Codling Moth, Flatheaded Borers, Root Weevils, Coryneum

April 13, 2005

**********Insect Advisory**********

CODLING MOTH: Traps should be set sometime this week or early next week. At any given site, at least two traps should be set (unless it's just a backyard scenario). To increase the chance of getting an accurate biofix (= first moths caught at a site), try to set 1 trap per 3-5 acres. It has been shown that a greater trap density translates into an earlier, more accurate biofix. This makes sense when you consider that the traps are like "beacons" out there in the orchard—the more beacons, the greater the probability of attracting moths.

PEACH TWIG BORER: Bloomtime sprays for this pest are very effective because the larvae are so exposed as they feed. At this time of year, there are not any succulent shoots for the larvae to burrow into, so they are forced to feed on young leaves and petals. Insecticide residues on the surface of leaves and petals are more likely to get ingested, which makes materials such as Bt (DiPel), spinosad (Success, Entrust, Conserve), or diflubenzuron (Dimilin) very effective at this time. Since most northern Utah peaches are at early to full bloom, now is the time to make such a spray. Bt (1 lb./acre) and spinosad (7 oz. Success) should be applied twice during bloom for maximum effect.

From the desk of Dr. Diane Alston:
FLATHEADED BORERS: Emerging adults cause the flattened, oval shaped holes in tree trunks. Adults are expected to begin emerging in mid- to late-May. Larvae tunnel in the cambial tissue and can girdle and kill young trees. We have observed large populations in older, declining tart cherry and apple orchards. Young orchards, especially 1-2 year-old trees, near older orchards with flatheaded borers are at risk for infestation. Removal of infested trees and preventive insecticide treatments applied to trunks of young trees are primary management tactics. Remove dead or dying trees that can attract borers to attack and initiate a borer population in a susceptible orchard. The timing is late May to first of June after adults begin to emerge, mate, and females will lay eggs on tree trunks. Recommended insecticides include Lorsban (not registered post-bloom on apple), Thiodan, permethrin, and esfenvalerate. Young tart cherry and apple orchards surrounded by infested trees are at greatest risk and you may want to consider protecting these with preventive trunk treatments.

ROOT BORERS: Ten-lined June beetle and Prionus root borer larvae have been observed killing young and old cherry (and probably other types) of fruit trees. Problems have been most prominent on lighter, sandy soils. Root borers can cause replant problems and kill newly planted trees. When an orchard is replanted without at least a 1-2 year fallow period, soil fumigation or other practices to reduce root borer populations should be employed. Replant problems are generally most severe when the same species of tree is replanted without a fallow period.

ROOT WEEVILS: Root weevil adults cause notching of lower leaves and larvae feed on the crown and roots of trees. In recent years, leaf notching has been observed on tart cherry and peach trees. Prolonged drought conditions may contribute to their population increases. Young trees with small root systems are especially prone to decline caused by root weevils. If heavy leaf notching is observed in an orchard, an insecticide treatment timed with when notching first begins in the late spring to early summer (May to early June) may be warranted. Insecticides applied to the lower canopy should reduce adult populations. Recommended insecticides include Lorsban, Thiodan,

Actara, Provado, Calypso, Guthion, and Diazinon. Check the label for registered tree crop sites. Insect parasitic nematodes have been shown to be effective in controlling root weevil larvae when applied to the soil under ornamental trees and shrubs.

**********Disease Advisory**********

FIRE BLIGHT: Pear flowers are beginning to open in some of the warmer sites of northern Utah. Open flowers are the primary infection sites for fire blight bacteria in spring. Susceptible pear and apple varieties can be hit very hard by fire blight if the pathogen is not held in check. An average daily temperature of 60 F or greater is often associated with blossom infections in orchards where fire blight is present. However, infection can also happen even if the daily average does not exceed 60 F. If there have been 3 or 4 days of relatively warm weather (averages in the high 50s F) followed by a rain, then there may also be a high risk of infection. At this time, it would be wise to remove fire blight cankers by pruning them out and destroying the cuttings. Streptomycin (usually formulated as Agrimycin) or oxytetracyclene right before a rain can help prevent infection. Irrigation that drenches flowers should be minimized during bloom.

CORYNEUM BLIGHT (Peach Shothole): Another reminder to scout for coryneum cankers and treat trees with a history of problems with this disease. Reddish, sunken lesions on year-old wood and gumming on dark, unopened buds are fairly diagnostic of coryneum blight at this time of year. Selective pruning to remove these infections should help reduce the number of spores that are spread by spring rains. A shuck-split or shuck-fall 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.

PEACH POWDERY MILDEW: Treatments, if necessary, generally need to be applied around petal fall or shuck-split . Recommended materials include sulfur, Rally, Orbit, Abound (Abound should do double-duty by suppressing coryneum blight, too), horticultural mineral oil (don't mix with sulfur or apply soon after a sulfur application), and Flint.
