

Fruit Pest Advisory

University of Idaho, U.S. Department of Agriculture, and Idaho counties cooperating.

Spring 2013 Issue 1

Protect Yourself

Blossoms are already open, watch forecasts closely. Beware of the forecasted cold temperatures for much of Southwestern Idaho the next few weeks. See Table on critical temperatures for flower and bud damage. Orchardists use heaters if available, or turn on wind machines.

Another idea is to cover the buds and blossoms with water, forming an ice layer. Remember that water freezes at 32 degrees F, and a permanent, uninterrupted layer of ice throughout the frost period will insulate those flowers and buds. The ice must remain until the daytime air temperatures rise above freezing. If High winds are expected using water is not advisable as the weight of limbs could result in breakage.

The last freeze will occur 2 out of 10 years after May 4 at a temperature of 28 degrees or less in Payette County,

May 6th in Emmett and Parma, May 13th in Weiser, April 27th in Caldwell and Western Magic Valley, May 14th in Eastern Magic Valley. May 6th in Twin Falls.

A 10% loss of a tree's flowers may be tolerable for some growers. You might consider it as a natural thinning technique this year.

Coryneum Blight (Peach Shothole): Peach and apricot growers should thoroughly examine trees at this time to look for cankers. Most of these infections probably occurred in the fall and have developed over the winter. A canker may look like a dark patch with reddish borders, and are often centered at buds. Dead, unopened, gummy buds on year-old wood are fairly representative of coryneum blight. Prune out and destroy all such cankers to reduce the number of spores that are spread by spring rains. A shuck-

split spray of Bravo (Daconil for home use), Abound, Captan, Ziram, or Pristine may be necessary in orchards where fall or delayed-dormant fungicide applications were **not made**.

If you had a problem with this pathogen last year, hopefully you have already applied your delayed-dormant application whereas these sprays should not be applied now.

Fire Blight: Continue to scout your apple and pear trees for overwintered cankers. Often they will be stems or twigs with last year's leaves still attached. Prune them out 8 - 12" below the canker.

If they aren't pruned out, they will become an inoculum source for infections this spring. This spring is creating a perfect environment for Blights. I feel we are in for a bad Blight year.

Degree Day "No biofix" (4/16/13)

<u>Sta. Elevation</u>	<u>°Days</u>	<u>1% Hatch</u>
Weiser (2080)	142	May 19
Fruitland (2421)	179	May 15
Emmett(2390)	167	May 20
Parma(2309)	151	May 18
Nampa(2713)	130	May 20
Boise (2719)	141	May 21
Mt Home (2992)	158	May 14
Hagerman (3197)	125	May 21
Twin Falls (3921)	94	June 5
Rupert (4154)	84	June 6

Look out for:

- Look for eggs of pear psylla and aphids near buds and in cracks and crevices
- Trap crawlers with electrical or Duct tape.
- Look for old fire blight infection and prune out and remove from orchard
- Make sure all trees are pruned properly. Remember your ABCD's prune All Broken, Crossing, Diseased or Dying branches anytime.

	Stage of Development	10% Kill (°F)	90% Kill (°F)
Apple	Silver tip	15	2
	Green tip	18	10
	½-inch green	23	15
	Tight cluster	27	21
	First pink	28	24
	First bloom	28	25
	Petal fall	28	25
Peaches	Swollen bud	18	1
	½-inch green	25	15
	Pink	26	21
	Bloom	27	24
	Petal fall	28	25
Pears	Swollen bud	15	0
	Bud burst	20	6
	Green cluster	24	15
	White bud	25	19
	Bloom	28	24
	Petal fall	28	24
Sweet Cherries	Swollen bud	17	5
	Bud burst	25	14
	Tight Cluster	26	17
	White bud	27	24
	Bloom	28	25
	Petal fall	28	25
Tart Cherries	Swollen bud	15	0
	Bud burst	26	22
	Tight cluster	26	24
	White bud	28	24
	Bloom	28	24
	Petal fall	28	24
Apricots	Swollen bud	15	---
	Calyx red	20	0
	First white	24	14
	First bloom	25	19
	Full bloom	27	22
	Post bloom	27	24

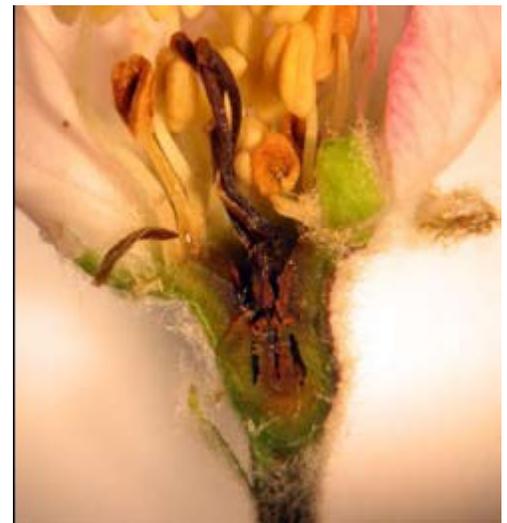
TABLE. FROST TABLE DEVELOPED BY UTAH STATE UNIVERSITY

Self-Alerts

Codling moth traps should be hung from your apple trees at this time. Hang traps as high as you can comfortably reach (6-7'). Preferably in the top third of the tree canopy. Find a sturdy branch and make sure trap openings are not obstructed (hang 2 traps minimum; or 1 trap per 5 acres). Check traps every day for moths until you reach biofix and every three or four days thereafter.

For commercial growers planning to use **Pheromone Mating Disruption** for either codling moth or peach twig borer, purchasing the dispensers now will allow you to deploy them as soon as you reach biofix. Biofix occurs when 2 or more moths are caught inside traps in a single day.

According to temperature modules Biofix is set to occur around April 25th.



UNIVERSITY OF IDAHO EXTENSION UPDATE

Twin Falls County

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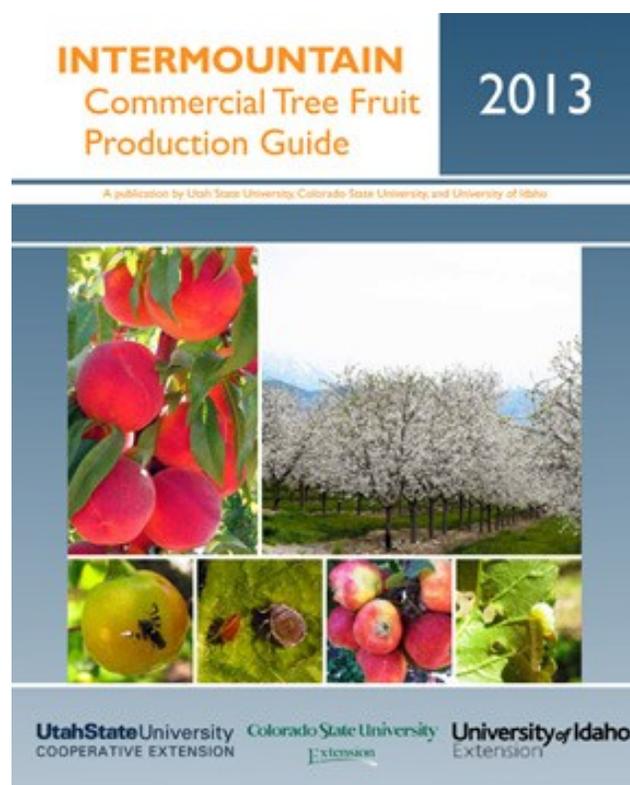
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WSU Pest Management Transition Project Newsletter

Marion Murray Utah State University Extension IPM Project Leader

WSU Decision Aid System

In 2012 I teamed up with Marion Murray from Utah State University and collaborated in providing Idaho information to the Intermountain Commercial Tree Fruit Guide. This Extension publication effort covers pest management and general production issues for growing healthy fruit in the Intermountain West, with an emphasis on integrated pest management and sustainable agriculture. Complete spray recommendations for each fruit crop are included, along with: weed management, plant growth regulators, thinning, nutrition, irrigation, managing frost, and special pest management programs. Whether you grow fruit as a homeowner or for a commercial business, I highly recommend downloading or ordering the publication from the www.hortmagic.org (Magic Valley Horticulture website) or directly from the www.intermountainfruit.org website.



Fertilize your Brambles

Tony McCammon

Too little or too much fertilizer can be bad for any fruit producing plant, as it can result in nutrient imbalances and toxicity. Generally, blackberries and raspberries require less attention to fertility than other crops, but a good schedule does increase their productivity. When choosing fertilizers, avoid those that contain chlorides as raspberries are particularly sensitive to them. Select fertilizers that contain sulfates like Ammonium Sulfate to benefit from the acidity in our alkaline soils.

In late April, usually when the redbud and serviceberry are in bloom, top-dress your newly planted brambles with 10-10-10 at 13 ounces per 10 foot row, or for 2 or 3 year old plants add 24 ounces per 10 foot row. The next round of fertilizer will occur right at blossom time, at half the rate listed above.

To increase moisture and nutrient holding capacity plan on mulching your brambles. Some mulches will cause rots and harbor other pests. The key is to use a coarse mulch, like pine nuggets or straw, that dries out readily and doesn't mat. Things to **avoid** using are grass clippings, un-shredded leaves, hay, hardwood bark mulch, and wood chips. Mulch your patches every other year, after you see emergence and thin out the canes. Fertilize with the granular material right before mulching, if you can. Remember that late is better than never, and if you don't get around to mulching and fertilizing them until May (late), they will still appreciate the attention.

For more management practices for brambles review the UI publication at <http://www.cals.uidaho.edu/edComm/pdf/BUL/BUL0812.pdf>

Spring Nutrition For Fruit Trees

By Tony McCammon

Nutrition is one of several factors which can influence fruit quality. The best way to determine the needs of your trees is to use an integrated approach of using historical leaf, soil, and fruit analysis data. Periodic soil tests and leaf sample analysis is the only way to assure optimal tree nutrition.

Nitrogen plays the most important part in the living machinery of a tree. Apply Urea (less than .25% biuret) at 3lbs/100gal.

Phosphorus is essential part of many sugars involved in photosynthesis and respiration. **Potassium** Maintains the water

status in the plant by regulating transpiration. It also activates most enzymes. **Calcium** is critical for cell growth and cell division therefore it is imperative for quality, shelf life, and prevention of breakdown. **Zinc** is involved in nitrogen metabolism and activates enzymes. **Boron** is involved in sugar formation and the transport of photosynthates and water in the plant. Apply Solubor at 1lb/100 gal or any other boron source at .1-.2 actual B/100gallons. Some other elements that play a less importance roles in quality are Magnesium, Sulphur, Manganese, Iron, Copper, and Molybdenum.

For Apples and Pears applications of nutrients are put on before

bloom (after analysis' mentioned previously).

The prebloom spray with nitrogen, boron, and zinc can be applied in a tank mix at the tight cluster stage of blossoms. These elements together will enhance bud quality, improve the ability of the buds to overcome cold damage, and enhance fruit set.



Tight Cluster

Table and Wine Grapes

Fertilization:

Vinyards should consider applying fertilization this Month. Decisions should include knowledge about the specific nutrient such as its mobility in the soil and plant and the time the nutrient is most critical for plant growth. Timing of fertilizer applications is based on vine physiology, type of nutrient and product being applied, and the purpose of the application. Below are some general guidelines for the most commonly applied nutrients.

Nitrogen – N can be applied by banding, broadcast, or through fertigation. The greatest demand for

soil N is from around the time of mid-shoot leaf expansion through véraison. Additions are often made to replace the amount of N removed by the crop.

Phosphorus – Is immobile in the soil so it should be "banded" or "placed" in the rooting zone or incorporated with tillage. Raising the pH in vineyards can also increase the availability of phosphorus.

Potassium – Is immobile in the soil so it should be "banded" or "placed" in the rooting zone or incorporated with tillage. In Southwestern Idaho vineyards, potassium doesn't need to be applied unless tissue tests continue to show deficiencies.

Boron – Boron should be applied as a broadcast application or foliar as banding can sometimes result in toxicities. Boron is relatively immobile in the grapevine so it is most effective when applied directly to the buds. A pre-bloom spray of .4 lbs actual B / 100 gallons and a post-harvest spray of up to .8 lbs actual B / 100 gallons is a common maintenance program.

Zinc - Is immobile in the soil and relatively immobile in the plant so it should be "banded" or "placed" in the rooting zone or incorporated with tillage or applied as a foliar. A dormant spray of 5 – 15 lbs Zn / 100 gal. can be applied just prior to bud-break.

Twin Falls County

ALWAYS read and follow the instructions printed on the pesticide label. The pesticide recommendations in this UI publication do not substitute for instructions on the label. Pesticide laws and labels change frequently and may have changed since this publication was written. Some pesticides may have been withdrawn or had certain uses prohibited. Use pesticides with care. Do not use a pesticide unless the specific plant, animal, or other application site is specifically listed on the label. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

Trade Names--To simplify information, trade names have been used. No endorsement of named products is intended nor is criticism implied of similar products not mentioned.

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