

Kentucky Fruit Facts

June 2008/ (6/2008)

Fruit Facts can be found on the web at: <http://www.ca.uky.edu/fruitfacts/>

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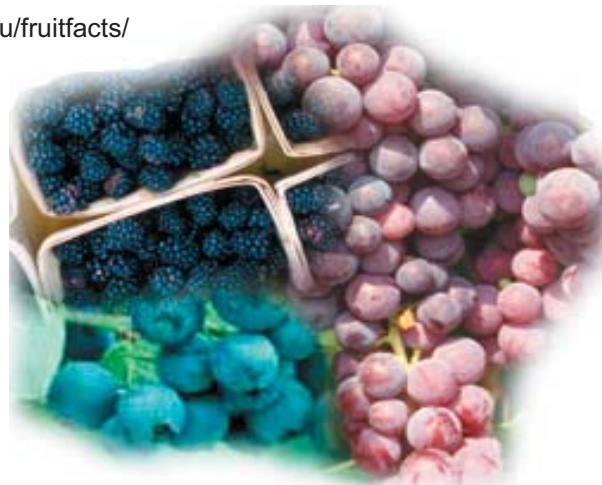
Fruit Crop News

The June 3 Fruit Grower Orchard Meeting at Hinton's Orchard & Farm Market was well attended. Since the periodical cicadas had begun emerging the week before cicadas were a hands down favorite topic. The cicadas should quit their serenade and egg laying in another week or so and we won't see this brood for another 17 years. Danitol was the commercial apple grower material of choice. It provided a rapid knock down and had excellent repellent activity. The eggs won't hatch for 6-8 weeks, which means that the shoots and eggs can be cut out and destroyed up to late July and early August to prevent the cicada nymphs from getting on the roots. This will work if you don't have too many trees.

In addition to cicadas there are several other pertinent pests to be concerned with. This is the time to put on summer San Jose Scale crawler spray(s) if Esteem was not applied earlier. It looks like the cool spring has caused crawlers to emerge about a week later than normal. We are finished with the first generation of codling moth and oriental fruit moth. Rosy

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apple aphids have caused a little more than normal damage. Fire blight has become a problem in many apple and a few pear orchards on the more susceptible cultivars despite bloom streptomycin sprays. If there are only a few strikes these can be removed by breaking or cutting the diseased shoots out a foot to two feet below the visible infection. If pruning shears are used, they should be disinfected with 70% alcohol or Lysol. In situations where there are large numbers of blighted shoots the best course of action is to grin and bear it and plan to take these out during the dormant season. We have also seen varying amounts of apple scab, frog eye leaf spot and cedar apple rust. Peach leaf curl was more serious than normal probably due to the lack of crop in 2007 and the elimination of most fungicide sprays that tend to keep inoculum levels down.

This was Dr. John Hartman's last orchard meeting as he will be retiring at the end of June after 37 years of helping Kentucky fruit growers with their plant disease problems. We will miss John's superb diagnostic abilities, his depth of knowledge and willingness to cooperate with our fruit team and growers. We wish John the best in his future endeavors.

Fruit crops look good across the state at this point. Apple crops are full and chemical thinning was not extremely difficult this year. We are past the



Dr. John Hartman at our June 3 orchard meeting.

point of chemical thinning and small cull fruit should be pulled from the trees, particularly those that have been fed on by rosy apple aphids as time permits. Peaches have a full crop and both peach and plum growers have noticed an abnormal number of double or twin fruit this year. This is due to last year's drought. Tart cherries have tended to set lightly over most of the state due to rains during pollination. The strawberry crop has been exceptionally heavy this year and fruit flavor has been tart and somewhat off on some varieties. Grapes have a full crop as do blueberries and raspberries. Blueberry plants that have few leaves at this point are being overcropped and were not pruned heavily enough to remove excess flower buds. Some of the lower inner plant fruit should be removed on these. Blackberries are showing the effects of last season's spring freeze and drought in that there are fewer floricanes (fruit) than normal. Some plants have been lost. Primocane growth for the 2009 crop is very vigorous in most cases.

Upcoming Meetings

Jun. 18 Mid American Ag and Hort Human Resource Conference. Pritchard Community Center, Elizabethtown, KY. 9:30 a.m. to 3:30 p.m. EDT. Program and registration information may be found below.

Jun. 20 – 21 7th Annual Kentucky Blueberry Festival, On the square in Edmonton, KY. Hosted by the Kentucky Blueberry Growers Association Inc. For a schedule of activities see www.kyblueberryfestival.com or contact Larry Martin at 270-432-5836 or email: a61853@scrtc.com

Jun. 28 Second Annual Summer Viticulture Field Day, Harkness Edwards Vineyards, near Athens-

Boonesboro, KY. 9:00 a.m. to 5:00 p.m. Early bird registration is \$34.50 for KVS members or \$44.50 non-members by June 25 and includes lunch. Registration at the door is \$42.50 for KVS members and \$54.50 for non-members. See program and registration information below or call 859-527-6635.

Jul. 31 Horticulture Research Farm Twilight Field Day, Lexington, KY. Contact John Strang 859-257-5685.

Aug. 10-13 99th Annual Meeting of Northern Nut Growers Association, College Station, TX. For additional information send an email with the subject, "NNGA 2008 Meeting," to: icomserve@aol.com

Sept. 6 Pawpaw Workshop. KSU Research Farm, Frankfort, KY. Sponsored by Kentucky State University, The Pawpaw foundation and The Ohio Pawpaw Growers Association. Contact Kirk Pomper phone: 502-597-6375; email: kirk.pomper@kysu.edu

Sept. 25 U.K. Robinson Station Field Day, 130 Robinson Road, Jackson, KY 41339. Contact Terry Jones 606-666-2438 X 234.

Jan. 5-6, 2009 Kentucky Fruit & Vegetable Conference & Trade Show, Embassy Suites Hotel, Lexington, KY. Contact John Strang 859-257-5685 email: jstrang@uky.edu

Jan. 12-14, 2009 Mid-States Horticultural Expo (MSHE). Kentucky Fair & Exposition Center, Louisville, KY. Sponsored by Kentucky Nursery and Landscape Association, Tennessee Nursery and Landscape Association, and Southern Nursery Association. Contact: SNA (Show Management); 770-953-3311; Fax, 770-953-4411; e-mail, mail@mshe.org; url, <http://www.mshe.org>

Mid American Ag and Hort Services Kentucky Human Resource Conference

This conference is intended for producers of fruit, vegetable, floricultural, ornamental nursery, Christmas trees, turf grass sod, tobacco and livestock that face human resource and legal risks due to their need for hired labor. The goal for this conference is to introduce some of these risks and educate producers on effective management tools to minimize and manage them.

The agenda includes two presentations by Dr. Bob Milligan, Senior Consultant with Dairy Strategies, LLC. Dr. Milligan provides insight to managers by presenting complex human resource and business concepts in formats that are understandable and useable.

Dr. Milligan's agenda topics include, "Understanding How Individuals- Including Yourself – respond to Change," and "Three Keys to Successful Supervision, Ways to Increase Workforce Productivity."

Register on line at www.midamservices.org or by calling Deanne Maus at 419-724-2930

John Wargowsky, Sr. Director, Field Communications with the Ohio Farm Bureau Federation, has expertise and knowledge in labor and immigration compliance issues. Mr. Wargowsky will present on the topic, "What's New with Labor and Immigration Compliance?"

Registration is \$50 for MAAHA members and \$55 for non-members. A sharing and networking luncheon is included with each registration.

Second Annual Viticulture Field Day

Saturday June 28 -- 9 am to 5 pm

Sponsored by U.K. Viticulture and the Kentucky Vineyard Society

By Kaan Kurtural, U.K. Viticulturist

The on-line registration for the 2nd Annual Summer Viticulture Field Day, Saturday, June 28, 2008 is now open. We will be meeting at the Harkness Edwards Vineyards near Athens-Boonesboro, KY.

Directions:

Exit interstate 75 at Athens-Boonesboro (Exit #104). Go East on Rt. 418, 6.8 miles and turn left on to Coombs Ferry Rd. Proceed North 1 mile and turn left into the entrance.

Program:

9:00 am	Registration opens
9:30	Welcome address Dr. Dewayne Ingram UK, Mr. Charles Smith, KVS
9:45	Principles of Grapevine Training for Hybrids Mr. Jeff Wheeler, Southern Illinois University
10:30	Managing Summer Diseases in Kentucky Vineyards Mr. Chris Smigell, UK Dept. Horticulture
11:30 am	Midwest Vineyard Supply Mr. Mike Switzer, Tools of The Trade for Midwestern Vineyards

12:00 pm	Lunch -- Please select on registration form
12:45	Presentation of award plaque to Hon. Don Pasley KY Congress 73rd District by the KVS Board
1:00	Chemical Weed Control in Vineyards Dr. Joseph Masabni, UKREC, Princeton
1:45	Wabash Valley Progressive Viticulture Mr. John Ditzler, Air-blast Sprayers for Eastcoast Vineyards
2:15	Calibrating Air-blast Sprayers Mr. S. Brandon O'Daniel, UK Dept. Horticulture
2:45	Steps in Canopy Management for Midwest Vineyards Mr. Jeff Wheeler, Southern Illinois University
3:15	Central Equipment Mr. Ron Nash, Vineyard Tractors, and Equipment for Kentucky Growers
3:30	Roll-forming Corporation Steel vineyard trellis posts
3:45	200 Years of Grape Breeding Mr. Lucian Dressel, Davis Viticultural Research
5:00 pm	Adjourn

Directions, agenda and registration information can also be found at:

<http://www.kentuckyvineyardsociety.org/meeting-08-06-28.htm>

Please take advantage of the early bird specials for discounted registration over the web site. (Registration at the door costs more). You can pay by credit card, or download a registration form and mail in check by June 25th.

Please take a moment to check out the new KVS web site from the link above. Thanks to our Web Site Editorial Board, Chuck Smith, Harkey Edwards and Kaan Kurtural. If you have a vineyard or winery listed, it might be a good idea to check your listing and send us an update using the form on the site.

**Summer Viticulture Field Day Registration
June 28, Saturday**

Registration Form

Name(s) As you would like it on your Name Tag

Total Amount Enclosed _____

Please make checks payable to:
Kentucky Vineyard Society

Mail completed registration form to:
Harkness Edwards, Treasurer
1500 Jones Nursery Rd
Lexington, KY 40509

Early bird registration by June 25 2008

Early bird registration	Cost	How many attending	Total Cost
KVS Member	\$34.50		
Non-member	\$44.50		

Registration at the door

After 25 June 2008	Cost	How many attending	Total Cost
KVS Member	\$42.50		
Non-member	\$54.50		

Lunch is included in the registration price:

MEAT AND TEA CHOICE

Pulled pork barbeque	
Pulled chicken barbeque	
Sweet tea	
Un-sweetened tea	

The Kentucky State University/Ohio Pawpaw Growers Association/Pawpaw Foundation Pawpaw Workshop

September 6, 2008 Frankfort, Kentucky

Kentucky State University, the Ohio Pawpaw Growers Association and the Pawpaw Foundation will hold a Pawpaw Workshop on September 6, 2008 at the Kentucky State University Research and Demonstration Farm in Frankfort, Kentucky. The workshop objective is to discuss progress in pawpaw regional variety trials, cultivar development, pest management, management of mature orchards, storing and handling fruit, and marketing pawpaw. This workshop will be a unique experience for scientists, nurserymen, entrepreneurs, and enthusiasts to share information about the production and uses of pawpaw. In addition to presentations on pawpaw, the workshop will also offer an opportunity to taste pawpaw fruit and tour the Kentucky State University pawpaw orchards. The workshop will have a number of invited speakers; however, there will also be a poster session and show-and-tell session about pawpaw for participants. The workshop will be limited to 150 attendees. Early registration for the meeting must be paid by August 1, 2008 and is \$30.00 per person. The registration fee covers: informational handouts, the Ohio Pawpaw Growers Association Pawpaw Recipe Book, a PawPaw Foundation T-Shirt, lunch, and dinner. For registration information, go to our website at <http://www.pawpaw.kysu.edu/pawpaw/2008workshop.htm> or write Dr. Kirk Pomper, Kentucky State University, 129 Atwood Research Facility, Frankfort, KY 40601, or call 502-597-6174. We look forward to seeing you at this exciting event!

Preliminary Schedule of Events

Friday, 9/05/08

6:00-9:00 pm On your own pre-conference gathering at Jim's Seafood Restaurant in Frankfort, Kentucky and meeting concerning the formation of the Appalachian Pawpaw Growers Association

Saturday, 9/06/08

8:00-9:00 am Registration and Refreshments
-KSU Farm

9:00 am-6:00 pm Presentation and Round Table
Topics: (Lunch 12:00 to 1:00 pm)

- 1) Cultivar trial results and tasting event (Dr. Kirk Pomper, Ms. Sheri Crabtree, and Mr. Jeremy Lowe)
- 2) Storing fruit (Dr. Doug Archbold)
- 3) Processing fruit (Dr. Chang Wang, Mr. Neal Peterson, Dr. Pomper, others)

- 4) Care of mature orchards, such as pests, pruning, etc. (Dr. Pomper, others)
- 5) Grower roundtable
- 6) Marketing roundtable
- 7) Orchard tours

6:00 – 9:00 pm Dinner followed by PPF Award Presentations, Show-and-Tell Session, and Poster Session

Area Attractions and Self-guided Opportunities

There are many area attractions in Frankfort, Kentucky and the surrounding area. In Frankfort you will find: the Kentucky History Center, Liberty Hall (1796) Historic Site, The Orlando Brown House (1835), Old State Capitol and History Museum, Frank Lloyd Wright's Zeigler-Brockman House, Kentucky State Capitol, Kentucky Military History Museum, Daniel Boone's Grave at Frankfort Cemetery, Kentucky Vietnam Veterans Memorial, The Kentucky Department of Fish & Wildlife Resources Salato Wildlife Education Center & Game Farm, Buffalo Trace Distillery, Rebecca-Ruth Candy Inc. world famous as the "Originators of Bourbon Candy," and many other attractions. In the surrounding area you will find: the Kentucky Horse Park in Lexington, Abraham Lincoln Birth Place National Historic Site near Elizabethtown, Kentucky, Shaker-town, Kentucky, Natural Bridge State Park Resort, and many other sites of interest. Large wild pawpaw patches can be visited at Cove Spring Park (near the spring) and on the Pea Ridge Trail at the Salato Wildlife Education Center & Game Farm, both in Frankfort, KY. The Capital Plaza Hotel (<http://www.capitalplazaky.com>) is close to campus and can be contacted at 502-227-5100. Information on other Frankfort accommodations is available at <http://www.visitfrankfort.com>. For further information, contact Dr. Kirk Pomper at kirk.pomper@kysu.edu or telephone # 502-597-6174.

Kentucky State Fair August 14-24, 2008

By Anna Lucio, Kentucky Department of Agriculture

The deadline for entering fruits, vegetables and nuts in the Kentucky State Fair is approaching rapidly. Entry forms for the fruit, nut and vegetable competitions must be postmarked by July 1 or July 10 for late entries. The Kentucky State Fair is particularly in need of fruit entries. Entire information is available on line at: http://www.kystatefair.org/competitions/entry_info/index.html or call 502-367-5190 to obtain catalog.

New Web Site Promotes Visiting Kentucky's Farms

The growth in Kentucky's agritourism industry has led to a new web site focused on providing the most up-to-date information on everything agritourism in Kentucky. The new Kentucky Farms are Fun web site is a collaboration between the Kentucky Department of Agriculture and the Kentucky Department of Tourism. "The site is going to be a great marketing tool for the Kentucky agritourism industry and for all agritourism businesses," said Stephen Yates, Kentucky Agritourism Director. The new web site will promote agritourism in Kentucky and provide an interactive search site to help consumers find agritourism venues across the state. The attractions search page will allow consumers to search by activity, region or county to select the perfect adventure. As fuel costs continue to skyrocket, consumers often consider taking short trips to nearby agritourism destinations.

The Kentucky Farms are Fun web site is located at www.kentuckyfarmsarefun.com. To plan a trip go to: www.kentuckyfarmsarefun.com and click on Itineraries. Kentucky growers can sign their farm up on the site or by contacting Stephen Yates at: 502-564-4983 or email: StephenP.Yates@ky.gov

Strawberry Leaf Spots are Active

by John Hartman, U.K. Extension Plant Pathologist

As strawberry harvest season comes to a close, growers need to turn their attention to strawberry leaf spot and blight diseases. The following information was adapted from a Purdue University Cooperative Extension Service "Facts for Fancy Fruit" newsletter article entitled "Three Big Foliar Diseases of Strawberry," authored by Dr. Janna Beckerman, Purdue University Extension Plant Pathologist.

Strawberry leaf spot is caused by *Mycosphaerella fragariae*. This fungus infects leaves, petioles, runners, and even fruit stalks (pedicels), berry caps or calyxes. Small, dark purple to reddish-purple, round spots, 1/8 to 1/4 inch in diameter develop on the upper leaf surfaces. As the lesion develops, the center of the spots becomes tan, eventually turning gray or even white, while the margins remain dark purple. Later in the season, dark pepper-like specks appear in older lesions. These black specks are either sclerotia, tiny fungus balls that allow the fungus to survive inclement conditions, or perithecia, that contain the sexual spores of the fungus. Long wet periods (several days) and warm temperatures

(over 50° F) favor disease development in the spring and in summer after renovation. During conditions such as these, the fungus can also infect fruit, causing what is called “black seed disease.” Berries usually have one or two spots but more can develop. Fruit does not decay but discolors under the spot.

Strawberry leaf scorch disease is caused by the fungus, *Diplocarpon earliana*, and affects the above ground portions, including the leaves, petioles, runners, pedicels, and calyxes of strawberry plants. The fungus most frequently infects strawberry leaves at any stage of development. The symptoms of leaf scorch are very similar to the early stages of leaf spot in that small, round to angular dark purple spots about 1/4 inch in diameter develop on upper leaf surfaces. Unlike leaf spot, the leaf spots of leaf scorch remain dark purple, and never develop a dying or dead center. As the spots gradually enlarge, they resemble small drops of tar due to the production of large numbers of minute, black, fungal fruiting bodies called acervuli. Spots have an irregular outline and may run together, causing the entire leaf to develop a reddish or light purple color. In severe cases, foliage is reduced considerably, and plants may be stunted. Fruit may become infected, as well. Infected fruit has elongated, slightly sunken, reddish areas or streaks; these lesions usually disappear as the fruit ripens.

Strawberry leaf blight is caused by the fungus *Phomopsis obscurans*. Although infections occur earlier, symptoms often do not become visible until after harvest. The disease can weaken strawberry plants through the destruction of older foliage. Weakened plants can result in reduced yields the following year. *Phomopsis* leaf blight symptoms begin as circular spots that also appear similar to leaf spot disease of strawberry. However, as the disease progresses, irregular, zoned lesions may form. In later stages of disease development, lesions, especially ones along veins, may become V-shaped, with the widest part of the V toward the margin of the leaflet. These V-shaped lesions are characteristic of the disease.

Strawberry leaf diseases need to be managed to maintain the health and productivity of the strawberry bed. The following suggestions should be helpful in reducing foliar diseases.

- Choose disease resistant cultivars. The Cornell University Tree Fruit and Berry Pathology web site provides a comprehensive list of commonly used strawberry cultivars, and their known disease susceptibilities and resistances. This table can be found at: <http://www.nysaes.cornell.edu/pp/extension/tfabp/factshts/smallfr/stbapx.html>. It is important to note that due to the presence of different races of the pathogens, strawberry cultivars rated as resistant in one location may be susceptible in another.

- Purchase only certified, disease-free plants from a reputable nursery.
- Locate the strawberry bed in full sun in well-drained soil with good air circulation.
- Reduce competition and increase air circulation by properly spacing plants and preventing weed growth by cultural or chemical methods.
- Limit nitrogen fertilizer applications to renovation time after harvest. Nitrogen fertilizer increases tender, susceptible leaf growth, encouraging disease.
- In plantings with severe disease incidence, destroy (mow, rake, and burn) all diseased strawberry debris at renovation time immediately after harvest.
- If necessary, apply fungicides to prevent strawberry leaf diseases. Consider fungicides such as Nova 40WP, Abound 2.08F, Cabrio 20EG or Pristine 38WG. To avoid fungicide resistance development, the above chemicals should be alternated with Captan 80 WDG or a fixed copper fungicide such as Champ Formula 2, Cuprofix Disperss, Kocide DF or Nu-Cop 50 DF. When using fixed copper fungicides, monitor plants and discontinue use if signs of phytotoxicity appear.

For timing and rates of fungicides to use, consult U.K. Cooperative Extension Publication ID-94, Midwest Commercial Small Fruit and Grape Spray Guide 2008, available at County Extension Offices statewide.

Should I Practice Within Cluster Fruit Thinning in Pawpaw?

by Kirk W. Pomper, Principal Investigator of Horticulture-Kentucky State University

The pawpaw has a unique tropical like-flavor and has great potential for farmers' markets across the Commonwealth of Kentucky. Fruit thinning is practiced with apples and peaches to increase fruit size, obtain uniform annual production, improve fruit quality, and avoid limb breakage. Pawpaw can also benefit from fruit thinning when fruit set is high. One pawpaw flower can develop into a cluster of from one to nine fruit. Pawpaw fruit are ripe when they begin to soften and when harvesting from a multi-fruit cluster a tear usually results when harvesting the fruit. Therefore, within-cluster thinning to one fruit can not only increase fruit size, it will allow growers to harvest the fruit by cutting the peduncle of the fruit and thereby eliminate a tear in the skin. This also eliminates a major entry point for any pathogens into the fruit.

Can you thin within pawpaw clusters without causing damage that will cause the entire cluster to abort? Yes. In studies conducted at Kentucky State Uni-

iversity in 2006, clusters of the cultivars ‘PA-Golden’, ‘NC-1’, ‘Mitchell’, ‘Taytwo’, and ‘Overleese’ were thinned to one fruit per cluster via hand thinning in mid-May when the fruit were about 1.5 cm in length. Fruit were harvested from mid-August through late-September. Fruit from hand-thinned pawpaw trees was larger, weighing 54% more than fruit from non-thinned trees for all cultivars. There are still many questions we need to answer concerning fruit thinning in pawpaw, such as: When is the best time to thin pawpaw fruit? Should we hand thin when fruit are smaller than 1.5 cm? How many clusters can a mature pawpaw tree support and does this vary by cultivar? Chemical thinning with NAA has been unsuccessful in pawpaw and has damaged trees, so hand thinning is the only option at this time for pawpaw.

In 2007, the spring freeze event decimated the pawpaw crop. Thus there is a high fruit set on pawpaw trees this year due to biennial bearing and trees will benefit from thinning. If fruit set appears high on your pawpaw tree (75-100 clusters on a mature tree) in early June, you may benefit from within cluster thinning of pawpaw. If you have questions about pawpaw production, please contact Kirk Pomper at 502-597-5942; e-mail: kirk.pomper@kysu.edu, also check out the KSU Pawpaw website for more pawpaw information at: <http://www.pawpaw.kysu.edu>.

The IR-4 Project: Filling A Needed Role

by Ric Bessin, U.K. Extension Entomologist

Since the early 1960’s, the IR-4 Project has been the major resource for supplying pest management tools for specialty crop growers by developing research data to support new EPA tolerances and labeled product uses. The IR-4 Project is a cooperative program of the USDA, and Land Grant Universities, with the principle goal of developing data to support and to expedite regulatory clearances of newer, reduced risk pest control products for specialty crop growers. The IR-4 Project provides the field trial and laboratory residue data necessary for EPA clearance of minor crop tolerances, and approval of new uses for pesticide labels. By securing tolerance clearances and label registrations for pesticides, the IR-4 Project is filling the gaps in pest management tools for specialty crop growers. The IR-4 Project has provided the necessary field and residue data to account for about 50% of EPA’s annual work plan and new clearances in recent years.

The IR-4 Project has proven instrumental in helping curtail substantial economic losses to the agricultural sector when stricter standards of food safety were imposed with the passage of the Food Quality Pro-

tection Act of 1996 (FQPA). This act imposed added protections from pesticide exposure on food, especially for infants and children, and forced several critical pesticides off the market or substantially restricted their use. The IR-4 Project proactively established an operating strategic plan to facilitate registering new, safer alternatives for minor use pest management prior to the passage of FQPA; reducing the impact of FQPA on the farm community.

Working closely with growers and commodity groups, university extension and researchers, USDA scientists, the agrichemical industry, and EPA, the IR-4 Project assures that alternative pest control products are available that are safer and more efficient than existing products. To be sure, over 80 percent of IR-4 Projects support registration of reduced-risk pesticides that substantially reduce the risk to human and environmental health relative to existing or recently de-registered products. Since its inception, the IR-4 Project has achieved over 10,000 pest control clearances on food crops and over 10,000 clearances on ornamental crops.

New Tolerances Established Through the IR-4 Project (June 07-Nov 07) Note that these represent new tolerances and this is one step in the process of the development of a pesticide label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical.

Bifenthrin (Brigade,Capture): Root vegetables (except sugar beet), Soybean, Peanut, Pistachio, May haw, Groundcherry, Pepino

Buprofezin (Applaud, Courier): Stone fruit, Grape (increased tolerance), Mango, Papaya, Black sapote, Canistel, Mamey sapote, Sapodilla, Star apple

Cymoxanil (Curzate): Caneberry (subgroup 13A), Grape, Hop

Desmedipham (Betanal,Betanex): Garden beet Spinach

Dimethenamid (Frontier): Grasses grown for seed

Diuron (Seduron,Karmex): Prickly pear cactus, Mint

Fenamidone (Reason): Leafy vegetables (except Brassica), Head and stem Brassica, Brassica leafy greens, Fruiting vegetables, Carrot, Strawberry, Sunflower

Fluazinam (Allegro, Omega): Bushberries, Edible podded legume vegetables (except pea), Succulent shelled beans, Dry shelled beans except soybean, Brassica leafy vegetables, Turnip greens, Ginseng

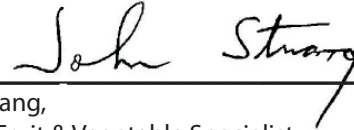
Foramsulfuron (Option): Sweet Corn, Popcorn (both crops —exemption from the requirement of a tolerance)

Glufosinate-aluminum (Buster, Challenge, Conquest, Final, Liberty, Rely, Remove): Pistachio

Imidacloprid (Admire, Confidor, Gaucho, Provado): Caneberry subgroup 13A, Wild raspberry,

Peanut, Kava, Pearl millet, Proso millet, Oat
Indoxacarb (Avaunt, Steward): Tuberous and corm
vegetables (subgroup 1C), Leafy vegetables
(except Brassica), Leafy Brassica vegetables,
Turnip greens, Cucurbit vegetables, Pome fruit
(except pear), Oriental pear, Stone fruit, Southern
pea, Okra, Cranberry, Mint
Isoxadifen-ethyl (herbicide safener): Sweet corn,
Popcorn, Field corn
Lactofen (Cobra, Phoenix): Fruiting vegetables, Okra
Lambda-Cyhalothrin (Karate, Matador, Warrior): Barley,
Buckwheat, Oat, Rye, Wild rice, Pistachio
Linuron (Afalon, Linurex, Norunil): Celeriac, Rhubarb
Oxytetracycline: Apple
Pendimethalin (Prowl, Pendulum, Stomp): Globe
artichoke, Asparagus, Head and stem Brassica,
Grape

Pyriproxyfen (Distance, Esteem, Knack): Root and tuber
vegetable, Bulb vegetables (except dry bulb onion),
Caneberry (subgroup 13A), Cereal grain (groups 15
and 16), Animal nongrass feed (group 18), Banana,
Plantain, Cacao bean, Canola, Coffee, Cranberry,
Date, Pawpaw, Peanut, Pineapple, Pomegranate,
Safflower, Sesame, Sugarcane, Tea
Thiamethoxam (Actara, Cruiser, Platinum): Caneberry
(subgroup 13A), Globe artichoke, Hop, Barley
(increased tolerances)



John G. Strang,
Extension Fruit & Vegetable Specialist