Fruit FAX

Horticultural and Pest Management Notes, produced by Lake Ontario Fruit Program, CCE

From FAX: 585-798-5191 **D. Breth & M. Miranda S.** **April 2, 2013**

This is the 2nd Fruit FAX of the season – nice late start! Please call Debbie Breth if you have transmission problems.

Forecasting Bud Break in the Spring of 2013 – Terence Robinson

Using forecasts for the next 3 weeks (until April 21) we estimate that green tip in apples will be on April 16 for early bloom varieties (Idared) and on April 17 for mid bloom varieties (Delicious) at Williamson NY. The weather forecast indicates we will slowly accumulate growing degree hours in the next few days and then rapidly accumulate growing degree hours after April 4. We caution that the estimated date of green tip is dependent on the accuracy of the weather forecast we used and the accuracy of the models (which in most cases is quite good).

DEC Special Permit Training Class for Non-Certified Applicators and Handlers of Federally Restricted-Use Pesticides

Look in Fruit Notes Issue 3 or 4 for registration form. Please pre-register by April 3.

Wayne County
Tuesday, April 9, 2013

English Session - 9:00 am to 12:00 pm
Spanish Session - 1:00 pm to 4:30 pm

Registration Begins at 8:30 am (English) and at 12:30 pm (Spanish)

Orleans County
Wednesday, April 10, 2013

English & Spanish sessions
9:00 am to 12:30 pm

Registration Begins at 8:30 am

Pest Management Notes…

Prepare your sprayers so they are ready to go for the warmer weather expected next week.

Leaf curls sprays if not done last week in peaches need to be completed by the time we get the next warm up to prevent the fungal spores from washing into the open bud scales and infect the leaf tissue developing inside the bud scales.

Plan and order your fungicides for the first apple scab spray – captan, mancozeb, copper, or sulfur (organic). These copper or sulfur need to be applied before any scab infection event. Captan and/or mancozeb can be applied within 18-24 hours of the start of the rain. Copper should be applied between silver tip and ¼ inch green in apples. Kerik Cox has suggested that copper applications can help reduce the level of fungicide resistant scab in orchards.

Prune raspberries and blueberries and make preparations to apply lime sulfur for cane diseases in brambles at budbreak before ½" green and blueberries as leaf buds begin to break.

In berry plantings and apples where water typically stands after heavy rains, evaluate drainage systems and evaluate the need for treatment of phytophthora root rot using Ridomil drench before growth starts in apples, band application before growth begins in stone fruit, blueberries, and raspberries; before bloom in strawberries.

Herbicide applications - If you plan to use Goal or Goaltender (in combination with Prowl or Surflan) in herbicide strips, this needs to be applied by budbreak. And remember the Chateau label requires application by pink bud in apples. Using post-emergent burndown herbicides are necessary to kill any weeds already emerged, but with cool temperatures, it will take longer for any effect. When perennials are actively growing, glyphosate is the only effective herbicide for those plants.

Horticulture Notes…

Tree Fruit Cold Damage Survey: Please respond a survey prepared by Greg Lang (MSU) and other scientists who are working on putting together a future grant proposal focused on cold damage in temperate grape and tree fruit crops. The survey, which is a quick 12-question multiple choice survey, can be answered at: www.surveymonkey.com/s/ColdDamageTreeFruitGrapes

Tree Fruit Nutrition: Fertilizer programs in NY are based on supplying just-enough nutrition to optimize cost and production. Here are some guidelines on fruit nutrition from Steve Hoying, Horticulturalist at Cornell's Hudson Valley Lab.

Determining nitrogen needs of apples is best done using leaf analysis combined with examination of last year's shoot growth and crop. Cornell apple leaf N recommendations are: (1) 2.4-2.6% for young non-bearing apples, (2) 2.2-2.4% for young bearing apples, (3) 1.8-2.2% for mature soft variety types (like Cortland, Honeycrisp, Jonamac and McIntosh), (4) 2.2-2.4% for hard varieties (like Red Delicious, Empire, Gala, Rome).

In the absence of last year's leaf analyses, infer N need based on last year's shoot growth and fruit condition, and on older nutritional analyses: (1) Bearing trees with low N status may have terminal shoot growth less than 8 inches long, and may have produced highly-colored, early-maturing fruit. However, trees that did not receive adequate supplemental irrigation may also show limited shoot growth, (2) Bearing trees with excessive N status have shoot growth over 18" and poorly-colored fruit, (3) Also, consider leaf and soil analyses from 2 or more years ago. Combined with growth observations, older nutritional data will give useful, if not ideal, indications of N needs. Plan to do leaf analyses this year if you find yourself relying on older data, (4) The optimal timing for N application may be green tip through bloom, or a split application at green tip followed by a second between bloom and petal fall. Avoid application of N after shoot growth begins because it may contribute to higher fruit N levels. Another strategy would be to apply N shortly before harvest or right after harvest to provide higher reserve N levels for the next year.

A "standard" fertilizer program for bearing apples where leaf analysis shows no major deficiencies and no deficiency symptoms are visible could include: (1) a soil application of 20-40 lbs of actual N; 50-80 lbs KCL; 2 lbs B, (2) at green tip - 4 lbs C-O-C-S or Kocide per 100 gal, (3) at tight cluster to pink - one spray of 3 lbs. feed grade low biuret Urea plus 1 lb. Solubor per 100 gal, (4) At first cover - foliar spray of Zn-EDTA at label rate, (5) at petal fall, first and second cover - 3 sprays Epsom salts per 100 gal., especially on McIntosh to reduce drop, (6) beginning at 1st or 2nd cover, 3 foliar sprays of 1-2 lbs calcium chloride per 100 gal, (7) during the period of shoot growth - 3 more calcium chloride sprays at 3-4 lbs per 100 gal.; Bitterpit-susceptible varieties should receive 6 or more calcium sprays per season, and (8) after harvest - supplemental potassium as needed; 2-3 tons dolomitic lime every 2-3 years.

Recommended Leaf N Levels for Stone Fruit: (1) 2.4-3.4% for apricots, cherries and plums, (2) Above 3.0% and closer to 4.0% for peaches, (3) The best peaches are produced on pencil-sized one-year old wood. The presence/absence of adequate amounts of such wood is another way to determine how your N fertilizer program should be adjusted.

Stone fruit nutrient needs are similar to apple but have important differences: (1) The common apple orchard broadcast fertilizer mix (1-0-2 of N-P-K plus B) is not recommended for stone fruit. Do not apply higher rates of custom-mixed apple fertilizer blend to stone fruit in order to meet their higher N needs, (2) Unlike apples, stone fruit do not require a large amount of potassium. Careful analysis of leaf samples is important to judge the amount of potassium needed. In addition, stone fruit are very sensitive to chlorides; the sulfate form should be substituted for the muriate form when large applications of K_2O are called for in the leaf analysis, (3) Both excess and deficiency of Boron can reduce fruit quality in stone fruit. Rates of boron for soil application in stone fruit orchards should not exceed 1 lb per acre (equals 1/2 of the rate suggested for apples and pears) unless both soil and leaf analysis results indicated that greater amounts are required.

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