

## **Delayed Dormant Pest Control, Trapping Supplies**

---

**March 12, 2004**

Winter is a good time to consider IPM programs for the coming growing season. Delayed-dormant applications, in particular, are an effective way to suppress certain pest species before they become more troublesome in-season.

**SAN JOSE SCALE, APHIDS, PEAR PSYLLA, EUROPEAN RED MITES:** A horticultural oil (Volck Oil, SunSpray Ultra-Fine, Orhex) provides good control when applied at a 2% dilution (1 gallon of oil in 50 gallons of water). Overwintering eggs laid by aphids, pear psylla, and European red mites, as well as San Jose scale, can be controlled by thoroughly coating all tree scaffold surfaces. Uniform coverage is critical since the oil causes mortality primarily through suffocation.

**PEACH TWIG BORER:** This caterpillar spends the winter in small galleries within the tree cambium. It emerges in early-spring to seek the first flush of new growth. If a grower experienced significant pressure from twig borer last season, tank-mixing esfenvalerate (Asana for commercial acreage; Ortho Bug-B-Gon or Ortho Max for homeowners) with horticultural oil at the delayed dormant period has been an effective means of controlling this pest just as the young caterpillars emerge. Should an application be necessary, the timing is well suited to an IPM approach because it is made before bees and spider mites enter the canopy (spider mite flare-ups are common when pyrethroids such as esfenvalerate and permethrin are used).

**GREEN FRUITWORMS:** Most pome and stone fruit trees can be affected by these early-season caterpillars. By mid-spring, eggs laid in the canopy begin hatching, and feeding damage is often very noticeable (damaged buds, followed by devoured leaves and fruit). Bt treatments will attend to this pest very well.

**CORYNEUM BLIGHT (shothole):** If you had a problem with this fungal pathogen in your stone fruit trees last year, then a delayed-dormant application of fixed copper, copper sulfate, captan, or chlorothalonil (Bravo for commercial acreage; Daconil for homeowners) would be advisable. Petal fall or shuck-fall sprays can be made as well, though copper shouldn't be applied after leaf-out since it can be phytotoxic.

**POWDERY MILDEW:** This disease is caused by a couple different fungal species, each targeting apple/pears, peach/nectarine, or cherries. In apples and pears, it overwinters underneath the bud scales, so as buds open and young leaves emerge, they can be exposed to infection. Treatments should begin around first pink (Bayleton, Funginex, Rally, Rubigan, Sulfur, Flint, Procure). In peaches and nectarines, the fungus overwinters as mycelia under the bud scales, and treatments should be made around petal fall (Rally, Rubigan, Funginex, Sulfur, Elite, Topsin). In tart cherries, the fungus overwinters as cleistothecia (little spore bundles), which germinate and disperse in spring rains. Monitoring for the first small powdery lesions in mid- to late-spring will determine if and when sprays are needed on tarts (Rally, Rubigan, Funginex, Topsin, Elite, Procure, Sulfur). Sweet cherries generally do not require treatment, but if lesions are visible, a decision to spray can be made at that time.

**PEACH LEAF CURL:** This disease is uncommon in Utah, but if you had a problem with it last year then a spring application of copper, chlorothalonil (Bravo or Daconil), or sulfur might be advisable.

**FIRE BLIGHT:** Last, but certainly not least, is fire blight. If your apple or pear trees (or a neighbor's trees) had symptoms of fire blight last year, then it is critical that you remove all blighted tissue as soon as possible. Look for dark gray flower and/or leaf clusters remaining on the tree and make cuts 18 inches below the infection site. Remove and/or burn the cuttings. Bloomtime treatments of streptomycin (Agrimycin) or oxytetracycline (Mycoshield) will suppress the bacterium from initiating new infections during bloom. I'll again be supplying advisories on site-specific infection periods during bloomtime.

**TRAPPING MATERIALS:** Consider purchasing trapping materials (traps, lures), sampling equipment, non-disruptive pesticides (Bt, insecticidal soap, neem oil, spinosad, bactericides), and mating disruption materials before the growing season begins. Having the materials ahead of time will allow you to discover pest situations early and suppress them before they become entrenched. In addition to local nurseries, hardware stores, and other retail outlets, materials can be ordered from [www.greatlakesipm.com](http://www.greatlakesipm.com).

---

**Precautionary Statement:** All pesticides have benefits and risks, however following the label will maximize the benefits and reduce risks. Pay attention to the directions for use and follow precautionary statements. Pesticide labels are considered legal documents containing instructions and limitations. Inconsistent use of the product or disregarding the label is a violation of both federal and state laws. The pesticide applicator is legally responsible for proper use. Any mention of a pesticide brand in this document is not an endorsement by USU, and brand lists are not all-inclusive.