FACTS FOR FANCY Fruit PURDUE EXTENSION

FACTS FOR

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Crop Conditions:

Apple harvest is underway. Higher than usual levels of scab are being seen, probably as a result of so much rain early in the season. Otherwise crops are looking good. Grape harvest is underway across the state. Despite the heavy rains this spring, fruit quality is excellent. Primocane red raspberry harvest continues. SWD pressure is very high. We have an excellent crop of primocane fruiting blackberries at Meigs this year and are excited about the possibility of these cultivars providing new opportunities for northern growers.



The Four Horsemen of the Rotpocalypse:

It's been one of those summers! Brown rot (discussed in the previous issue of Facts for Fancy Fruit) has shown up in the early summer apples (Pristine, Lodi and Yellow Transparent) in addition to Gala. This is a new addition to our regular trifecta of summer pathogens: black rot, white rot, and bitter rot. Black rot, caused by the fungus Botryosphaeria obtusa, is the same fungus that causes frogeye leaf spot, black rot fruit decay, and cankers (Fig. 1).



Fig. 1 Apple black rot 3 varieties

The fungus can colonize any wound that penetrates the epidermis, including insect injuries. This year, we are seeing lenticel infections, too. As lesions develop, they begin as reddish spots that darken to purple and are bordered by a red ring. Eventually, the infected area changes color, becoming brown as it increases in size, or it may turn black. As this rotted area enlarges, concentric bands of brown and black develop with a surprising uniformity of width. The flesh of the decayed area remains firm and leathery. Eventually, the apple rots completely, dries, and shrivels into a mummy. Pycnidia, little erumpent pustules containing spores of the black rot fungus, appear on the surface of rotted tissue. White rot or bot rot, caused by Botryosphaeria

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dothidea "only" causes a limb canker and fruit rot (Fig. 2).



Fig. 2 Apple white rot

This pathogen can be mistaken for black rot, although at Meig's black rot is regularly a much greater problem than white rot. White rot first appears on fruit as a small, brown sunken spot, often surrounded by a red halo. When infection occurs on red-skinned apples, fruit often become a light brown during the decay process.

Lesions of calyx-end rot caused by B. obtusa are usually dark brown to black and may completely surround the calyx or they may be offset to one side of the calyx. In orchards where inoculum levels are high and fungicide protection is lacking, B. obtusa can infect as soon as the bud scales begin to loosen, although infection of the flower sepals and/ or fruit calyxes is more common. Unfortunately, growers are unaware of infection because the fungus usually remains quiescent. Symptoms of fruit decay develop only after fruit begins to ripen. Unfortunately, by then it is too late to manage.

Some cultivars are more susceptible to black rot than others: Studies done by Alan Biggs and Stephen Miller in West Virginia ranked 'Orin', 'Pristine', and 'Sunrise' as highly susceptible; 'Suncrisp', 'Ginger Gold', 'Senshu', 'Honeycrisp', 'PioneerMac', 'Fortune', NY 75414, 'Arlet', 'Golden Supreme', 'Shizuka', 'Cameo', 'Sansa', and 'Yataka' as moderately susceptible; and least susceptible were 'Creston', 'Golden Delicious', 'Enterprise', 'Gala Supreme', 'Braeburn', 'GoldRush', and 'Fuji'. Previous published rankings have included 'Red Delicious', 'Empire', and 'Cortland' among the most susceptible cultivars to the black rot pathogen. From the NE-183 trial, only 'GoldRush', 'Enterprise', and 'Gala Supreme' were more resistant than "standard varieties." There does not seem to be much difference between cultivar susceptibility to white rot.

Bitter rot, caused by Colletotrichum acutatum and C. gloeosporioides, infects fruit early in the season, but symptoms do not develop until the fruit begins to ripen (Fig. 3).



Fig. 3 Apple bitter rot

After infection, the fungus grows to develop a small, light brown, circular lesion that becomes sunken. Eventually, small pustules filled with orange-pink colored spores develop, often in concentric rings. Old cankers, dead shoots, and twig debris serve as sources of inoculum, but the primary sources of overwintering inocula are mummies left in the tree. Honeycrisp, Ida Red, Granny Smith, and Nittany are very susceptible to this disease. Bitter rot devastated the HoneyCrisp in our surfactant-captan trial.

All of the registered scab fungicides suppress the rots, but control is often less than ideal on highly susceptible varieties, like HoneyCrisp, Ida Red, and Golden Delicious. Captan and Topsin M provide the best protection against black and white rot infection and are recommended at petal fall in orchards

(2)

Facts for Fancy Fruit is a newsletter for commercial and advanced amateur fruit growers. It provides timely information on pest control, production practices, and other topics likely to be of interest to fruit growers. All growers and interested persons are welcome to subscribe.

Subscriptions are \$15 per year. Subscribers will receive 12-15 issues biweekly during the growing season and monthly otherwise.

To subscribe, send your name, mailing address, and check for \$15 (payable to Purdue University) to:

Facts for Fancy Fruit Purdue University Department of Horticulture & Landscape Architecture 625 Agriculture Mall Drive West Lafayette, IN 47907-2010 Attention: Lori Jolly-Brown

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where black rot fruit decay has been a problem in previous years; the bitter rot pathogen was found to be resistant in work done in our lab. In the field, we've found that treatments that included any strobilurin (Flint, Sovran, Pristine, Luna Sensation and Merivon) in a scab program provide better control of frogeye leaf spot (the foliar infection phase of black rot) than DMI alone. The latest possible application of mancozeb reduced black and bitter rot in later mid-season maturing varieties. The SI fungicides (Nova, Indar, Inspire) and/or low rates of mancozeb fungicides (1 lb/100 gal) were the least effective for summer rot control.

As always, remember the PHI for your fungicides:

- -Captan (FRAC Group M4; 0 day PHI)
- -Flint (FRAC Group 11; 14 day -PHI)
- -Indar (FRAC Grop 3; 14 day PHI)
- -Luna Sensation (FRAC Groups 7 + 11; 14 day PHI)
- -Merivon (FRAC Groups 7 + 11; 0 day PHI)
- -Pristine (FRAC Groups 7 + 11; 0 day PHI)
- -Topsin M, Topsin 4.5FL (FRAC Group 1; 1 day PHI)

Last but not least, physiological stresses, especially drought stress, predispose trees to cankers caused by both species of Botryosphaeria. Unusually wet weather encourages spread of bitter rot. Sunscald also seems to play a role in the opportunistic colonization of fruit.

Like many plant pathogens, by the time you find the problem it is too late for this year. However, sanitation in the form of mummy clean-up and cankered limb removal is something to consider during spring pruning. Apples that are mummified due to chemical thinning, or fire blighted twigs, serve as an easy site of colonization. Piles of prunings are another important reservoir of this disease. Prunings can be left if they are debarked during any sort of flail mowing. As we head into Fall, careful observation of trees for cankers as a source of inoculum should be high on every growers list to mark for spring pruning and removal! (Beckerman)

Post Harvest Fungicides for Grapes:

Downy mildew is running rampant in many vineyards this year. If left uncontrolled, it can cause significant defoliation on susceptible varieties well ahead of the first frost. This can lead to low winter hardiness and poor fruitfulness next year. If downy is a problem in your vineyards, I strongly recommend post harvest applications of mancozeb to keep the disease in check. Mancozeb has low risk of resistance development so it is a good choice if you have a significant build up of downy mildew in the vineyard. I recommend against using phosphorous acid products, strobilurins or any of the newer fungicides to avoid potential resistance issues.

(Bordelon)

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Fall Herbicide Applications for Strawberries:

A number of pre and post emergent herbicides can be used on strawberries during late summer and fall to prevent weed germination, kill emerged weeds, and provide residual control through next spring. The key set of weeds you need to control during this period are fall germinating winter annuals such as chickweed, henbit, and shepherds purse. You may also need to prevent germination of wheat, oats, or rye seeds that come in the straw mulch you apply for winter protection. Carefully read the labels to minimize risk of damage to your strawberries. Below is a list of herbicides registered and comments about each.

Chateau (flumioxazin) is primarily a pre emergent herbicide but has some post emergent activity against small susceptible weeds. Fall applications of Chateau should only be applied after the strawberries are completely dominant. If Chateau is applied to actively growing strawberries, injury can occur. Add 1% crop oil or 0.25% nonionic surfactant to improve post emergent control of small weeds.

Dacthal (DCPA) is a pre emergent herbicide that can be used in new plantings, immediately after renovation or in fall. It provides good control of many grasses and some broadleaves such as purslane and lambsquarter. It must be applied before weeds emerge.

Devrinol (napropamide) is a pre emergence herbicide that can inhibit rooting of daughter plants so it should be applied after early forming daughter

differ in tolerance to Sinbar. In general, less vigorous cultivars have greater injury. Applications are most effective when applied to the soil and activated by rainfall or irrigation. Sinbar provides excellent control of many winter annual weeds.

plants have rooted. Late forming (after

late August) daughter plants do not

contribute to yield and Devrinol can

be applied before these runners root. Devrinol must be applied before winter

Devrinol provides excellent control of

small grains and some winter annuals

such as chickweed. Devrinol must

be moved into the soil by cultivation

or water (rainfall or irrigation) after

Prowl H20 (pendimethalin) is a pre

emergent herbicide that can be applied

in fall after strawberries are completely

dormant. Rainfall or irrigation following

Sinbar (terbacil) is primarily a pre

application provides best results.

emergent herbicide but it has some

post emergent activity against small

susceptible weeds. Fall applications of

Sinbar should only be applied after the strawberries are completely dominant.

If Sinbar is applied to actively growing

strawberries, injury can occur. Cultivars

application.

annuals and small grains emerge.

Spartan (sulfentrazone) is a pre emergent herbicide with good activity against annual broadleaf weeds, grasses and nutsedge. It should be applied after strawberries are dormant. Some cultivars may be sensitive. The amount of rainfall or irrigation required for activation depends on existing soil moisture, organic matter content, and

soil texture.

Poast (sethoxydim) is a post emergent, grass specific herbicide. The grasses must be actively growing, thus Poast should be applied in late summer or early fall before plants become dormant. Summer annual grasses, such as foxtails and crabgrass, will be killed by fall frosts, and do not require Poast applications for control. Poast is more effective against annual than perennial grasses. Poast can be used in the fall to suppress perennial grasses such as quackgrass, control early emerging small grains, and kill winter annual grasses such as wild oats and downy brome.

Select Max (cletodim) is a post emergent, grass specific herbicide that provides good control of most annual and perennial grasses. Like Poast, grasses should be actively growing for best results.

Ultra Blazer (acifluorfen) is a post emergent herbicide that provides good control of annual grasses and broadleaves. It can be applied when strawberry plants are dormant during fall or early spring.

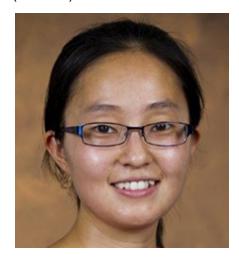
2,4-D amine, a post emergent broadleaf herbicide, can be applied when strawberries are dormant to control some winter annuals. 2,4-D provides good control of many mustards and shepherds purse, but is not very effective against chickweed. The herbicide should be applied to actively growing weeds. Be careful of 2,4-D drift causing injury to nontarget plants. Check the label as only a few formulations are labeled for

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strawberries. 2,4-D is typically used during renovation rather than in fall.

Gramoxone Inteon (paraguat) can be applied as a directed spray between strawberry rows, using shields to prevent contact with strawberry plants. Gramoxone is a nonselective herbicide, so it will kill or severely injure strawberries it contacts. Gramoxone is a restricted use pesticide and is extremely toxic to humans. It provides excellent control of annual grass and broadleaf weeds. Gramoxone does not translocate in plants so it does not control perennial weeds. Weeds should be actively growing when Gramoxone is applied.

The Midwest Small Fruit and Grape Spray Guide contains a section on weed management. It is available on line at http://bit.ly/1qf0Cxs (Bordelon)



Welcome Dr. Wenjing Guan: Wenjing Guan comes to Purdue from North Carolina Agricultural and Technical State University, where she was a Horticultural Specialist working on season extension for vegetable production. She was involved in research projects to establish planting

calendars for organically produced warm season (tomato, cucumber and pepper) and cool season (lettuce, spinach and pak choi) vegetables in high tunnels, and participated in strawberry variety evaluation under organically managed high tunnel systems. Wenjing received her Ph.D. at the University of Florida, with the dissertation project focusing on specialty melon production and vegetable grafting. She conducted specialty melon variety evaluations under conventional and organic production systems in Florida, and investigated yield, disease resistance and fruit quality of melons grafted onto hybrid squash and African horned cucumber rootstocks. Her research showed grafting is a promising practice to control soil-borne diseases and could potentially increase yield. Taking the position as a horticulturist at the Southwest Purdue Agricultural Center, Wenjing will establish a research and extension program on vegetable and melon production with an emphasis on sustainable production systems. Her specific interests include season extension techniques, alternative production systems, fruit quality, plant nutrient management, and innovative cultural and pest management practices. Her longtime research goal is to increase on-farm profitability while maintaining environmental sustainability. Wenjing's research and extension program will be established based on the needs of stakeholders in Indiana. She welcomes comments and suggestions from vegetable growers

and industry representatives all over the state. Please do not hesitate to contact her if you have any questions: <u>guan40@purdue.edu</u>

812-886-0198, or (cell) 352-870-4696.

Strawberry Leaf Scorch under the Heat:

We recently launched a project to test the feasibility of growing strawberries under high tunnels in south Indiana (Fig 4).



Fig. 4

This project is intended to explore season extension technologies for strawberries in our region. We hope high tunnels could protect strawberry plants from harsh winter, and allow us to harvest strawberries as early as in Valentine's Day. There are ten strawberry cultivars in the trial, with three day-neutral cultivars, and seven June bearing cultivars. In order to have the strawberries grow to a decent size before winter arrives, we planted them on August 27 in our 30×96 high tunnel at Southwest Purdue Agricultural Center.

Unexpected heat happened in the first week of September brought us the first challenge of planting strawberries under tunnels in early fall. After the highest temperature inside the tunnel

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reached 110 °F, we started to see leaf scorch on newly planted strawberries. The symptom started on margins of leaves that are on top of the plants. They turn brown and become brittle. In severe cases, the entire plants die (Fig.5).



Fig. 5

New growth will continue and replace damaged leaves if plants are mildly affected (Fig. 6).



Fig. 6

Leaf scorch is essentially caused by water stress. The plants cannot supply water fast enough to supplement water lost through transpiration. Young strawberry plants are particularly susceptible, as they have not developed a strong root system. Additional irrigation and shade cloth will help in this case. The similar symptom can also be observed with high soil salinity. Please follow us for more updates about the trial. (Guan)

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Schools Demand More Apples:

U.S. apples usually are at their highest volume and lowest cost between September and May. That's a schedule that coincides perfectly with the school year.

"The demand for Michigan apples is growing in the foodservice and school markets," said Pat Chase, sales and field representative for Jack Brown Produce Inc., Sparta, Mich.

Chase said schools often want medium-sized apples, which fits well with the size profile of many Michigan varieties.

In April, the U.S. Department of Agriculture approved a U.S. Apple Association request for a bonus buy of fresh apples and processed apple products.

The purchase includes nearly 35 million pounds of fresh apples and more than 16 million pounds of processed products, according to the association. The largest apple purchase in USDA history was expected to be worth more than \$18 million.

The apples were to be used in the USDA's nutrition programs, including school lunch programs.

Riveridge Produce Marketing Inc., Sparta, Mich., is a USDA supplier that benefitted from the deal.

"Any time you have added business that's going directly to schools, that's a great thing," president Don Armock said.

"It helped clean up last year's crop — especially Red Delicious — which was a pretty big crop."

Many apple growers already had

been seeing an uptick in demand from school programs before that multimillion-dollar deal.

"The national trend of promoting more healthy options in schools certainly has something to do with that," said Nick Osmulski, vice president of sales for North Bay Produce Inc., Traverse City, Mich.

"Also, I think people in general are trending towards trying to eat more healthy, and for the foodservice industry apples are something that are always readily available, and the market doesn't fluctuate as much as other commodities."

For some apple growers, however, increased demand from schools for fresh-cut apples has actually been a drawback.

"Some of the school systems are leaning more to slices than they have in the past," said Scott Swindeman, vice president for Applewood Orchards Inc., Deerfield, Mich., and vice president of sales for All Fresh GPS LLC, Comstock Park, Mich.

"We've done tray packs and whole apples for schools. We don't do fresh slices. That's a huge investment." (David Mitchell, thepacker.com)

Newer Varieties Take a Bite Out of Red Delicious:

Red Delicious was once the dominant variety of apple grown in Michigan, and as of 2011 the variety accounted for 1.45 million of the state's 9.2 million apple trees.

But an interesting thing happened that year. The state's growers planted

only 15,200 Red Delicious trees down from the 41,700 trees planted four years earlier — and planted 142,000 gala trees.

That pushed Gala to 1.46 million trees in the state, making it the state's biggest variety, according to U.S. Department of Agriculture data.

The state's USDA fruit inventory is being updated this year, and growers said Red Delicious has continued to lose ground to newer varieties in the four years since the previous report's publication.

The new report is expected to be available by the end of the year.

"We're seeing an increase in the varieties that consumers want," said Chris Sandwick, vice president of sales and marketing for BelleHarvest Sales Inc. Belding, Mich.

"We have more Fuji, Honeycrisp and Galas. Some of the older varieties are starting to wane."

Michigan growers planted more than 700,000 Honeycrisp trees from 1997 to 2010, and growers continue to plant more in order to keep pace with demand for the premium variety.

Scott Swindeman, vice president for Applewood Orchards Inc., Deerfield, Mich., and vice president of sales for All Fresh GPS LLC, Comstock Park, Mich., said customers still want Red Delicious, but the deal isn't what it once was.

"Retailers are taking shelf space away," he said.

"Honeycrisp and other managed varieties have cut into it. There are several that are getting space at some point during the season."

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Those newer varieties, he said, include apples like Ambrosia, Jazz, Kiku, Lady Alice, Opal and SweeTango. Swindeman said All Fresh will be offering Kanzi — a cross of Braeburn and Gala — for the first time this season.

"The flavor profile consumers want today isn't what it was years back," Swindeman said.

"Consumers are picking other things. We're selling a lot more Galas and Fujis."

Although some growers have increased acreage, the shift in varieties has largely come at the expense of older trees.

"Over the last decade, older plantings are being replaced by higher density orchards so you're getting more production on more acres," Sandwick said.

"They're taking blocks their fathers and grandfathers planted and planting new varieties and new systems."

Overall, Michigan actually lost acreage between 2000-11, falling from 47,500 to 36,500, according to the USDA. But old plantings are being replaced with high-density orchards.

"Every apple tree we have is trellised," said Damon Glei, president and owner of Glei's Inc., Hillsdale, Mich.

"That's not new if you're a Washington grower, but it's a change for us in the last eight years or so. We try to pack more trees into our acreage."

Glei said his family has been planting more Fuji, Gala, Honeycrisp and Pink Lady trees while phasing out Empire, Golden Delicious, Ida Red, Mcintosh and Red Delicious.

"We keep planting new trees," Glei said.

"We're trying to keep up with varieties that are in demand. We're planting as fast as we can to get newer, better varieties."

Glei said the changes aren't without risk.

"We have deposits out for buying trees two years in advance, and we have orders out for trees four years in advance, but you have no idea what the future will be like," he said.

He said the idea that the nation's growers could eventually plant too many Honeycrisp trees is "a major concern."

"Honeycrisp is a good variety as long as it holds its premium price," he said.

"There's a lot of extra work involved with that variety, so if the price goes down — like everything else — it wouldn't be worth growing."

But growers continue to plant because demand — so far continues to grow.

"It's all they want at retail," Glei said.

"In the peak of the season, we probably sell as many Honeycrisps in one week as we sell of all the other varieties combined. Everyone is itching for them. They probably account for 50% of our apple sales and even more than that in terms of dollar sales."

Sandwick said some older varieties, such as Cortland and Jonathan, still have loyal followings, but they aren't attracting new consumers. Growers, of course, are looking for varieties that will. BelleHarvest is hoping Topaz will be one such variety.

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"We're pretty high on it," he said. "We're putting more in. It's been a slow build up, but it has a growing following."

Standwick said Topaz is "vibrantly acidic."

"It's impossible not to have a reaction, which we like," he said.

Meanwhile, North Bay Produce Inc., Traverse City, Mich., is high on Zestar.

"We are seeing a good increase in our Zestar volume," said Nick Osmulski, vice president of sales.

"Zestars are an early variety that come on at the same time as paula Reds and Ginger Golds. There are some limitations with Zestar that will prohibit it from being a mainstream variety that would be available throughout the year, but for an early season apple it eats much better than Paula Reds and Ginger Golds and will serve a niche as a good early season variety."

(David Mitchell, thepacker.com)

FSA Financing Options Improving for Produce Farmers:

Washington, DC, July 22, 2015 – For fruit and vegetable growers, especially operators of small and mid-scale family farms, packing and storage sheds serve as critical pieces of their farm operations, allowing fresh produce to be safely washed, sorted, graded, labeled, boxed up, and stored before it heads to market. In an effort to better serve producers like these, especially those selling to local and regional markets, the U.S. Department of Agriculture's (USDA) Farm Service Agency (FSA), recently issued national guidance to increase coordination, outreach, and usage of Farm Storage Facility Loans (FSFLs) in conjunction with FSA Microloans.

In a notice sent to all state FSA offices on July 17th, Acting Deputy Administrator for Farm Loan Programs James Radintz directed all FSA state and local loan program staff to learn how to use FSFL and direct microloans in combined financing packages and to inform farmers, banks, and other farm lending institutions about the availability of FSFLs and microloans.

"We applaud the Farm Service Agency for taking steps to ensure that its staff are trained in and coordinate the use of farm storage facility loans and FSA microloans, in order to better serve farmers across the country, especially those selling to local and regional food markets," said Juli **Obudzinski, Senior Policy Specialist** with NSAC. "This national guidance is a critical first step to make sure that state and local FSA staff are not only knowledgeable about both loan programs, but also understand how the two can work together to provide farmers the financing they need to build or expand on-farm storage and packing facilities."

The directive not only helps to enhance these programs for local and regional food producers but especially helps beginning farmers looking to enter this expanding market. Over the past several months, NSAC has been urging the agency to take steps to better coordinate FSFLs with other FSA financing options like Microloans and other Direct Operating Loans.

The Farm Storage Facility Loan program, which was expanded to serve produce farmers and finance cold storage facilities for the first time in the 2008 Farm Bill, provides low-interest loans for farmers to build cold storage units or to upgrade and expand existing storage facilities.

Changes introduced by FSA in 2014 extended the program to also finance many aspects of produce packing sheds. The National Sustainable Agriculture Coalition (NSAC) worked closely with NSAC member group the National Young Farmers Coalition to help create the changes to the FSFLs. While these changes have made it easier for diversified farmers — especially those serving local and regional markets to secure low-interest financing for their cold storage and packing needs, the announcement made this week will ensure that produce farmers have improved access to all of USDA's loan programs and are better able to finance equipment that is not covered under the FSFL program.

For example, a farmer can obtain a FSFLs to finance the construction of a cold storage building or a prefabricated cooler, but cannot use the loan to purchase a refrigerated truck needed to transport produce to market. Likewise, a farmer can obtain a FSFL to purchase boxing equipment,

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tanks, conveyers, washers, and weight graders, but cannot use the loan to purchase portable equipment, scales, or used equipment, or to supply the packaging and shipping containers. For a complete list of allowed equipment under the FSFL program can be found in NSAC's Grassroots Guide to Federal Farm and Food Programs.

The Microloan program was launched in early 2013 to provide small farms with loans of up to \$50,000 to cover purchases such as seeds, animals, and small equipment. Featuring a simplified and streamlined application process, the microloan program better meets the credit needs of small farms of all types, including beginning farmers and those serving local and regional food markets, including urban farmers. NSAC worked with NSAC member groups the National Young Farmers Coalition and California Farmlink to help develop the program and get it authorized as part of the 2014 Farm Bill. In FY 2014 there was a 45 percent jump in microloans over its inaugural year. FSA recently made its 13,000th microloan in the program's brief history.

FSA's farm loan programs, including microloans, operate separately from FSFLs and are often administered by different FSA staff. FSFLs are part of the commodity program division of FSA, while operating loans are within the agency's loan making division.

"Combining the two low-interest loan programs will allow farmers to finance the full array of buildings and equipment they may require for cooling, packing, and transport," said Obudzinski. "Ideally, FSFL rules should be expanded to better cover the full array of cold storage, packing shed, and mobile equipment needs of fruit and vegetable operations, but until such time, the coordination between the two FSA loan programs fills an important gap."

As Food Safety Modernization Act (FSMA) regulations become finalized in the coming months, FSFL and microloans will become especially important as farmers take steps toward compliance, upgrading or even replacing or purchasing new packing and cold storage facilities. Coordination between USDA and the Food and Drug Administration (FDA) will be essential to making sure that farmers know not only about the new FSMA regulations but about their financing options for these facilities.

"From access to credit to compliance with food safety regulations, produce farmers, in particular operators of smaller scale farms, face many challenges. But with these recent improvements to farm loan programs, NSAC looks forward to seeing some of those challenges addressed and will work hard to get the word out about these opportunities," said Obudzinski.

(National Sustainable Agriculture Coalition)

New Farm Storage Financing Options for Meat, Dairy, and Eggs:

For most farmers, on-farm storage is essential to keeping food fresh and

safe prior to marketing. Whether a grain bin, cold storage for fruits and vegetables, refrigerated milk tank, or meat cooler, all farmers need a temperature-stable environment to safely store products they grow or raise on their farm. Depending on the size, on-farm storage facilities can be costly to build and install, and not always financially feasible for small and beginning farmers. The good news is that the U.S. Department of Agriculture has recently expanded eligibility for very low interest farm loans to farmers to help defray the costs of needed onfarm storage.

Just weeks after expanding financing options for produce growers, USDA's Farm Service Agency (FSA) last week expanded the Farm Storage Facility Loan (FSFL) program yet again, to provide affordable financing to farmers to build or upgrade storage for meat, dairy, and eggs. The FSA notice to its field offices also covers flowers, hops, and rye.

NSAC commends FSA for this expansion of the program to cover the needs of additional farmers, especially those serving local and regional markets with high quality meat, eggs, and dairy products. Grain storage is important, but it's promising that USDA is reaching out to serve other needs and a more diverse range of farm businesses.

The Farm Storage Facility Loan program was expanded to serve produce farmers and finance cold storage facilities for the first time in the 2008 Farm Bill. Changes introduced by

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FSA in 2014 extended the program to also finance many aspects of fruit and vegetable packing sheds.

The new announcement makes the following commodities eligible for facility loans: unprocessed meat and poultry, eggs, milk, cheese, butter, yogurt, floriculture (flowers), hops, rye, and aquaculture. Most grains and oilseeds have been eligible for the FSFL program since the program's beginning, and pulse crops, peanuts, hay, biomass, and honey were added later.

This USDA loan program provides financing for farmers to build or upgrade on-farm cold storage, packing, washing, and handling facilities, including:

- Packing sheds
- Walk-in coolers
- Electrical, cooling, monitoring and food safety equipment
- Graders, sorters, conveyors, washers and drying tunnels
- Shipping, preparation and installation costs

The new expansion will allow FSA to serve a more complete range of farming operations in building and improving short-term on-farm storage capacity. Costs and equipment that are not currently covered under the FSFL program may be eligible for financing through other FSA farm loan programs including Direct Operating and Microloans.

These needed changes will help farmers of all kinds keep food safe,

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facilitate new markets, and better serve the expanding customer base for healthy, local and regional food.

Getting the word out about this new financing opportunity to farmers across the country will be essential to ensure program dollars are flowing to farmers who may not be familiar with this loan program. NSAC will be working with our farmer-based member organizations across the country to conduct outreach on the Farm Storage Facility Loan Program.

To read more about the Farm Storage Facility Loan Program, check out NSAC's Grassroots Guide to Federal Farm and Food Programs or download this FSFL fact sheet that can be used at upcoming farmer conferences. (National Sustainable Agriculture Coalition)

Upcoming events

Sept. 24, 2015:

Purdue Wine Grape Team Fall Workshop, Purdue Meigs Farm, 9101 S. 100 E. Lafayette, IN 47909 <u>http://bit.ly/1XTrpla</u>

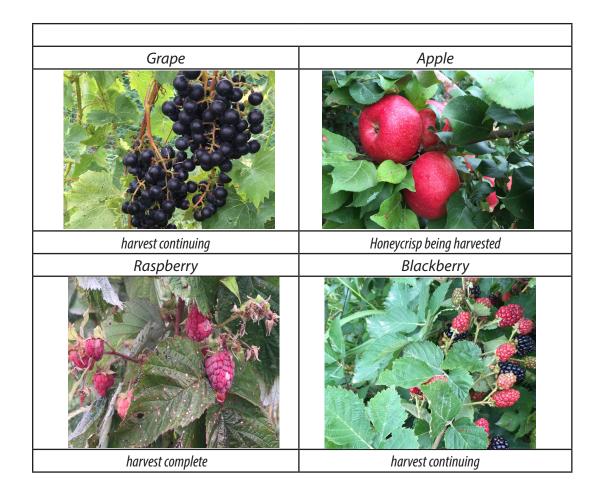
Jan. 19-21, 2016:

Indiana Horticultural Congress, Wyndham Hotel, Indianapolis, IN http://www.inhortcongress.org/

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