



Newsletter Extension

Fruit ICM News

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Calendar

March 5-6: Michigan State Organic Fruit School, topics for the two full days of instruction include building soil quality, certification guidelines, marketing, economics, organic transition, varieties to consider, pest management, ecology, nutrition, and ground floor management. The \$200 registration fee includes instruction, a large resource notebook, lunches, breaks, and one dinner. Registration is open until Friday, February 23, 2001. Please contact Sandy Allen by phone at (517) 355-8362, fax at (517) 353-0890 or e-mail at allens@msu.edu for details and to register. Information is also available on line at <http://www.hrt.msu.edu/organicfruitschool.htm>

March 10: Ohio Berry Growers School, OSU Piketon Research and Extension Center, Piketon, Ohio. Presenters for this year's school include Dr. Barclay Poling (North Carolina State University), Dr. Fumiomi Takeda (USDA Appalachian Fruit Research Station), and Peter Bierman and Brad Bergefurd (OSU Piketon). For more information call Brad Bergefurd at (740) 289-3727 or e-mail at bergefurd.1@osu.edu.

March 28: North Central Fruit Crops Breakfast, Vanson's Restaurant, Monroeville, Ohio; 8:00 a.m. followed by pesticide update at 9:00 a.m. Contact Ted Gastier at Huron County Extension, (419) 668-8210.

June 30: Ohio Fruit Growers Society Summer Tour and Meeting, Patterson Fruit Farm, Chesterland. For more information, contact John Wargowsky at (614) 249-2424, or e-mail at jwargows@ofbf.org.

Peach Leaf Curl

Source: *Midwest Tree Fruit Pest Management Handbook*
<http://www.ca.uky.edu/agc/pubs/id/id93/id93.htm>

Peach leaf curl, caused by the fungus *Taphrina deformans*, can result in severe defoliation that in turn reduces fruit quality, yield, and tree vigor. A related disease, plum pockets, occurs on plums but is generally not a threat in commercial orchards.

Disease Development: Symptoms are first seen about a month after bloom. Leaves are initially red and become distorted, thickened, and curled before eventually turning brown and dropping. Infected fruit are distorted and off-color. Spores of the fungus are produced on the surface of diseased leaves and are spread by wind and splashing rain. Spores that become lodged under bud scales and rough bark overwinter in those sites. In the spring, spores germinate and infect young leaves while still in the bud. Leaf curl is more severe when extended cool and rainy weather occurs at bud burst; apparently, cool weather retards leaf maturation and prolongs the period that leaves are susceptible. Infection is greatest at temperatures of 50° to 70°F and minimal below 45°F and above 86°F.

Peach Leaf Curl Control: No peach or nectarine cultivars are immune to leaf curl, but Redhaven and its derivatives are more resistant than Redskin and its derivatives. A single fungicide spray applied in the fall after leaves drop or in the spring while trees are still dormant will control leaf curl. By bud burst, most infection has already occurred, and fungicide sprays are relatively ineffective.

Spray materials recommended from the 2001 Commercial Tree Fruit Guide include one application of any of the following::

- Bravo 720F
- Carbamate 76WDG
- Ziram 76
- Copper hydroxide (Kocide)
- Copper oxychloride (C-O-C-S)
- Bordeaux mixture

Remember: Treatments applied after bud swell are not effective.

Pesticide News

Source: *2001 Commercial Tree Fruit Spray Guide and various web sites*

As you are well aware, the application of Lorsban 50 WP is only labeled for prebloom on apple for control of rosy apple aphid and San Jose scale. However, it is still labeled for up to 8 applications on sour cherry, for control of plum curculio, cherry fruit fly, peachtree borer, and lesser peachtree borer. Lorsban is phytotoxic on sweet cherries and should also not be used on peach, nectarine, pear, or plum.

On stone fruit, Lorsban 4 EC is labeled to be applied as a trunk spray, not for contact with fruit, for one application only per season on peach, plum, and nectarine for control of borers. On peach and nectarine, do not apply within 14 days of harvest. On cherry, make 2 preharvest application (at least 6 days before harvest) and one post-harvest application. On apple, the single recommended use for Lorsban 4EC is in combination with Superior oil at green tip for control of San Jose scale, European red mite eggs, and aphid eggs.

Mating Disruption for Codling Moth Control

Isomate C-Plus and CheckMate EM are registered for the control of codling moth. They dispense the sex attractant of the codling moth and are designed to prevent male moths from locating females for mating. This strategy, termed mating disruption, is most likely to succeed in blocks of at least 5 acres and where initial populations of codling moth are low. If mating disruption is used for codling moth control in smaller blocks or where infestations are greater, border sprays or at least one or two cover sprays will also be necessary. Controlling codling moth by mating disruption will not control other insect pests that are controlled by cover sprays (plum curculio and apple maggots, for example). Isomate C-Plus has performed better than CheckMate CM in most studies.

Neem Products

Some growers have expressed interest in Neem-based biological products such as Aza-Direct by Gowan, Neemix 4.5, and Azatin XL Plus by Thermotriology Corporation. Extracted from the seed of the neem tree, this insect growth regulator controls targeted insect larvae. When they ingest or come in contact with it, this product interferes with the insect's ability to molt and shuts off feeding behavior. Affected larvae slowly starve and die at next molt.

Neem-based products are formulated for use in: **Tree fruits:** apples, apricots, cherries (sour, sweet), crabapples, nectarines, peaches, pears, plums, prunes, and quinces. **Small fruits:** blueberries, caneberries (blackberries, boysenberries, dewberries, elderberries, loganberries, raspberries, youngberries), currants, gooseberries, huckleberries, grapes, strawberries. Be sure to check label for specific crop usage, as there is variability between products.

Check out the following web site for more information:

<http://www.gowanco.com/labels/sec3/azadirectsec3no.pdf>

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Information presented above and where trade names are used, they are supplied with the understanding that no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely, and accurate, the pesticide user bears responsibility of consulting the pesticide label and adhering to those directions.

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