Geneva Predictions:

**Codling Moth**
Codling Moth development as of August 13:
- 2nd generation adult emergence at 56% and
- 2nd generation egg hatch at 18%.
- 2nd generation 30% CM egg hatch: August 16 (= target date where one spray needed to control 2nd generation codling moth).

**White Apple Leafhopper (WAL)**
2nd generation WAL found on apple foliage: August 13.

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[Ed. note: This is an update from a 2004 article on borer management, reprinted because of its timeliness and applicability to the situation in many commercial orchards recently.]

There is increasing concern throughout the Northeast about damage done to apple trees by borers. The species of primary concern is dogwood borer, but American plum borer can be prevalent in western New York apple orchards that are close to tart cherry and peach orchards. While we do not yet fully understand the effects these borers have on dwarf trees, we do know that they reduce vigor and can, in time, completely girdle and kill trees.

We tested a number of insecticides against these borers over a number of growing seasons. Lorsban is very effective for this use and we would strongly urge growers to take advantage of it where needed. In 2001–2003 we compared some other materials, including white latex paint, endosulfan, Avaunt, Surround, Intrepid, Danitol, Imidan, spinosad and Esteem with Lorsban, with varying results. To make a long story short, only Avaunt, Danitol and, possibly Esteem, applied two or three times in midsummer, provided control comparable to one application of Lorsban. Assail and Altacor were effective when applied only once in midsummer but, obviously, will control only the summer generation.
Our tests so far have shown that borers can be controlled season-long by applying Lorsban at various times in the spring and summer. While postbloom trunk applications of Lorsban are still allowed, enabling growers to spray at the peak of the dogwood borer flight, applying this material prebloom as early as half-inch green works well, too, and may be more convenient. Fall also may be a good time to control dogwood borer. Results from 2002 indicated that Lorsban applied postharvest the previous year (sprays went on in October 2001) controlled both the overwintering and the summer generations of dogwood borer. An October 2002 application of Lorsban similarly provided season-long control of dogwood borer in 2003. Lorsban works when applied in the spring and fall because it infiltrates burr knot tissue and kills larvae concealed within. It is also very persistent in wood so it continues to work for a considerably long time after it is applied (apparently 9–12 months in our trials). Fall application may offer growers a more convenient alternative for applying borer control sprays.

In a survey we conducted recently, we observed some relationships between borer infestation and various orchard parameters such as the proportion of trees with burr knots, proximity to stone fruit orchards and presence of mouseguards. Conventional wisdom has held that borer problems are worse where mouseguards are in place. Mouseguards can contribute to increased expression of the burr knots that borers invade, and may shield borers from predators and insecticide sprays. This has led some growers to contemplate removing mouseguards under the premise that mice are easier to control than the borers. However, results of our survey indicate that dogwood borer larvae may be found as readily in trees without mouseguards as in those with them. (American plum borer may be a different story in orchards near tart cherry or peach trees.) The orchard in which we have conducted borer control trials has never had mouseguards and there is no shortage of dogwood borers. If mouseguards are deteriorated and no longer protect the tree, there may be some small advantage, in terms of borers, to removing them. But, in orchards where mouseguards still provide protection against rodents, removing them for the sake of borer control is probably not worth the risk. Instead, we would recommend the use of trunk sprays to control borers. Even with mouseguards on, insecticides will give adequate control if they are applied carefully (i.e., a coarse, low-pressure, soaking spray with a handgun).

Bottomline: as we go into fall, consider using Lorsban after harvest to control borers, and reconsider removing mouseguards on trees where they still afford protection.

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ROOTS AND BRANCHES

For the second time in as many weeks, the DEC has approved a NY label for a new insecticide — this time it is Movento 240SC (Bayer CropScience, EPA Reg. No. 264-1050), for the control of a variety of indirect pests of pome fruit and stone fruit crops, primarily aphids (including woolly apple aphid), mealybugs, pear psylla, and San Jose scale.

The active ingredient, spirotetramat, is the first member of the tetramic acid group to be registered as an insecticide in tree fruit crops. It has systemic activity, and uniquely exhibits 2-way movement in the plant, both upwards in the xylem to new shoots and leaves, and downwards in the phloem to the root tissues, which gives it good long-term control of the target pest species. Its mode of action is as a Lipid Biosynthesis Inhibitor (LBI), and it is active by ingestion against immature insects feeding on treated plants. Additionally, adult females have exhibited reduced fecundity and offspring survival.

To achieve the highest levels of uptake and systemicity within the plant, Movento must be applied in tankmix combination with a good spreading, penetrating adjuvant or other additive having similar qualities, such as nonionic or organosilicone surfactants, methylated seed oils, or highly refined horticultural mineral oils. Movento is not toxic to bees or beneficial arthropods, and poses low risk to wildlife, including fish and birds. It has a 24-hour REI and a 7-day PHI.

Application of this product is recommended as a preventive or threshold treatment, so it is likely too late in the season to achieve optimum effectiveness from any sprays applied this year. Also, Bayer has noted that, although this product’s MRLs (Maximum Residue Levels) are in place for the US, Canada, and Australia, they do not have satisfactory MRLs in the EU at this point. Therefore, no shipment of Movento-treated apples should be exported to the UK until this issue has been resolved.

EVENT REMINDERS

*N.Y. FRUIT PEST CONTROL FIELD DAYS
Wednesday Sept. 9 (Barton Lab, NYSAES, Geneva) 8:30 am
Thursday Sept. 10 (Hudson Valley Lab, Highland) 8:30 am

After registration in the respective labs’ lobbies, the tours will proceed to the orchards to view plots and preliminary data from field trials involving new fungicides, bactericides, miticides, and insecticides on tree fruits and grapes. It is anticipated that the tour of field plots will be completed by noon. No pre-registration is required for either event.
NOTE: Every effort has been made to provide correct, complete and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are possible. These recommendations are not a substitute for pesticide labelling. Please read the label before applying any pesticide.

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