New York Berry News

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What's Inside

We are well on the way to breaking the record rainfall for this month, and it's only half over. With the arrival of Hurricane Ivan, and Jeanne looming on the horizon, a new record for September seems a sure thing, with only 2 more inches to go to beat the recorded record high.

This month's issue of NYBN features an invitation to participate in the newly formed North American Bramble Grower's Association, breaking information on foliar fertilization of strawberries, an article outlining possible effects of all this rain on your herbicide applications by Leslie Huffman, the first of a series of articles on Food Safety and Produce, more on *Botrytis* control for fall-bearing raspberries by Annemiek Schilder, Part II of a series on on-line visual image galleries of small fruit diseases and disorders, and finally an article by Bob Weybright on value-added marketing.

Upcoming Meetings

October 6-8, 2004. *Northeast Division Meeting, American Phytopathological Society*, at Pennsylvania State College, State College, PA. **Deadline** for registration is **August 31st, 2004.** Contact Wade Elmer at Wade.Elmer@po.state.ct.us or call 203-974-8503.

October 10-12, 2004. *Old and New Fruit Crops With Commercial Potential for Small Farms*, New Paltz, NY. Hosted by author, grower and researcher Lee Reich at his experimental farm home. Hardy Kiwi, Paw Paw, Gooseberry and Serviceberry are a few examples of the multitude of species and varieties his orchards contain. Tour will cover growing requirements. Marketability, and taste tests of some of the unusual fruits aw well as touching on more common fruit crops like grapes and blueberries. Free and open to all. Sponsored by the Regional Farm & Food Project.
For more information call 518-271-0744 or e-mail farmfood@capital.net .

October 26-27, 2004. *66th Annual Meeting of the New England, New York, Canadian Fruit Pest Management Workshop*, in Burlington, VT. **Deadline** for registration is **September 14th, 2004.** Contact Lorraine Berkett at lorraine.berkett@uvm.edu or Anne Marie Resnik, aresnik@uvm.edu or 802-656-0463.

December 7-9, 2004. *Great Lakes Fruit, Vegetable and Farm Market Expo*, in DeVos Place, Grand Rapids, Michigan. **Go to:** http://www.glexpo.com for details.

December 15-16, 2004. *New England Vegetable and Berry Conference& New England Fruit Meetings and Trade Show*, in Manchester, New Hampshire. **Go to:** http://www.nevbc.org for details.

February 14-17, 2005. *Empire State Fruit and Vegetable Expo*, in Syracuse, New York. **Mark your calendars now:** more information forthcoming in the next issue.

February 16-19, 2005. *North American Berry Conference- a joint conference with the North American Bramble Growers Association*, in Nashville, Tennessee. **Mark your calendars now:** For more information see article below.

2005 Empire State Fruit and Vegetable Expo to be Held in Syracuse, New York

The 2005 Empire State Fruit and Vegetable Expo will be held in Syracuse, New York at the Oncenter Convention Center on February 14-17, 2005. This combined fruit and vegetable show brings together the New York State Vegetable Growers Association, Inc., Cornell Cooperative Extension, The Empire State Potato Growers Club, the New York State Berry Growers Association and the New York State Horticultural Society in order to provide a first-rate educational conference and commercial agricultural trade show.

"We are very pleased to be in Syracuse for the Expo," says Jeff Kubecka, executive secretary of the New York State Vegetable Growers Association, Inc. and Co-chair of the Empire State Fruit and Vegetable Expo. "This central New York location is ideal for growers attending from all over the state, and the surrounding states. The Oncenter facility itself is a great venue to hold not only the trade show but also the educational sessions." The conference features many full-day sessions on a variety of commodities grown in New York State, including potatoes, sweet corn, onions, tree fruit, berries and cabbage. Half-day sessions are held on a variety of topics as well and may focus on tomatoes, vine crops, stone fruit, peppers, soil health and high tunnel production. In addition to the educational sessions, many of the Associations and groups involved in the Expo hold meetings for their members to attend.

Free shuttle bus service will run from the Holiday Inn Syracuse, conveniently located off of the New York State Thruway at exit 37. Expo attendees will be able to park their cars at the Holiday Inn's parking lot and ride the complimentary shuttle directly to the front door of the Oncenter, located in downtown Syracuse. Make plans now to attend this exciting conference and trade show. The 2005 Empire State Fruit and Vegetable Expo promises to be an event that you don't want to miss!

Please contact the New York State Vegetable Growers Association, Inc. at 315-687-5734 or **nysvga@twcny.rr.com** for more information about the Expo. Trade show exhibitor information will be available in September 2004 and the conference programs detailing the complete educational program will be available in December 2004.

Cornell's Heritage Red Raspberry Variety is Given ASHS 2004 Outstanding Fruit Cultivar Award.

Nate Abbott, Cornell Chronicle, Vol. 36 No.2, August 26, 2004

Heritage, a variety of red raspberry released by Cornell 35 years ago, was awarded a 2004 outstanding fruit cultivar award by the American Society of Horticultural Sciences (ASHS) at its annual convention in Austin, Texas, July 18. Heritage was released by Donald Ourecky and George Slate at the New York State Agricultural Experiment Station in 1969 and is the world's predominant primocane fruiting cultivar.

"Heritage is one of the most widely grown raspberry cultivars in the world," said Courtney Weber, assistant professor of Horticultural Sciences and director of the small fruits breeding program at Cornell. "Heritage is the first red raspberry bred to ripen in the fall with quality and firmness good enough for shipping and wholesale markets and sufficient yields to be commercially viable. Because of these characteristics, Heritage has extended the season for consumers and raspberry growers and paved the way for the year-round fresh raspberry marketHeritage is resistant or tolerant to most, if not all, major raspberry diseases and has been used as a parent in the breeding of at least five other commercial cultivars. "Heritage is the standard variety by which raspberry breeders judge all fall-bearing varieties," noted Weber.

The Outstanding Cultivar Award recognizes fruit introductions that have had a significant impact on the fruit industry within the past 35 years. The awards are determined by the ASHS Fruit Breeding Work Group, which granted them this year to Crimson Seedless grape, the Tulameen red raspberry, the Duke blueberry and the Heritage red raspberry.

Fruit breeding has been a major focus of the Geneva Experiment Station since it was founded in 1880. Over the past 124 years, researchers at Geneva have introduced more than 245 varieties of apples, grapes, berries and stone fruits, selecting for yield, flavor, winter hardiness, insect and disease resistance, and vigor.

Fall Review

Cathy Heidenreich, Research Support Specialist, Department of Plant Pathology, Cornell University, Geneva, NY

Now is the time to be getting on with your fall herbicide applications for most berry crops. Refer to the articles featured in NYBN Vol. 2 No. 9 for more information on fall weed management. See the article below on Berry Herbicides, Weeds and Rain, by Leslie Huffman, to see how rain may affect your herbicide applications.

— Raspberry —

Fall bearing raspberries are winding down. The wet weather we've been experiencing all season long has spurred quite a bit of gray mold activity. Switch, Elevate and Rovral are labeled on raspberry and can be used to reduce spread of the disease on fruit. See the article by Annemiek Schilder below for more tips on how to control Botrytis fruit rot.

Late leaf rust continues to be a problem on some varieties. Nova 40W is the most effective fungicide labeled against rust. Applications at this time of year target the second spore stage, i.e., secondary spread from initial infections originating from within yours or neighboring plantings. Thus, mid-September applications should be limited to periods when conditions favor disease development *only* in plantings where the disease is present.

You may also be noticing raspberry leaf spot on both your summer bearing and fall bearing raspberries. This disease can cause extensive defoliation in severe cases. Nova 40W is labeled for raspberry leaf spot as well and can be applied to fall bearing raspberries at the same time you would apply it for control of late leaf rust (if necessary).

This is also the time of year when you should begin to prune out spent floricanes and diseased primocanes/floricanes. Diseased canes should be pruned out and burned or destroyed. If prunings are left near a planting they can re-infect the planting again next season.

— Strawberry —

Unless you are growing day-neutral strawberries, you should be keeping an eye on your foliage. This is normally the time of year when you would notice infections from leaf blight, leaf spot, and leaf scorch, particularly in older plantings. You may also be noticing powdery mildew and angular leaf spot, although they don't seem to be as prevalent this year as they were last year. As the autumn rains continue, keep an eye on these diseases, as they can move thorough a planting fairly quickly if conditions remain wet. Nova 40W is labeled for control of leaf blight, leaf spot and powdery mildew on strawberry.

In fields where red stele is a problem, it is getting close to the time where Ridomil Gold or Aliette should be applied. See NYBN Vol. 2 No. 9 for more information on this disease and its control.

For those growers with day-neutral strawberries, they should be concerned about *Botrytis* fruit rot, tarnished plant bug, sap beetle, and picnic beetles. Day-neutrals should be fruiting up until the first frost.

— Blueberry —

Blueberry plants infected with blueberry stunt will be showing symptoms about now. This is an important disease of blueberry in the Northeast, particularly in New Jersey. However, there are no confirmed cases of the disease in New York as of yet. The disease is caused by a phytoplasma (similar to a virus) and is vectored only by the blueberry sharp-nosed leafhopper, *Scaphytopius magdalensis*. Agdia Inc. offers a diagnostic test for this disease, although it is nearly $300/sample because of the complexity of the procedure. If you suspect other problems, such as blueberry mosaic virus, blueberry scorch virus (no confirmed cases in NY), blueberry shock virus, or blueberry shoestring virus, this is a good time of year to test for these (the price is more reasonable for these tests). Apparently, this is not the time of year to test for tomato ringspot virus. Please visit NYBN Vol. 1, No. 5 for pictures and more information. If you have a confirmed case of blueberry stunt or blueberry scorch, please contact let us know.

Lastly, it's time to be thinking about reapplying for a section 18 for Indar and/or Topsin-M for 2005. Part of the application process requires documentation that the products were used or, if they were not used, an explanation of why they were not, other than that products were perceived as ineffective. New York growers who used any of these products should contact Cathy Heidenreich directly (mcm4@cornell.edu or 315-787-2367) or via their local CCE representative (be sure to tell them to contact me) to report their usage and their desire to resubmit an application for 2005.

North American Bramble Growers Association Invitation

The North American Bramble Growers Association (NABGA) invites you to the 2005 North American Berry Conference on February 16-19, 2005 in Nashville Tennessee. This combined conference of NABGA and the North American Strawberry Growers Association (NASGA) will feature full a full schedule of bramble-specific sessions, strawberry-specific sessions, and sessions of interest to growers of both fruits, along with an extensive trade show, a farm tour, a berry-product tasting, and lots of opportunities to learn and share with other growers.

What is NABGA? NABGA is a membership association of growers and professionals united in their interest in commercial bramble production and the advancement of the bramble industry. . Members include blackberry and raspberry growers both small and large, nursery operators, extension workers, processors, marketers, breeders, researchers, educators, and suppliers across the North America. NABGA's activities include a quarterly newsletter, funding of bramble-related research, this annual conference, regional events, and more—and we welcome your suggestions about what would best help you.

For more information: To be added to the mailing list to receive more information about the conference, as well as information about joining the Bramble Growers Association and a sample newsletter, send your name and address (and email) to nabga@mindspring.com or 1138 Rock Rest Road, Pittsboro, NC 27312.

Fall Foliar Nitrogen Fertilization in Strawberries

Lori Bushway, Senior Extension Associate in Berry Crops, Department of Horticultural Sciences Cornell University, Ithaca, NY

Applying nutrients to the foliage is widely practiced in many fruit crop production systems. Nutrient foliar sprays have been proven effective in correcting deficiencies of micronutrients such as zinc. Macronutrients such as nitrogen applied to the tree fruits' foliage have received mixed reviews.

Foliar urea fertilization has been reported to have no measured benefit or increase in leaf nitrogen levels in peaches and grapes. However, foliar urea fertilization is practiced in apples and citrus where once urea is absorbed, the nitrogen derived from it has effectively increased nitrogen reserves and positively impacted yield.

In regard to berry crops, Cornell University researchers Laura Acuna-Maldonado and Marvin Pritts recent preliminary results indicate that foliar applications of urea can be of value in strawberry plantings. They found that foliar application of urea to strawberries in September of planting year:

- Increases nitrogen reserves
- Increases vegetative growth of strawberry plants the following spring
- Increases fruit yields the following June

These increases were reflected not only on nitrogen deficient strawberry plants but also in sufficient and high nitrogen strawberry plants. However, additional spring application of nitrogen did not improve growth or yield.

In strawberry plantings, fall foliar application of urea may be used to complement summer nitrogen applications and effectively increase future nitrogen reserves and productivity.

Berry Herbicides, Weeds and Rain

Leslie Huffman, Weed Management Specialist, Horticultural Crops, Ontario Ministry of Agriculture and Food

Herbicides and weeds react to rain in several ways. The rains have activated germination of many annual weeds, which is important for root absorption of herbicides. However, rain can affect herbicide performance in both good ways and bad.

Soil-Applied Herbicides: Generally soil-applied herbicides like Casoron, Dacthal, Devrinol, Dual II Magnum, and Princep give better weed control when at least 1/2" of rain falls shortly after application. This moisture dissolves the herbicide in soil water solution so that developing weed seedlings can absorb the herbicides as they take up water. For herbicides sensitive to photodegradation, a good shower will give shallow incorporation. However, excessive rains can leach soil-applied herbicides below the weed-seed germination zone, especially if heavy rains fall shortly after application and before herbicides get bound to soil particles. The effect of leaching depends on the characteristic of the herbicide. The

layer of herbicide may be washed just below the soil surface, allowing weed seeds to germinate on the surface. § The layer of may be diluted from a narrow band (i.e. 2 cm at the soil) to a wide band (i.e. 6 cm), which effectively dilutes the concentration where the weeds are germinating § The herbicide may be leached below the cropping zone on sandy soils, allowing both shallow and deep seeds to germinate. If the end result of heavy rain is a low or nil concentration of herbicide on the soil surface or in the incorporation layer, the level of weed control will be reduced. This information on soil-applied herbicides for horticultural crops is from the Herbicide Handbook, Weed Science Society of America:

Herbicide	Soil Mobility Leaching	Main dissipation route
Casoron	Low mobility; moderately adsorbed by soil OM.	Microbial breakdown: will volatilize from soil surface if not incorporated
Dacthal	Does not leach from any soil type. Adsorbed by soil OM.	Microbial breakdown: rapidly hydrolyzed
Devrinol	Slightly leachable (Rain required for incorporation)	Highly photodegradable; Slowly degraded by soil microbes
Dual II Magnum	Moderately adsorbed to the soil; Less leaching potential on higher OM soils; moves < 4" deep	Microbial breakdown
Princep/Simazine	Limited leaching potential Strongly adsorbed to clay particles	Microbial breakdown in high pH soils; hydrolysis in low pH soils
Sinbar	Weakly adsorbed to soil particles; Moderate to high leaching potential	Microbial breakdown
Treflan	Low to negligible leaching potential due to strong adsorption to the soil.	Degraded by light: also microbial breakdown (more rapid in flooded anaerobic conditions)

Where soil erosion by water is a problem, any herbicides bound to soil particles will also be moved. Be cautious of higher herbicide residues where ponding and settling has occurred. Another reason to implement erosion control measures!

Note: If herbicides have moved down in the soil profile, crop injury may increase. Repeat applications are not recommended even if weed escapes appear.

Post-emergent Herbicides: Spring rains have pushed a strong germination of many annual weeds, and active growth in many perennial weeds. These are good conditions for effective control with post-emergent herbicides. Rain is a concern for post-emergent herbicides if it falls too soon after application. Table 4-6 in Publication 75, Guide to Weed Control outlines the time intervals required after application for absorption of the herbicide into the plant. The full version of this table is also online at http://www.gov.on.ca/OMAFRA/english/crops/pub75/4table6.htm

Table 4-6: Interval Before Rainfall (Post-emergence)

Time Interval	Herbicides Affected
0 to 15 minutes	Gramoxone
1 Hour	Poast Ultra
2 Hours	Venture L
3 Hours	Goal 2XL
4 Hours	2,4-D amine, Ignite, Lontrel, Roundup Transorb, Touchdown iQ,
6 Hours	Roundup

(Reprinted from: The All Ontario Berry Grower, Vol. 6, July 2004)

Food Safety and Produce

Betsy Bihn, GAPS Program Coordinator, Depart of Food Science and Technology, NYSAES Cornell University, Geneva, NY

A recent survey of New York growers highlighted some very important things about food safety. First, many growers are still not aware of what good agricultural practices are. As the National GAPs Program defines them, good agricultural practices (GAPs) are any operational or management practices that reduce microbial hazards to fresh fruits and vegetables during growing, harvesting, sorting, packing, storing, and transportation. That is a very broad definition. It may be easier to ask yourself, "What am I doing, specifically, to reduce microbial risks on my farm?" Perhaps you have recently purchased portable field toilets or have installed a drip irrigation system because you were

concerned about the microbiological quality of your water. The important things are that you realize produce food safety is something that you should be thinking about and GAPs are how you reduce microbial risks on the farm and in the packinghouse. As this goes on-line, it is the middle of September. As fall and winter approach it is a great time to start thinking about reviewing your farm practices and developing a farm food safety program.

Where to Begin-If the concepts of produce food safety and GAPs are new to you, consider contacting the National GAPs Program at Cornell University to receive a complimentary copy of *Food Safety Begins on the Farm: A Growers' Guide*. This 28-page booklet is a good introduction to produce food safety and can be viewed at www.gaps.cornell.edu if you would like to see it before requesting it.

If you know about produce food safety and GAPs, but are having a hard time getting motivated to start the process, perhaps the best place to start is to ask yourself this one question. **What is the most microbiologically risky part of my operation?** Are you concerned about the quality of your irrigation water or when you apply manure or that you have seen workers using the field for urination and defecation? You know your operation better than anyone and this knowledge is the key to reducing microbial risks.

If you are still having trouble getting started, consider purchasing *A Grower Self Assessment of Food Safety Risks*. This spiral bound document covers most aspects of growing, harvesting, sorting, packing, and transporting produce and allows you the flexibility to only review the sections that pertain to your operation. It is available at the GAPs website listed above and is a step-by-step evaluation of the farm and packinghouse.

Future Discussions-The next topic to be discussed will be worker training. The same survey that revealed growers do not know what GAPs are also revealed that less than half of the growers have a worker training program. The importance of worker training and how to get a program started will be addressed in the next produce food safety article.

One Last Thing-The key to produce food safety on the farm is grower commitment. Most obstacles can be over come if the desire and commitment to do so is there. The National GAPs Program is here to assist growers with implementing GAPs and if you have questions or problems, please contact us at http://www.gaps.cornell.edu/ or 315 787 2625.

Battling Botrytis in Fall Raspberries

Annemiek Schilder, Assistant Professor, Department of Botany and Plant Pathology, Michigan State University

Editor's Note: The fungicide section of this article has been replaced with New York guidelines.

Botrytis gray mold, caused by the fungus *Botrytis cinerea*, is one of the most important diseases affecting fall raspberries. Fall raspberries are usually at greater risk of infection than summer raspberries because of the prevailing weather conditions, such as lower temperatures, heavy dews, and frequent precipitation. Cool, wet weather is conducive to development of the fungus and infection of the fruit. Botrytis is problematic in raspberries this year.

Symptoms-Typical symptoms include a brown discoloration of the fruit and the presence of a gray fuzzy mold, which can rapidly develop and spread to neighboring healthy berries. Symptoms tend to be more severe inside the canopy and on clusters closer to the ground. Even if berries look perfectly healthy at harvest, they can change to a moldy mass within 24 to 48 hours.

Biology of the fungus-*Botrytis cinerea* is a ubiquitous fungus, which is able to grow and sporulate profusely on dead organic matter. It overwinters in old infected canes and plant debris. The spores are airborne and can travel long distances by wind. When the spores land on plant surfaces, they germinate and can invade the plant tissues directly or through wounds. Production of spores and infection are favored by prolonged periods of wetness or high humidity and moderate temperatures (60-75°F). When wet conditions prevail during the bloom period, withering flower parts may become infected by the fungus and lead to latent infections of the young berries. Such infections become active as the berries ripen. But berries can also be infected directly. Overripe berries and bruised berries are particularly susceptible to infection.

Control-Cultural methods are very important for control of Botrytis gray mold. Choosing a site with good airflow can reduce humidity in the canopy considerably. Low-density plantings/narrow rows and trellising can also reduce a buildup of humidity. Good weed control and moderate fertilizer use to avoid lush growth are also important. Selecting a resistant cultivar or, at a minimum, avoiding highly susceptible cultivars will help to reduce the need for control measures. During

picking, avoid handling infected berries, since spores can be transferred on hands to healthy berries. Timely harvesting and rapid post-harvest cooling can also help to reduce losses to Botrytis gray mold. Three fungicides are labeled for control of Botrytis in raspberries in New York. Fungicide sprays during bloom are important to prevent pre-harvest infections, while sprays can reduce post-harvest infections close to harvest. Elevate (fenhexamid) is a reduced-risk fungicide with locally systemic properties. It has a 0-day PHI and provides good control of pre- and post-harvest gray mold. Switch (cyprodinil + fludioxonil) is a recently registered fungicide with protectant and systemic properties. It has also performed well in raspberry trials in Michigan. Switch has a 0-day PHI. Since Switch and Elevate are in different chemical classes, they may be alternated with one another or with Rovral to reduce the risk of resistance development.

(Reprinted from: Michigan State University, Fruit Crop Advisory Team Alert, Vol. 19, No. 3, July 13, 2004)

A Picture is Worth a Thousand Words, Part II: Blueberries

Cathy Heidenreich, Plant Pathology, NYSAES Cornell University, Geneva, NY

This is the second in a series of articles spotlighting websites that provide excellent pictures of small fruit diseases, pests, and disorders. This month we are focusing on blueberry web sites. A short description of each web site follows the html address. Happy viewing!

Blueberry Diagnostic Tool

(http://www.hort.cornell.edu/department/faculty/pritts/BerryDoc/Berrydoc.htm **)**

Author Marvin Pritts developed the on-line Berry Diagnostic tool for Strawberries, Raspberries, Blueberries, and Ribes as a companion to the NRAES Production Guides. It is to assist with the identification of diseases, insects, chemical injury and physiological disorders that affect berry crops in northeastern North America and eastern Canada. Simply click on the blueberry fruit to be re-directed to the blueberry section that holds images of various blueberry diseases, pests and disorders, organized according to symptom appearance on various plant parts.

Blueberry Diseases in Michigan

(http://www.msue.msu.edu/vanburen/e-1731.htm **)**

This is an on-line Michigan State University Fruit IPM Extension Bulletin by D. C. Ramsdell. Images are linked within the body of the text describing each disease, but they also appear as a gallery at the end of the bulletin.

Blueberry Pest Management: A Seasonal Overview

(http://ipm.ncsu.edu/small_fruit/blueipm.html**)**

This guide, an on-line North Carolina State University Bulletin by John Meyer and William Cline, includes both disease and pest descriptions. Images are linked within the body of the text describing each disease. The insect sections include both adult and juvenile stages as well as damage images.

Wild Blueberry Fact Sheets-Insects and Diseases

(http://www.nsac.ns.ca/wildblue/facts/insects.htm), (http://www.nsac.ns.ca/wildblue/facts/disease.htm)

Provided by the Wild Blueberry Information Network, these fact sheets contain information and images of various insect pests or diseases of wild blueberries from the New Brunswick, Nova Scotia and Maine areas.

Sell Value - Not Price

Bob Weybright, Extension Support Specialist, New York Agricultural Innovation Center, Cornell University, Ithaca, NY

Given the current "market winners" in the selling world, one would think that price is the primary reason people buy a product or service. Some evidence of this would be the phenomenal growth of such chains as Wal-Mart, Home Depot, Dollar Store, etc. To be able to sell at the lowest price, these chains are continually pushing, if not demanding, that their suppliers give them lower prices as well. Under this situation, one might conclude that selling at the lowest price is required to be successful in today's market. I would argue that unless you are without a doubt the lowest cost provider or producer, you cannot and should not sell merely based on price. This then raises the question of how can one expect to survive in today's environment if an increasing number of potential market outlets for our products and services are squeezing to get the lowest price possible? The premise of my argument is that all organizations and people will buy, and continue to buy, if they believe that value has been received as a result of the transaction. What this means is that in addition to price, there are other benefits, both tangible and intangible, which must be present in

order for a buyer, whether a corporation or an individual, to feel they have received value. The purchase must contain an appropriate level of total benefits to satisfy the needs that drove the purchase in the first place.

Value-added marketing-To illustrate the concept, let's apply the concept to a simple, real life situation. Let's look at two different types of coolers widely used in the summer. When identifying what value is being delivered in a cooler, the obvious one is that it keeps food and drink cold when used as directed with ice or ice packs. More subtle is the unique and/or specialized value being delivered by the respective coolers beyond initial purchase price. It is this deeper value that is a key element to identify and incorporate into the selling and pricing decision. For example, a widely available low-cost foam cooler does not cost much more than a couple of dollars, and buyers usually only expect them to last one, maybe two uses before they are ready for the trash can. A unique value is that when there is high risk of losing or damaging a cooler, a relatively low-cost cooler that is expected to be thrown away very soon will provide adequate value for the money spent. For basis of comparison, one could state that a $2 foam cooler used once and then thrown away would result in a $2 per use transaction fee. Now consider a high-end Coleman cooler with metal housing at a price range of $80-90. Who would ever buy an expensive cooler like that? This type of cooler has a much longer life expectancy. In fact, I have had one in use for over 19 years, with perhaps 45 uses total (a conservative 2.4 uses per year). This particular cooler has a per use transaction cost of approximately $1.66, based on a purchase price of $75 in 1985. Even at today's cost of $90, it would match the per use transaction cost of the lower cost foam cooler at $2. If one believes that low price is the only basis upon which buying decisions are made, it could be stated that I would not or should not ever consider using the foam cooler with it's per use transaction premium of more than 30 cents. So what does this comparison exercise tell us, since both types are widely sold today?

To sell simply by price, one would first need to define low price because, as in this example, it could be initial cost or per use transaction cost. An interesting paradigm is that while the foam cooler has a lower initial cost, it's per use cost ends up being higher than that of the metal-clad Coleman. To make the comparison even more interesting is the fact that the Coleman cooler with its lower transaction cost also keeps items colder for a longer period of time because of its superior insulation and construction. So, based on per use price and basic function, one could question why anyone would buy the lower-cost foam cooler. What becomes evident in this example is that there are different aspects of non-financial attributes that contribute to the value proposition for a particular product. Therefore, selling based on price alone would be a flawed tactic.

Other examples-While this is a simple example; there is evidence throughout the country that demonstrates this concept. Brands such as Rolls Royce, Jaguar, Lincoln, Ford, and Hyundai all demonstrate the ability to satisfy a broad range of value propositions in the transportation industry.

More relevant might be an example from the food industry's coffee category. Folgers, Maxwell House and Hills Brothers are working hard to maintain their sales, yet companies like Starbucks and Green Mountain Coffee are growing their sales leaps and bounds. The value being sold and delivered by Starbucks and Green Mountain Coffee, in addition to a quality coffee, is pampering in a complex and difficult world, cult membership, mental links to a scenic location (Vermont), and images of vacation and relaxing fun times. While the other national brands have a price advantage, their value is not equivalent to that of the newer premium brands in the eyes of the consumer.

While this might be a simplified example, the bigger question remains: How can I compete in today's environment? Simply stated, it means that one must look carefully at their product and service. Marketers need to assess the competitive climate in the region, country, and world to determine how it might affect the value of what they have to offer; learn to identify what the purchaser needs to see or experience that supports their sense of value while satisfying the needs that drove the purchase initially; and finally, apply what is learned when making a decision as to where products or services are to be sold, who (in the case of large organizations or commodity products) to sell to, and at what price.

Changing your value proposition and pricing-The key to success is that price and value must be a conscious decision on the part of the company. Wherever the price and value position is for your product or service in the market right now, it can be changed. An example of a large company working to move its products up the price and value scale is Subaru. They are actively and carefully working to change the value proposition of the brand. The Subaru Company has accepted that they will most likely alienate some of their existing customers, in fact losing them to competitors, but still believes the changes in value proposition and price is where they want the company to be to maximize its sales and viability. Is this concept easy to state on paper? Most certainly yes. Is this concept easy to implement? Most certainly

not. It takes time and practice to develop an accurate picture of the value proposition. It is, however, a concept that can be worked on and applied over time to slowly improve the selling price and business position.

While the examples I have cited are not specifically from the food or agriculture sectors, they can be learned from. Sales, buyers, and customers share common attitudes across all aspects of business sectors. Looking to other industries to learn from their success and mistakes can shorten the learning curve and help us to improve our business practices in a shorter time period.

(Reprinted from: Smart Marketing, August 2004. **"Smart Marketing**" is a monthly marketing newsletter for extension publication in local newsletters and for placement in local media. It reviews the elements critical to successful marketing in the food and agricultural industry. Articles are written by faculty members in the Department of Applied Economics and Management at Cornell University.)

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

Questions or Comments about the New York Berry News?

Send inquiries to:
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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, August 22nd, 2004

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN*[1]**	***Week***	***YTD*[2]**	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	82	49	68	-2	128	2085	152	3.96	3.15	22.42	6.72
Glens Falls	79	45	67	0	116	1744	50	1.30	0.46	20.18	4.87
Poughkeepsie	89	51	69	-2	135	2197	176	3.36	2.59	24.13	5.99
Mohawk Valley											
Utica	80	45	65	-3	110	1742	-15	2.22	1.36	27.66	9.9
Champlain Valley											
Plattsburgh	80	48	66	-2	111	1670	-51	0.65	-0.33	19.32	4.53
St. Lawrence Valley											
Canton	80	41	65	-2	106	1590	49	0.45	-0.53	19.27	3.81
Massena	80	42	65	-2	104	1638	12	0.74	-0.10	18.90	4.78
Great Lakes											
Buffalo	80	48	66	-3	115	1804	-41	0.24	-0.74	18.64	3.03
Colden	78	46	64	-2	97	1573	71	1.01	0.05	23.29	5.38
Niagara Falls	80	46	66	-3	113	1759	-95	0.06	-0.85	17.96	2.9
Rochester	80	47	66	-3	111	1746	-39	0.50	-0.30	18.72	5.25
Watertown	79	40	65	-2	106	1546	-13	0.58	-0.20	14.37	2.3
Central Lakes											
Dansville	79	46	65	-4	104	1625	-171	1.39	0.63	24.13	9.31
Geneva	81	49	66	-3	112	1761	-20	0.88	0.17	19.83	5.12
Honeoye	80	47	64	-6	103	1698	-156	0.99	0.22	21.21	6.65
Ithaca	79	43	65	-2	105	1718	103	1.79	1.02	24.52	8.64
Penn Yan	80	50	67	-1	121	1861	80	0.16	-0.55	16.40	1.69
Syracuse	82	48	68	-1	126	1934	123	1.42	0.64	23.43	6.78
Warsaw	75	43	61	-3	81	1436	39	0.80	-0.11	23.25	5.98
Western Plateau											
Alfred	78	46	64	-1	101	1592	117	1.47	0.77	25.59	8.69
Elmira	80	46	67	-1	119	1778	69	1.74	1.04	23.11	7.92
Franklinville	76	42	62	-2	87	1404	143	0.73	-0.18	21.87	4.39
Sinclairville	78	45	64	-2	96	1592	177	1.28	0.23	24.58	5.12
Eastern Plateau											
Binghamton	78	48	66	-2	111	1718	58	1.85	1.08	21.47	5.5
Cobleskill	79	47	66	0	112	1694	150	2.33	1.55	22.61	5.53
Morrisville	77	47	63	-3	91	1486	14	2.21	1.38	24.81	7.88
Norwich	79	47	65	-2	106	1675	129	1.87	1.10	24.20	7.26
Oneonta	80	47	67	3	119	1845	417	2.24	1.40	28.30	9.74
Coastal											
Bridgehampton	85	54	69	-2	135	1846	-9	2.41	1.62	23.05	6.31
New York	90	61	75	1	179	2665	166	1.40	0.56	24.57	6.65

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

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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, August 29th, 2004

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN[1]***	***Week***	***YTD[2]***	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	87	51	69	3	136	2221	167	0.46	-0.31	22.88	6.41
Glens Falls	86	44	66	2	113	1857	58	0.02	-0.82	20.2	4.05
Poughkeepsie	88	51	70	2	140	2337	187	0.08	-0.72	24.21	5.27
Mohawk Valley											
Utica	85	51	69	4	136	1878	10	1.06	0.13	28.72	10
Champlain Valley											
Plattsburgh	85	44	66	2	113	1783	-42	0.05	-0.87	19.37	3.66
St. Lawrence Valley											
Canton	82	40	66	3	117	1707	69	0.1	-0.88	19.37	2.93
Massena	82	43	67	4	122	1760	36	0.2	-0.7	19.1	4.08
Great Lakes											
Buffalo	86	56	72	6	156	1960	-4	0.69	-0.29	19.33	2.74
Colden	83	47	69	6	137	1710	109	0.87	-0.16	24.16	5.22
Niagara Falls	85	56	72	6	155	1914	-58	0.53	-0.41	18.49	2.49
Rochester	86	56	71	6	151	1897	-2	0.29	-0.49	19.01	4.76
Watertown	83	43	69	5	132	1678	17	0.31	-0.53	14.68	1.77
Central Lakes											
Dansville	84	47	69	3	135	1760	-152	0.78	0.01	24.91	9.32
Geneva	86	52	70	4	141	1902	6	0.73	-0.04	20.56	5.08
Honeoye	86	51	71	4	148	1846	-131	0.67	-0.1	21.88	6.55
Ithaca	84	48	69	5	136	1854	134	0.84	0.05	25.36	8.69
Penn Yan	86	53	71	5	149	2010	114	0.22	-0.55	16.62	1.14
Syracuse	87	50	71	5	152	2086	160	0.85	0.01	24.28	6.79
Warsaw	84	49	68	6	128	1564	79	0.77	-0.15	24.02	5.83
Western Plateau											
Alfred	84	47	69	6	134	1726	157	0.69	-0.04	26.28	8.65
Elmira	85	46	70	5	140	1918	100	0.25	-0.45	23.36	7.47
Franklinville	81	46	68	7	127	1531	188	0.7	-0.23	22.57	4.16
Sinclairville	83	46	69	7	138	1730	222	0.88	-0.19	25.46	4.93
Eastern Plateau											
Binghamton	81	55	68	4	130	1848	82	0.69	-0.08	22.16	5.42
Cobleskill	87	50	68	4	124	1818	175	0.22	-0.62	22.83	4.91
Morrisville	84	49	66	4	116	1601	35	0.65	-0.21	25.46	7.67
Norwich	86	48	69	5	136	1811	166	0.44	-0.38	24.64	6.88
Oneonta	86	49	70	7	140	1989	471	0.26	-0.58	28.56	9.16
Coastal											
Bridgehampton	80	49	66	-1	117	1963	-28	0	-0.84	23.05	5.47
New York	90	65	75	2	177	2842	178	0	-0.84	24.57	5.81

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

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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, September 5th, 2004

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN*[1]**	***Week***	***YTD*[2]**	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	85	58	71	-1	151	1685	179	2.47	1.73	16.20	2.87
Glens Falls	83	57	70	-1	139	1397	82	1.28	0.54	15.85	3.01
Poughkeepsie	85	59	72	-2	154	1766	192	1.90	1.06	15.78	0.08
Mohawk Valley											
Utica	84	57	69	-2	137	1404	43	3.47	2.65	23.13	7.87
Champlain Valley											
	83	54	69	-2	134	1330	-14	0.48	-0.32	14.07	2.11
St. Lawrence Valley											
Canton	85	47	68	0	130	1275	86	2.81	1.98	16.77	4.13
Massena	87	48	69	-1	132	1316	53	1.89	1.12	15.57	3.94
Great Lakes											
Buffalo	81	61	70	-2	141	1459	26	2.29	1.50	17.73	4.94
Colden	79	54	67	-1	121	1278	122	2.65	1.84	21.11	5.91
Niagara Falls	80	61	69	-3	136	1417	-27	3.55	2.84	16.64	4.18
Rochester	81	59	69	-2	133	1411	13	2.67	2.00	17.52	6.36
Watertown	82	52	69	0	135	1239	48	1.46	0.94	12.71	2.8
Central Lakes											
Dansville	80	54	67	-4	122	1317	-79	2.80	2.17	21.27	8.61
Geneva	81	57	68	-3	130	1419	39	2.73	2.10	18.20	5.57
Honeoye	82	56	69	-4	132	1379	-54	2.00	1.37	18.52	6.13
Ithaca	81	53	69	-1	130	1390	142	2.25	1.49	20.70	7.13
Penn Yan	80	61	69	-2	136	1502	122	2.49	1.86	14.84	2.21
Syracuse	84	60	71	1	150	1553	139	3.25	2.44	21.02	6.69
Warsaw	78	53	66	-2	113	1182	105	1.88	1.11	21.80	7.11
Western Plateau		au									
Alfred	79	50	66	-2	113	1303	161	2.54	1.82	21.84	7.04
Elmira	81	59	69	-2	137	1435	109	3.23	2.53	20.08	6.94
Franklinville	77	53	66	1	113	1158	194	1.43	0.61	20.26	5.43
Sinclairville	78	54	67	0	120	1307	220	2.76	1.85	22.24	5.76
Eastern Plateau											
Binghamton	78	58	68	-3	124	1386	100	3.37	2.60	17.86	4.15
Cobleskill	83	52	68	-1	125	1348	158	3.14	2.38	18.02	3.26
Morrisville	82	54	67	-1	122	1192	56	3.64	2.87	20.60	6.04
Norwich	84	55	69	2	133	1343	150	3.16	2.46	19.65	4.94
Oneonta	86	55	70	4	139	1480	378	3.96	3.12	22.26	6.22
Coastal											
Bridgehampton	84	56	70	-3	142	1422	18	0.55	-0.15	17.62	3.17
New York	87	66	76	-2	185	2124	167	1.48	0.57	20.33	4.94

1. *D*eparture *F*rom *N*ormal
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WEATHER REPORTS OF TEMPERATURES AND PRECIPITATION THROUGHOUT NEW YORK STATE FOR WEEK ENDING SUNDAY 8:00am, September 12th, 2004

	Temperature				Growing Degree Days (*Base 50*)			Precipitation (*inches*)			
	High	***Low***	***Avg***	***DFN*[1]**	***Week***	***YTD*[2]**	***DFN***	***Week***	***DFN***	***YTD***	***DFN***
Hudson Valley											
Albany	80	52	67	5	120	2487	236	1.41	0.71	24.83	6.90
Glens Falls	78	47	64	4	99	2083	119	1.50	0.75	22.47	4.79
Poughkeepsie	82	52	67	3	117	2610	245	1.83	0.99	26.14	5.52
Mohawk Valley											
Utica	81	49	67	5	120	2126	78	1.55	0.50	31.15	10.40
Champlain Valley											
Plattsburgh	79	48	63	3	94	1981	-9	2.15	1.38	23.33	6.00
St. Lawrence Valley											
Canton	81	50	66	6	110	1918	129	3.23	2.31	24.73	6.39
Massena	79	50	64	5	104	1958	83	2.77	1.93	23.19	6.45
Great Lakes											
Buffalo	86	53	68	5	127	2218	52	4.02	3.17	23.62	5.27
Colden	82	51	66	6	113	1941	180	3.71	2.59	28.95	7.79
Niagara Falls	85	53	67	4	123	2163	-8	3.46	2.55	22.27	4.45
Rochester	82	52	68	5	126	2149	54	4.12	3.40	25.32	9.58
Watertown	79	50	66	6	110	1895	70	3.03	2.25	20.14	5.61
Central Lakes											
Dansville	80	51	66	4	115	1993	-114	3.33	2.49	29.62	12.39
Geneva	79	53	67	5	119	2147	57	3.45	2.68	25.32	8.30
Honeoye	83	50	68	4	125	2090	-97	2.63	1.86	26.16	9.29
Ithaca	79	48	66	5	114	2093	201	1.93	1.09	29.80	11.45
Penn Yan	81	54	69	6	133	2272	182	2.61	1.84	21.08	4.06
Syracuse	84	52	69	6	137	2361	240	2.17	1.26	28.29	9.01
Warsaw	81	48	64	5	98	1781	156	3.85	2.87	29.11	8.96
Western Plateau											
Alfred	80	51	65	6	110	1956	236	2.83	1.99	30.43	11.17
Elmira	78	50	67	6	124	2169	171	3.15	2.39	28.01	10.66
Franklinville	80	47	64	7	103	1738	266	3.75	2.77	28.48	8.12
Sinclairville	82	49	66	6	110	1955	297	3.88	2.76	30.20	7.43
Eastern Plateau											
Binghamton	76	50	65	4	106	2078	141	2.40	1.58	24.58	6.25
Cobleskill	81	49	65	5	108	2059	256	1.53	0.62	24.54	4.84
Morrisville	77	51	65	6	106	1823	107	2.10	1.15	29.74	10.09
Norwich	80	51	67	7	120	2058	253	1.29	0.38	27.23	7.70
Oneonta	78	51	66	8	116	2236	577	2.09	1.25	32.01	10.93
Coastal											
Bridgehampton	79	48	68	3	127	2240	16	1.06	0.22	24.35	5.09
New York	83	60	72	2	152	3178	221	4.13	3.29	28.86	8.42

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