, 187 Monroe NW, Grand Rapids, Michigan. . **Contact**: 616-885-2000

December 1-7, 2005. *International Society for Horticultural Science 9th International Rubus and Ribes Symposium*, Pulcon, Chile. **For more information contact**: Pilar Banados, Facultad de Agronomia Ingenieria Forestal, Universidad Catolica de Chile, Casilla 306-22, Santiago, CHILE; fax: 56-2-55334130, E-mail: pbanados@puc.cl or online: http://www.faif.puc.cl/rubus-ribeschile.html

December 6-8, 2005. *Great Lakes Fruit, Vegetable, and Farm Market Expo*. DeVos Place Convention Center, Grand Rapids, Mich. www.glexpo.com.

December 13-15, 2005. *New England Vegetable and Berry Conference*. Radisson Hotel, Manchester, NH. http://www.nevbc.com/.

January 4–6, 2006. *North American Berry Conference and Southeast Regional Fruit and Vegetable Conference*; Savannah International Trade and Convention Center, Savannah, GA. For more information see news brief below or contact Georgene Thompson, 717-243-1349, georgenethompson@comcast.net or visit http://www.nasga.org.

January 31 – February 2, 2006. *Mid-Atlantic Fruit and Vegetable Convention*. For more information contact the Pennsylvania Vegetable Growers Association at pvga@pvga.org or visit http://www.pvga.org/.

February 15-16, 2005. *NABGA Regional Meeting*, at the *Empire State Fruit and Vegetable Expo*. More info to come.

BERRY IMPORTANT DATES!

Cathy Heidenreich, Department of Plant Pathology, Cornell University, NYSAES

Here is a checklist to help remind you of seasonal chores for the month of July. For more information on strawberry renovation, see news brief and article that follow. For more information on the other small fruit production topics on this month's checklist, see the 2005 Pest Management Guidelines for Small Fruit and past issues of the NYBN.

Strawberries:

Disease management-post renovation
- Powdery mildew
- Leaf blight, leaf spot, leaf scorch

Insect management
- Tarnished Plant Bug
- Potato Leaf Hopper
- Strawberry Root Worm
- Root Weevils

Brambles: Summer-bearing

Disease management
- Powdery Mildew

Insect management
- Tarnished Plant Bug
- Japanese Beetle
- Sap Beetle
- Potato Leaf Hopper

Brambles: Fall-bearing

Disease management
- Raspberry Leaf Spot
- Powdery Mildew
- Gray Mold

Insect management
- Japanese Beetle
- Sap Beetle
- Japanese Beetle
- Potato Leaf Hopper
- Two-Spotted Spider Mites
- Raspberry Aphid

Blueberries

Disease management
- Anthracnose

Insect management
- Leaf Rollers
- Blueberry Maggot
- Japanese beetles
- Blueberry Stem Borer

Currants and gooseberries

Disease management
- White Pine Blister Rust
- Leaf spot/Anthracnose
- Powdery Mildew

Insect management
- Currant Aphid
- Currant Borer
- Currant Stem-girdler
- Two-Spotted Spider Mite

NEW RUST DISEASE OF BLACKBERRIES MAY SPREAD ACROSS THE US

Marvin Pritts, Department of Horticulture, Cornell University's College of Agriculture and Life Sciences, Ithaca, NY

Himalaya blackberry (*R. armeniacus*/*R. procerus*) is considered a noxious weed in Australia, New Zealand, and Chile. A rust fungus was introduced in these countries to help control its spread. Now this fungus has shown up in Oregon and Washington and has begun to infect commercial plantings of certain blackberry cultivars, causing significant losses. Most of the varieties grown in California, Washington, and Oregon are not closely related to the susceptible varieties; however, many eastern varieties have susceptible species in their parental background. It is possible that this rust disease could spread to eastern plantings in the next couple of years. We do not yet know which varieties are susceptible, so screening will be underway shortly.

The rust disease does not kill the plant completely but can weaken it over time and significantly reduce fruit production. Wine colored spots appear on the top of infected leaves. Directly under these spots, on the bottom of these leaves there will be circular patches of cream to yellow spore masses surrounded by a violet tinge. Advanced stages of the disease will also have black spores mixed in with the yellow spores. Older leaves close to the canes are the first infected and can eventually die. Defoliation of entire canes has been seen in severe cases. Spores can also often be found on the blossoms and unripened fruit. All green portions of both primocanes and floricanes can be infected. Information and images of this rust can be found online at: http://www.nwipm.info/blkrust-05.htm

If the rust appears, it should be able to be controlled with fungicides. Pathologists in Oregon and Washington will likely have figured out how to manage the disease if and when it gets into the eastern United States.

THE PERILS ASSOCIATED WITH BERRY PRODUCTION

Steven McKay, Extension Educator, Columbia County Cooperative Extension

When viewing a beautifully packed and presented basket of berries in the market, one often forgets all that has gone into its production and care. The perils of production and marketing are numerous, and most berries are delicate, thus increasing the chance of damage. Each type of berry has a different inherent risk of being damaged according to its anatomy and physiology. There can even be differences in susceptibility to damage between different varieties. If I had to list the types of berries in order of susceptibility to damage from most to least, it would be as follows: brambles (raspberries and blackberries), strawberries, blueberries, currants, lingonberries, gooseberries, and cranberries. Obviously, the most susceptible fruit will require the most care during its production and storage/market phases. In this article, we will examine the perils in more detail, and discuss what growers can do to avoid losses.

First let's look at the weather. Rain, hail, frost, freezes, wind, and sunburn are potential damaging elements of weather. Rain can be damaging because it causes fruit to split, can splatter mud, reduce brix readings (simply put, reduce sugar content), and spread and foster disease. Splitting can be avoided if the farmer maintains constant soil moisture with irrigation and mulch. That way the plant doesn't lack moisture, and fruit can expand to its capacity at a constant rate. Mulching and growing cover crops can reduce mud splatter. The lack of splattering with mulch also reduces spread of disease. Plastic tunnels and roofs can help in maintaining the plant dry and the moisture content of the soil more constant. Constant moisture will also help prevent rapid fluctuations of brix since plants don't suddenly fill up with water.

More details on effects of weather are included here. Hail can pit and shred plants and fruit. Damaged plants are more susceptible to disease, and they have less photosynthetic capacity. Plastic tunnels and roofs can help prevent this type of damage. Frost can kill blossoms making it necessary to wait another year for fruit. Frost can damage and stunt plants, and make them more susceptible to pests. Freezes that take place in the winter can kill portions of or whole plants. Selecting cold and frost tolerant plants can help to reduce the chance of injury. Plastic row cover, tunnels, and sprinklers can also reduce frost and freeze damage. Wind can knock fruit off the bush, or cause scuffing as it rubs on other fruits and plant parts. Windbreaks prevent this damage. Sunburn damage can be extensive. Fruit exposed directly to the sun can actually cook in the sun, killing cells, changing taste, and removing storage life and salability. Shade cloth and planting under trees, or use of sprinklers can help prevent this type of injury.

Pests such as insects, other animals, disease, and weeds can be damaging to fruit and plants. Imagine a hungry flock of birds descending on a planting. Bird distress call recordings help to prevent this damage, Deer love to come and browse on new and established plants. Tall fences prevent their entrance. Diseases and insects can damage fruit and plant leaving holes in leaves or fruit, or removing the crop. Fruit can also become stained or scarred by pests. Weeds take away moisture and soil nutrients as well as block sunlight. . Local farmers to control all classes of pests use IPM approaches. This could include cultural practices, biological controls, chemicals, barriers, traps, etc.

The storage and shipping phases are also risky for fruit. Temperatures close to freezing are ideal for fruit storage, at about 33F. At this cool temperature, there is always a possibility that the temperatures will drop below the desired mark and actually freeze the fruit, making it unmarketable. As fruit is moved out of cold storage, condensation occurs on the surface of the fruit, making it more susceptible to rot, and breakdown. Shaking of fruit as it is handled bruises it and reduces shelf life and damages boxes, which can make it more susceptible to crushing.

If other produce such as alliums or other strong-scented foods (or chemicals) is in close proximity to the berries, they can pick up off odors.

In conclusion, many things can happen along the different stages of producing and marketing a fruit crop. Producers have learned to cope with these perils by using cultural practices and storage/marketing techniques for reducing risks.

USDA RE-ESTABLISHES FRUIT AND VEGETABLE INDUSTRY ADVISORY COMMITTEE

WASHINGTON, Aug. 5, 2005 –– The U.S. Department of Agriculture today announced that it has reestablished the Fruit and Vegetable Industry Advisory Committee.

The purpose of this advisory committee is to examine the full spectrum of issues faced by the fruit and vegetable industry and offer the secretary of agriculture advice on how USDA can tailor its programs to better meet the fruit and vegetable

industry's needs. The exchange of views and information between the industry and government is intended to improve understanding of the effect of USDA programs on the industry, and to contribute to those programs' effective and efficient administration. The committee is being established under the authority of the Federal Advisory Committee Act of 1972 (Public Law 92-463).

The secretary of agriculture will appoint up to 25 representatives of the nation's fruit and vegetable industry to serve two-year terms, including individuals representing fruit and vegetable growers, shippers, wholesalers, brokers, retailers, processors, fresh-cut processors, foodservice suppliers, and officials from state departments of agriculture and trade associations.
Written nominations must be received on or before Sept. 30 and should be sent to Robert C. Keeney, Deputy Administrator, Agricultural Marketing Service, Fruit and Vegetable Programs, USDA Room 2077-S, Stop 0235, Washington, D.C. 20250-0235; faxed to (202) 720-0016; or e-mailed to robert.keeney@usda.gov.

Advisory committee members will elect the chairperson and vice-chairperson. As deputy administrator of the AMS Fruit and Vegetable Programs, Keeney will serve as the committee's executive secretary.

This advisory committee was originally chartered in 2001 and reestablished in 2003. In June 2005, Agriculture Secretary Mike Johanns signed authorization to re-charter the committee for two more years. Additional information on this advisory committee is available at www.ams.usda.gov/fv.

Details of this notice will appear in the Aug. 8 *Federal Register*.

For more information contact: George Chartier (202) 720-8998, george.chartier@usda.gov or Becky Unkenholz (202) 720-8998, becky.unkenholz@usda.gov

USDA Agricultural Marketing Service News Release No. 165-05

2006 NORTH AMERICAN BERRY CONFERENCE WILL BE IN SAVANNAH, GA, IN JANUARY

The annual North American Berry Conference is being held January 4-6 at the Savannah International Trade and Convention Center in Savannah , GA. The conference date has been moved from its normal February date to make it easier for growers, researchers, educators, and suppliers to also participate in the Southeast Regional Fruit and Vegetable Growers Conference being held January 6-8, immediately following the Berry Conference. Scheduling the conferences side-by-side offers greatly enhanced educational and networking opportunities.

NASGA is emphasizing the importance of registering early for the 2006 conference – because of the date change, and registration materials will be available on the NASGA website, www.nasga.org by mid August.

Wednesday's sessions will offer two concurrent tracks, one on production, and one on making your business profitable. Thursday will feature a tour for attendees of both the Berry Conference and the Regional Fruit and Vegetable Growers Conference. Friday's morning's general sessions will highlight pest management, a local grower and marketing information.

Because exhibits will be available to attendees from both conference the Southeast Trade Show will also offer exhibitors greater opportunities to showcase their products and services.
Registration is separate for both conferences. For information on the Southeast Regional Fruit and Vegetable conference, visit their website, http://www.gfvga.org/).

NASGA is a multi-country organization of approximately 300 members, primarily small production growers that specialize in pick your own or farm market sales, along with the research community and suppliers that support them. For more information visit their website: www.nasga.org .

For more information: Georgene Thompson, 717-243-1349/ georgenethompson@comcast.net

DUTCHESS COUNTY BLACK CURRANT NECTAR NOW AVAILABLE FROM AU CURRANT

Steven A. McKay, Extension Educator, Columbia County Cooperative Extension

A number of years in development...but now available in local delis and grocery stores: **Au Currant Black Currant Nectar**. Mr. Gregg Quinn of Staatsburg, New York is very pleased with the quality of the product that has been released by his company, Au Currant. He is also very appreciative of the helping hand that Cornell Cooperative Extension has provided throughout the development phases of his product. In addition, a small fruits development grant from Northeast SARE made available technology and important commercial contacts. Much work has gone into planning, marketing plans, sourcing raw products, and developing packaging. Now the product is on the shelves of commercial outlets and making its way to enthusiastic consumers.

The nectar is probably some of the best black currant juice that can be found anywhere. I've been tasting black currant juices around the world and find this nectar superior due to its pleasing flavor, color, and sugar-acid balance. The product is 37% juice, and contains only black currant concentrate, water, cane sugar, and a touch of ascorbic acid. Taste tastings in various parts of the state have shown wide acceptance of the black currant flavor, and interest in the nutraceutical benefits of the product.

Following is some information from the Au Currant web site that explains some background about Au Currant and the company philosophy:

"When you think Florida, you think oranges and when you think Idaho, you think potatoes well, how about New York black currants? Au Currant Enterprises in the historic Hudson Valley area of New York State is making it their mission to bring back this popular fruit of days long past. The black currant, once a very popular and readily harvested fruit in the New York region, was banned in the early 1900s because it was found to help facilitate the spread of white pine blister rust, which threatened the then booming timber industry. Greg Quinn, with the help of several NYS Senators and Assemblypersons, has successfully led the effort to overturn the ban. Au Currant's goal is to help make New York the nation's top black currant producer once again.

Au Currants founder, Greg Quinn, horticulture expert, says this is the first crop in almost a half century that may provide profitability to struggling farmers. Each year, hundreds of small farms in New York State cease to exist (thousands across the U.S.), and developers quickly snap up open land when farmers sell off their property. Au Currant's goal is to bring back black currant farming in the hope of saving some of this open space.

Why black currants? This once forbidden fruit is more than a much-needed development to New York State farming, it is also the boost that Americans need to their diets. Black currants, a virtually unknown fruit to most Americans (but extremely popular in Europe), may be just what the doctor ordered. This dark-colored berry is jam packed with antioxidants, which have been shown to help prevent various types of degenerative diseases, such as heart disease and cancer, as well as slow down the aging process and protect the body's vision and neurological functions. The black currant has a much higher source of antioxidants than the blueberry and has three times the amount of vitamin C found in oranges."

If you'd like to learn more about the new black currant nectar, its development, and availability, you can visit the Au Currant web site at www.aucurrant.com.

EAT YOUR RASPBERRIES

Lori Bushway, Senior Extension Associate, Department of Horticulture, Cornell's College of Agriculture and Life Sciences, Ithaca, NY

Plump, juicy raspberries are a perennial summer favorite. These delicate fruits receive rave reviews for their delicious sweet flavor and they are also nutritional powerhouses, as well.

Raspberries are rich in vitamins A, C, E and folic acid, iron and potassium. They are packed with fiber, some in the form of pectin, which has been linked with lowering cholesterol. These tasty treats are also relatively low in sugar, so they won't stimulate severe insulin swings if eaten in moderation.

In addition, raspberries are high in natural antioxidants including anthocyanins and phytochemicals such as beta-carotene and ellagic, coumaric and ferulic acids. These compounds help our bodies battle damaging free radicals; advancing heart health, reducing the risk of certain types of cancer, and boosting total body wellness.

The immediate reward for raspberry eaters is equally fulfilling as the long-term health benefits. Raspberries add interest, lively color, and flavor to both indulgent and healthy recipes. Enjoy them fresh, on ice cream, in a smoothie, or tossed into cereal, salads, or yogurt. Stock the freezer with bags of berries that have been rinsed and initially frozen spread out on a baking sheet, or make some jam or jelly.

When the days are short and the landscape is dull, it is always a pleasure to open a jar or the freezer to taste the sweetness of last summer. New York locally field-grown raspberries are available from July into October. Look for them in all colors red, black, purple, and golden.

Nutrition Facts

Serving Size 1 cup (123g)

Amount Per Serving	
Calories 64	Calories from Fat 7
	% Daily Value*
Total Fat 1g	1%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 1mg	0%
Total Carbohydrate 15g	5%
Dietary Fiber 8g	32%
Sugars 5g	
Protein 1g	
Vitamin A	1%
Vitamin C	54%
Calcium	3%
Iron	5%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

NutritionData.com

IMPROVED FRESH FRUIT QUALITY OF GOOSEBERRIES AND RED CURRANTS WITH THE CORDON TRAINING SYSTEM

Steven A. McKay, Extension Educator, Cornell Cooperative Extension, Hudson, NY

As the production of fresh gooseberries and currants increases, growers will need to pay closer attention to fruit quality.

Cordon training systems have been proven to produce the highest quality fruit in Europe, and to make it easier to harvest fruit, especially thorny gooseberries.

Cordon training of Ribes plants whose fruit is intended for the fresh market is standard practice for growers in Holland. The practice has also been popular in England for hobby and display gardens (with some differences from the Dutch system) but, the basic idea of cordon systems is that one to three trunks (vertical cordons) per plant are grown and tied vertically to stakes. Pruning removes old and excess wood in order to renew the fruiting structures of the plant. Plants are opened up to provide better access to fruit, and better ventilation, light, and spray penetration. Quality and size of fruit is improved, and labor for picking is reduced.

Red Currants

In Holland, red currants are planted about 1/2 meter apart. Three branches are selected as cordons and trained up bamboo stakes spaced at the center of the plant and about fifteen centimeters on each side. The cordons are encouraged to grow to a height of five to six feet. A spare branch is left at the base of the plant each year as an insurance measure in case any of the cordons die and needs replacement. During the same year, right after fruiting, the 1-year-old branches that have borne fruit are removed. Very small branches and misplaced or crowding branches are removed; leaving medium sized branches that will bear fruit the next season. In this manner, a plant is completely renewed (except the cordon) on an annual basis. One additional and beneficial pruning step during the growing season could be to head the most vigorously growing lateral branches to keep them shorter and more fruitful.

In England, semi-permanent branches are selected evenly spaced along the cordon. In late June each year, poorly placed and crowding branches are removed leaving five to seven bud branches for the rest of the growing season. The five bud branches are shortened to two bud fruiting spurs during the dormant season pruning.

Mature cordon-trained red currants in a Dutch greenhouse for early fruit production.

Medium-sized one-year branches are spaced radially around the cordon.

Well-formed strigs of red currants from cordon trained plants

One year red currants being established

Gooseberries

Gooseberries can be very difficult to harvest if they are of a thorny variety. Cordon training offers the advantage of opening up the plant and leaving the fruit accessible. In Holland, a single branch is selected and trained up a stake to a height of five to six feet. Only new, well-spaced, medium-sized branches are left at the end of the growing season. (An alternative to drilling is to use commercial wire clips since holes can weaken posts making them more susceptible to breakage, bending in wind, or rusting. The clips available through orchard supply houses.) The posts could be spaced six to eight feet apart, with a number fourteen or twelve wire passed through the holes at the top of the stakes. At each end of the trellis, a conduit anchor post can be driven in, the wire attached through a hole drilled near the top of the small branches, and branches that bore fruit, are removed. In England, cordoned gooseberries are trained in the same manner they train cordoned red currants.

Young cordon-trained Dutch gooseberry plants.

Heavy crop of gooseberries on cordon trained plant.

Cordon-trained, spur-pruned gooseberries in England.

Harvesting cordon trained gooseberries.

Trellising System

Conduit used for training apples to the vertical axis system work well for a Ribes trellis. Ideally, posts would be about two plus meters long with about thirty centimeters pounded into the ground, and a hole drilled about four centimeters from the top. (An alternative to drilling is to use commercial wire clips since holes can weaken posts making them more susceptible to breakage, bending in wind, or rusting. The clips available through orchard supply houses.) The posts could be spaced six to eight feet apart, with a number fourteen or twelve wire passed through the holes at the top of the stakes. At each end of the trellis, a conduit anchor post can be driven in, and the wire attached through a hole drilled near the top of the post. Six-'foot bamboo posts are then spaced as needed along the wire, pushed into the ground a couple of inches, and tied at the top. Green horticultural tape can be used to tie trunks to the posts. Bamboo poles are susceptible to degradation, and when in contact with the soil, can rot out a lot faster. I have tried running two wires along the row, with the bottom wire about a foot off the ground, and the second wire a few inches below the top of the post (and at a distance from the bottom wire that allows a four to five foot bamboo pole to fit between the wires). The bamboo is attached to the two wires, and is kept off the ground. As the plants grow up the posts, they are tied on with tie-tape.

One-year branches chosen to be left on cordon after harvest. All of the wood that fruited this year has been removed.

Replacement wood for new trunks is maintained at the base of the plant.

Large, quality red currants produced on cordon-trained plants.

Large, quality gooseberries from cordon-trained plants.

Fertilizer

A very critical observation was made in a commercial planting in Germantown, NY. Red currant plants (one year old) started out the season green and vigorous, but after about a month of growing began to show yellowing and a lack of vigor. Fifty pounds of actual nitrogen per acre were applied (injected through the irrigation system) in May of two consecutive years, When no significant change in vigor or yellowing occurred, this was followed up with two additional 50 pound applications, one in June and one in July. The plants greened up and put on 1-2 feet of nicely branched, new shoot growth. No branching occurred in the first year. The approach for the first year was to be conservative with fertilizer Young cordon-trained Dutch gooseberry plants. Replacement wood for new trunks is maintained at the base of the plant. applications because a soil test on the site showed that nutrients were plentiful. If the plants were to be grown as bushes for mechanical harvesting, this approach might have been useful as a way to check excess plant vigor. Mistakenly, it was thought that restricting growth to a few branches would invigorate them sufficiently. But this was not the case. In a consultation with Adri Van Eck, he stressed that a heavy fertilization program in the first years when plants are established is important. It is also important not to set fruit during the first one to two growing seasons as the plants become established.

Pest Control

In a plot with some new cordons at Hudson, NY, there was a minor problem with currant aphids at the beginning of the season. We hoped that natural predators would control of the infestation. By August, a combination of aphids and leaf spot had defoliated the plants. This seriously stunted the plants in that season and the following growing season. The demonstration was a good illustration of the benefit of good pest control in the early years of cordon establishment when rapid, healthy growth is needed.

Conversion of Bushes to Cordons

Bushes can easily be converted to cordons by selecting three young to medium-aged branches (one in the case of gooseberries) to become cordons. If spacing is too wide between plants, cuttings can be taken and stuck between older plants (best done Sept.15-Oct. 15 in the Northeast US) to develop new plants. Older plants will become adapted within one growing season.

Advantages and Disadvantages Summarized

Advantages:

- Plants are opened up for better air circulation, spray coverage, and harvesting.
- Fruit quality is improved in terms of size, color, and lack of rubbing and puncture injury.
- Pruning is simplified over bush systems because one can easily see what to cut.
- The plant's cordon or support system does not constantly need to be renewed as with the bush system. (The trunk, or cordon, is relatively permanent, while branches in bush plants are renewed every three to five years.)

Disadvantages:

- The system is more costly to establish.
- Cordons can die out and need replacement.

This work was sponsored by a research grant from NE SARE. This article is based on observations made while in Europe on visits between 2002 and 2004, and on much appreciated discussions with Adri van Eck, DLV in Holland, and Jim Arbury, AHS Wisley Gardens in England.

(Reprinted with permission from: New York Fruit Quarterly, Vol. 13, No. 2, Summer 2005)

MARKETING SPECIALTY JAMS AND JELLIES TO GOURMET CONSUMERS

Wen-fei Uva, Senior Extension Associate, Department of Applied Economics and Management, Cornell University

Increased global supply has intensified competition in all agricultural and food commodities. Nevertheless, the Northeast offers premier marketing opportunities for high quality, specialty food products all along the Washington to Boston corridor, especially those perceived as having gourmet appeal or health benefits. In a recent marketing project, we interviewed gourmet consumers in the NYC metropolitan area to better understand their preferences when purchasing "specialty jams and jellies" and to explore marketing strategies to capture this high-end market effectively. This article describes some of those findings.

Gourmet Jams and Jellies are a Treat

Gourmet jams and jellies are perceived and used as self-indulgent luxuries by many of the consumers interviewed and, therefore, are eminently giftable. In fact, many consumers were introduced to their favorite gourmet jams and jellies as business gifts, host gifts, and personal gifts from friends and relatives. Some also gave them as gifts themselves. They ate these jams and jellies with their friends at special occasions, or when they wanted to reward themselves with a treat.

Gourmet consumers were generally very excited about trying new products, as new products evoke their curiosity. They are willing to pay a higher price (upwards of $10.00 per jar) for it if they perceive the product to possess the exceptional characteristics that appeal to them. Packaging combined with price is the primary tool that consumers used to judge these products were gourmet, giftable and otherwise special. These consumers also indicated that the higher the price, the more quality they expected when they tried the products. Therefore, a successful packaging and pricing strategy can induce consumers to try the product for the first time, but only good quality will get them to purchase the product again.

What Packaging Says "Gourmet", and Where Do They Buy It?

Among the consumers interviewed, brand plays virtually no role in gourmet jam and jelly purchase decisions. Thus, without a brand image and often with no experience, these users are essentially reminded or prompted to buy by the packaging. Packaging, if appealing, is extremely important in terms of portraying the gourmet image and inviting sampling. Comments from consumers about gourmet packaging included – it should be "authentic," "homey," "... have a country look," "... look homemade," "pretty," "exotic," "very clean, like glass," "smaller," "wide-mouth jar (to fit spoon)". However, caution should be exercised in fashioning "homemade" packaging to a point where the look might not justify premium pricing, a core value to the appeal of the gourmet jam and jelly market.

Consumers interviewed in this study indicated that they purchase gourmet jams and jellies from various independent stores or farm markets and not from supermarkets. Many of these stores are small; thus, they do not have burdensome slotting allowances for processors to sell to, but the number and geographical spread and diversity of these stores may make them difficult to service. Focusing on stores and markets with gourmet reputations in a target market area would be more effective for specialty jam and jelly marketers.

What Should Gourmet Jams and Jellies Taste Like?

In jams, the quality of a gourmet jam is measured by the pieces or "chunks" of fruit in it. Some consumers described it as, "...feel that you have to chew". And in jellies, the gourmet quality is measured by a pasty, non-runny consistency, and the color of the jelly, which should look like the fruit in it. This study showed that some consumers have a strong preference toward jam or jelly, and more gourmet food consumers preferred jam than jelly.

The gourmet jam and jelly consumers claimed that they could definitely tell the difference in the quality of gourmet items versus mass-produced products, and Smucker's was 3 used as an example of the mass-produced products. They indicated that the taste of gourmet jams and jellies should not be too sweet, no added sugar when possible, and natural – no preservatives, additives, or aftertaste.

The most mentioned positive comments for their favorite jam or jelly products, include:

- "Made of interesting or exotic fruits"
- "Fruity, not much sweetness"
- "It was not too sweet or too tart"
- "I liked the consistency, thick and chewy"; "Rich and pasty"
- "Texture is extremely smooth"
- "Flavor was more full and more interesting".

When asked why they did not like a jam or jelly product, the most mentioned comment was "too sweet". It was associated with too much sugar, chemicals and preservatives, low quality, and cheap. Other negative comments include:

- "It tastes like regular jelly"; "Ordinary tasting"; "Very supermarket tasting"
- "I don't like the consistency; too much like Welch's or other supermarket brand"
- "Texture is runny
- "Way too sweet and too fake"
- "Too tart"
- "Color was off, not like the fruit".

Marketing Opportunities

This study showed that urban gourmet consumers are very interested in trying new specialty jam and jelly products. A distribution opportunity could exist through gourmet food stores, farmers' markets, and bed & breakfasts in key Northeastern markets, as well as national gourmet food catalogs. The products could be sold individually or packaged as gift items with other gourmet products. That also presents additional new product opportunities for tie-in products. When marketing specialty jams and jellies to the premium food market, special attention should be paid to packaging that conveys a gourmet image and portrays other intangible image characteristics of the product, including history, any exotic nature and health benefits, or geographical tie-in of the fruit, the farm and the region. When selling to gourmet consumers, excitement counts. However, product quality and consistency is still the key for long-term profitability.

* Information presented in this article is derived from a marketing study conducted for the project "Beach Plum – A New Crop for New Markets". This project was supported by a joint research and extension program funded by Cornell University Agricultural Experiment Station and Cornell Cooperative Extension with funds received from the Cooperative State Research, Education, and Extension Service, USDA, and by a grant from the USDA Sustainable Agriculture Research and Education (SARE) Program.

** For more information on the Beach Plum Project, see http://www.beachplum.cornell.edu/.

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BRAMBLE DISEASE FAST FACTS

Cathy Heidenreich, Department of Plant Pathology, Cornell University's New York State Agricultural Experiment Station, Geneva, NY

Not all fruit diseases are caused by living organisms. Some result from adverse environmental conditions, such as excessive heat or drought, cold temperatures, lack of soil nutrients or moisture, etc. Such disorders are referred to as abiotic diseases. Excessive sun exposure and high temperatures may result in abiotic diseases in brambles, such as sunscald (sunburn) and white drupelet disorder. Below is a brief summary.

Sunscald, Sunburn, White Drupelet Disorder

What: Physiological disorders caused by excessive temperatures and sun exposure (solar injury). **Note**: Stinkbug damage is somewhat similar in appearance, resulting in a random pattern of white spots on mature fruit. Sunscald differs from stinkbug damage in that the shoulder or side of the fruit exposed to sun will be white, while the shaded side appears normal.

When: Berries with full exposure to direct afternoon sun appear most susceptible to sunscald and/or white drupelet disorder. However, high temperatures also appear to be involved as berries shaded by canopy in hot climates may also develop the disorders.

White drupelet disorder may become quite prevalent during hot growing seasons. Injury has been observed to rapidly increase as berries move from green to white to pink stages during ripening.

Where: Sunscald is more common in blackberries than raspberries; erect or semi-erect blackberries appear more susceptible than trailing varieties. Cultivar susceptibility differences within the same species have also been observed.

White drupelet disorder is most commonly observed on red raspberries, but may also occur on other brambles as well. As with sunscald, varietal susceptibility differences have been observed. White drupelets may be randomly distributed over to surface of the fruit or occur in groups.

How: The exact nature of sunscald is not yet fully understood. Occasionally, a section of the drupe turns brown and dries.

In white drupelet disorder, drupelets develop normally but are lacking in color, usually making the berries unacceptable for fresh market. Berries are still usable for processing.

What to do:

- Avoid sites with strong winds. Hot summer winds can dry fruit, causing sunscald.
- Orient planting rows north south to minimize sunscald on south sides of rows and maximize fruit production on both sides.
- The shift trellis was designed to concentrate all fruit on one side of the canopy, minimizing damage due to sunscald. The plants' own foliage provides shade to berries during morning hours. Use of shift trellising systems, particularly Stiles single-sided shift trellis (SSSST), and limited arm rotation system (LARS) assist with minimizing sunscald. For more information on these trellis systems see page 28 in: Commercial Bramble Culture.
- Consider installing an overhead system for evaporative cooling. Researchers from North Carolina State University reported using this method once or twice a day from 10 am to 3 pm for short time periods (approx. 15 minutes), pre-vented sunscald in their research plots. They recommend *not* using evaporative cooling in the late after-noon as the canopy needs to be dry before evening to minimize disease problems that may arise due to wet canopy during the night
- Shading may help minimize the occurrence of white drupelet disorder by reducing associated UV radiation. Shading should be applied after pollination.

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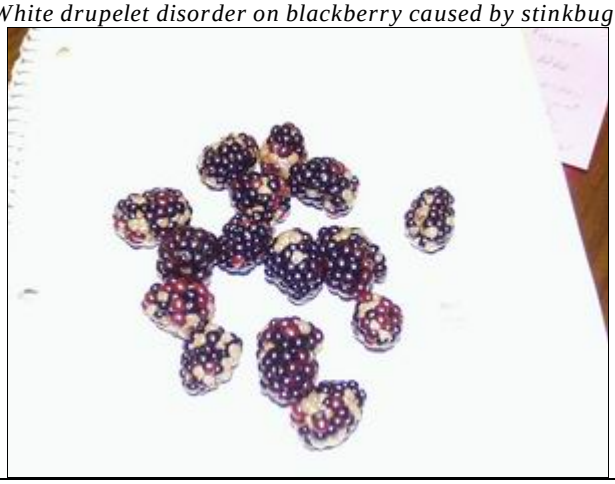
White drupelet disorder on 'Heritage' red raspberry

White drupelet disorder on blackberry?[1]

White drupelet disorder on blackberry caused by stinkbug?[1]



Unknown Physiological disorder on blackberry?[1]

[1]Pictures from Blackberry DiagnosticTool , courtesy of G Fernandez, Department of Horticulture, North Carolina State University.

Check out the NYSAES Tree Fruit and Berry Pathology web site at:
www.nysaes.cornell.edu/pp/extension/tfabp

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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, July 17th, 2005

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN*[1]**	***Week***	***YTD*[2]**	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	91	66	78	7	196	1393	240	0.95	0.25	13.56	1.78
Glens Falls	90	62	75	6	178	1140	145	0.65	0.02	13.84	2.53
Poughkeepsie	90	62	77	5	191	1350	144	0.47	-0.44	14.67	0.84
Mohawk Valley											
Utica	89	60	77	7	188	1255	228	0.40	-0.44	11.59	-1.88
Champlain Valley											
Plattsburgh	91	57	76	6	182	1104	87	0.10	-0.54	14.48	4.16
St. Lawrence Valley											
Canton	90	60	76	9	186	1133	245	1.54	0.80	10.84	-0.06
Massena	90	58	75	6	178	1129	180	2.07	1.37	11.40	1.37
Great Lakes											
Buffalo	94	66	81	10	219	1350	261	0.46	-0.17	9.18	-2.01
Colden	90	57	76	9	185	1107	239	1.08	0.30	12.78	-0.74
Niagara Falls	97	67	82	12	229	1415	312	1.54	0.92	8.88	-2.16
Rochester	93	60	79	9	205	1236	167	1.27	0.71	9.44	-0.34
Watertown	89	65	77	9	190	1131	244	1.31	0.91	11.10	2.18
Central Lakes											
Dansville	92	56	76	7	186	1174	110	0.24	-0.45	11.72	0.42
Geneva	91	66	78	8	197	1240	196	0.11	-0.54	12.31	1.04
Honeoye	91	56	77	7	194	1182	98	1.03	0.40	13.31	2.21
Ithaca	91	55	77	9	190	1145	201	0.00	-0.77	12.45	0.54
Penn Yan	90	59	77	7	192	1288	244	1.22	0.57	12.01	0.74
Syracuse	93	67	79	9	207	1406	326	3.37	2.52	12.26	-0.29
Warsaw	87	64	76	10	183	1028	223	0.27	-0.50	12.13	-0.96
Western Plateau											
Alfred	90	54	75	9	177	1076	209	0.92	0.07	12.85	-0.33
Elmira	94	53	76	7	185	1150	144	0.00	-0.77	11.47	-0.12
Franklinville	88	48	73	8	163	936	223	0.26	-0.55	11.51	-1.61
Sinclairville	90	55	75	9	179	1093	278	1.06	0.15	12.26	-2.31
Eastern Plateau											
Binghamton	87	59	75	6	177	1170	199	0.46	-0.31	9.80	-2.25
Cobleskill	86	57	74	7	169	1105	204	2.63	1.86	13.23	0.12
Morrisville	89	59	75	8	178	1062	212	1.58	0.78	13.17	0.28
Norwich	91	56	75	8	177	1113	214	0.35	-0.42	14.83	1.67
Oneonta	90	60	76	11	185	122	393	1.67	0.76	16.80	2.60
Coastal											
Bridgehampton	87	63	74	3	170	1086	37	0.09	-0.57	10.58	-2.47
New York	92	69	80	4	209	1625	99	0.15	-0.78	10.06	-3.35

1. *D*eparture *F*rom *N*ormal
2. *Y*ear *T*o *D*ate: Season accumulations are for April 1st to date

The information contained in these weekly releases are obtained from the New York Agricultural Statistics Service (http://www.nass.usda.gov/ny/), who in turn obtains information from reports from Cornell Cooperative Extension agents, USDA Farm Service Agency, Agricultural Weather Information Service Inc., the National Weather Service and other knowledgeable persons associated with New York agriculture.