

Tree Fruit Pest Advisory

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

Spring 2012 Issue 1

Protect Yourself

Blossoms are already open, watch forecasts closely. Beware of cold temperatures for much of Southwestern Idaho these 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.

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, and April 27th in Caldwell.

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

In addition to our unseasonably warm weather, if sudden wet weather occurs diseases will play a large part in your management practices 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" (4/15/12) Look out for:

| <u>Sta. Elevation</u> | <u>°Days</u> | <u>1% Hatch</u> | |
|-----------------------|--------------|-----------------|---|
| Weiser (2080) | 120.5 | May 19 | • Look for eggs of pear psylla and aphids near buds and in cracks and crevices |
| Payette(2150) | 123.8 | May 19 | • Trap crawlers with electrical or Duct tape. |
| Fruitland (2421) | 162.2 | May 15 | • Look for old fire blight infection and prune out and remove from orchard |
| Emmett(2390) | 138.6 | May 18 | • Make sure all trees are pruned properly. Remember your ABCD's prune All Broken, Crossing, Diseased or Dying branches anytime. |
| Parma(2309) | 145.2 | May 18 | |
| Nampa(2713) | 145.5 | May 18 | |
| Boise (2719) | 158.9 | May 18 | |
| Mt Home (2992) | 150.2 | May 18 | |
| Magic Valley (4048) | 126.2 | May 30 | |

| | 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 21st.



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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.

WashingtonCounty

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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