# scaffolds

Update on Pest Management and Crop Development

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## TIME TO RETIRE?

LAST LABORS (Art Agnello, Entomology, Geneva)

Day, we're not completely finished with some of the final pest issues of the season, particularly a couple that we never seem to hear about until they occur, almost as a frustrating afterthought, during the winter meetings. These pests can cause unnecessary fist-clenching at the packinghouse, but can often be taken care of with a final judicious spray while you're waiting for the late apples to color.

### **European Corn Borer**

Recall that these moths have a final flight that extends to the middle of September, and that the offspring can inflict last-minute fruit feeding damage to later varieties. One or two late sprays of a B.t. product like Dipel can go a long ways toward minimizing this injury, and the 0-day PHI is compatible with any harvest schedule.

#### **Pearleaf Blister Mite**

This is a sporadic pest of pears that shows up in a limited number of commercial pear orchards, and is a fairly common problem in home plantings. The adults are very small and cannot be seen without a hand lens; the body is white and elongate oval in shape, like a tiny sausage. The mite causes three distinct types of damage. During winter, the feeding of the mites under the bud scales is believed to cause the bud to dry and fail to develop. This type of damage is similar to and may be confused with bud injury from insufficient winter chilling. Fruit damage is the most serious aspect of blister mite attack. It occurs as a result of mites feeding on the developing pears, from the green-tip stage through bloom, causing russet spots. These spots, which are often oval

in shape, are usually depressed with a surrounding halo of clear tissue. They are 1/4-

1/2 inch in diameter and frequently run together. A third type of injury is the blistering of leaves; blisters are 1/8-1/4 inch across and, if numerous, can blacken most of the leaf surface. Although defoliation does not occur, leaf function can be seriously impaired by a heavy infesta-

tion.

The mite begins overwintering as an adult beneath bud scales of fruit and leaf buds, with fruit buds preferred. When buds start to grow in the spring, the mites attack developing fruit and emerging leaves. This produces red blisters in which female blister mites then lay eggs. These resulting new colonies of mites feed on the tissue within the protection of the blister, but they can move in and out through a small hole in its center. The mites pass through several generations on the leaves but their activity slows during the warm summer months. The red color of the blisters fades and eventually blackens. Before leaf fall, the mites leave the blisters and migrate to the buds for the winter.

A fall spray is recommended sometime in early October, when there is no danger of frost for at least 24-48 hr after the spray. Use Sevin 50 WP (2 lb/100), or 1–1.5% oil plus either Diazinon 50WP (1 lb/100 gal) or Thiodan 50WP (1/2–1 lb/100 gal). A second spray of oil plus Diazinon or Thiodan, in the spring, just before the green tissue begins to show, will improve the control.

#### **Borer Clean-up**

Lesser peachtree borer adults are still flying, and although they're on the way down, a post-harvest trunk spray of Lorsban or Thiodan will do a good job of preventing the last hatchlings of the year from getting established in your peach and cherry trees for next season. •••

#### scaffolds

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| UPCOMING PEST                                   | <b>EVENTS</b> |             |
|---|---------------|-------------|
|   | 43°F          | <u>50°F</u> |
| Current DD accumulations (Geneva 1/1–9/3):      | 3179          | 2202        |
| (Geneva 1/1-9/3/2000):                          | 3024          | 1998        |
| (Geneva 1/1–9/3 "Normal"):                      | 3028          | 2145        |
| (Highland 1/1–9/3):                             |               |             |
| (Hudson 1/1–9/3):                               | 3297          | 2312        |
| Coming Events:                                  | Ranges:       |             |
| Codling moth 2nd flight subsides                | 2518-3693     | 1705-2635   |
| Redbanded leafroller 3rd flight subsides        | 3103-3466     | 2013-2402   |
| Spotted tentiform leafminer 3rd flight subsides | 3235-3471     | 2228-2472   |
| American plum borer flight subsides             | 2841-3698     | 1907-2640   |
| Apple maggot flight subsides                    | 2764-3656     | 1904-2573   |
| Lesser appleworm 2nd flight subsides            | 2775-3466     | 2002-2460   |
| Lesser peachtree borer flight subsides          | 2782-3474     | 1796–2513 . |
| Oriental fruit moth 3rd flight subsides         | 2987–3522     | 2018–2377   |

| INSECT TRAP CATCHES (Number/Trap/Day) |      |      |              |                             |      |      |  |  |
|---------------------------------------|------|------|--------------|-----------------------------|------|------|--|--|
| Geneva, NY                            |      |      | Highland, NY |                             |      |      |  |  |
|                                       | 8/24 | 8/27 | 9/3          |                             | 8/20 | 8/27 |  |  |
| Redbanded leafroller                  | 0.8  | 0.8  | 0.8          | Redbanded leafroller        | 1.2  | 0.6  |  |  |
| Spotted tentiform leafminer           | 53.3 | 101  | 66.4         | Spotted tentiform leafminer | 14.2 | 6.1  |  |  |
| Oriental fruit moth                   | 7.1  | 6.8  | 2.9          | Oriental fruit moth         | 0.4  | 0.6  |  |  |
| Lesser appleworm                      | 4.0  | 9.5  | 4.2          | Codling moth                | 0.4  | 0.1  |  |  |
| Codling moth                          | 2.8  | 0.8  | 0.5          | Lesser appleworm            | 1.4  | 0.6  |  |  |
| San Jose scale                        | 0    | 0.2  | 0            | Variegated leafroller       | 0.6  | 0.5  |  |  |
| American plum borer                   | 0.4  | 0    | 0.3          | Obliquebanded leafroller    | 0.3  | 0.1  |  |  |
| Lesser peachtree borer                | 0.6  | 0.3  | 0.3          | Tufted apple bud moth       | 0.1  | 0.1  |  |  |
| Peachtree borer                       | 0    | 0    | 0            | Apple Maggot                | 0.6  | 0.1  |  |  |
| Dogwood borer                         | _    | _    | _            | Dogwood borer               | 0.1  | 0    |  |  |
| Obliquebanded leafroller              | 0.6  | 0    | 0            | Sparganothis fruitworm      | 2.9  | 2.2  |  |  |
| Apple maggot                          | 0.1  | 0.3  | 0.1          |                             |      |      |  |  |
|                                       |      |      |              | Hudson, NY (Steve McKay)    | 8/27 | 9/3  |  |  |
|                                       |      |      |              | American plum borer         | 0    | 0    |  |  |
|                                       |      |      |              | Oriental fruit moth         | 0    | 0    |  |  |

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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