

Landscape IPM Advisory



Weekly Pest Update for Woody Ornamentals, Utah State University Extension, May 1, 2008



What's In Bloom

(Salt Lake City area)

In like a lion out like a lamb? More like "in like a lamb out like a lion." I know the saying is for March, but if you didn't know the date, you wouldn't guess May I by looking out the window at falling snow!

Crabapple: begin bloom Bradford pear: bloom

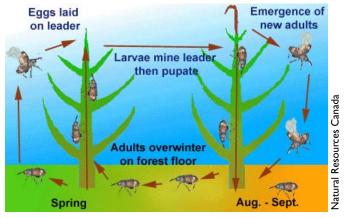
Japanese flowering cherry: full bloom

Kwanzan cherry: full bloom Mahonia: begin bloom Redbud: begin bloom Saucer magnolia: full bloom Serviceberry: bloom Star magnolia: end bloom

Insect/Disease Information

CONIFERS

White Pine Weevil



In eastern North America, the white pine weevil can be a serious pest of white pine while in Utah, it is a minor pest of blue spruce.

It overwinters as an adult in the soil, and emerges in early spring to mate. It lays eggs in the bark of the top terminal from May-June. The larvae feed on the phloem, girdling the stem and killing the central leader. They pupate in the terminal and emerge as adults in September. There is one generation per year.

Treatment: imidacloprid (Merit, and others) is a systemic and will kill the larvae within the tree, but will not prevent new eggs from hatching. Cut out the weeping terminal before adults emerge.

DECIDUOUS TREES

Birch Leafminer



Birch leafminer adults (shown above) are emerging now from pupation in the soil. After mating, the adult females cut a slit into the foliage and lay eggs between the leaf surfaces. The larvae feed on plant tissue within the leaves, forming meandering mines. This damage is not visible until late May into June. There is a second generation of adults in mid-summer.

Treatment: Apply a systemic such as imidacloprid (Merit, Bayer Advanced, Gordon's, etc.) or dinotefuran (Safari) as a soil

drench now. Or, target adults with permethrin (Astro, Warrior, etc.), carbaryl, or malathion.

Honeylocust Plant Bug

Honeylocust plant bugs have begun to hatch

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Insect/Disease Activity continued from previous page

into nymphs that feed on newly emerging foliage. Heavy feeding can cause necrosis and distorted foliage. There is just one generation per year, and they feed for about 6 weeks.

Treatment: Materials should be applied in the next few weeks for best control. Examples include insecticidal soap (Safer, Concern, Garden Safe, etc.), oil (Concern, Lilly Miller), imidacloprid (Admire, Bayer Advanced, Bonide systemic, Gallant, Provado, etc.), bifenthrin (Tundra, Talstar, etc.), permethrin (Aloft, Brigade, Pounce, etc.), carbaryl, malathion.

Cottonwood Leaf Beetle



Cottonwood leaf beetles can be found throughout Utah where cottonwoods are grown. They emerge as adults (shown above) from the soil in spring. After mating, they lay eggs on the underside of expanding willow leaves, in clusters of up to 25.

There are at least 2 generations in northern Utah.

Treatment: Insecticide applications should not be necessary if there is less than 20% defoliation in spring. If you notice heavier feeding in the spring, then plan to treat the following generation with azadirachtin (Amazin, Ecozin, Ornazin), canola oil (Concern, Pyola), horticultural oil (Lesco, Lilly Miller, Sunspray, etc.), imidacloprid (Admire, Alenza, Alias, Macho, Midash, Nuprid, Torrent, etc.).

Snowball Aphid

Snowball aphid (Ceruraphis viburnicola) feeds on the terminal leaves of the snowball, mapleleaf, and blackhaw vibur-



Whitney Cranshaw, CSL

num species, causing severely twisted, cupped, and ruffled foliage. It overwinters as eggs on twigs, and they are hatching now. They reproduce and feed for about 2 months on the viburnum, and then leave the host for a secondary host until September (the secondary host is unknown).

Look for nymphs by inspecting terminals with a hand lens.

Treatment: horticultural oil, insecticidal soap, imidacloprid, bifenthrin, etc.

DISEASES

Although we have had some moisture, it has fallen mostly as snow during cold periods, which is not ideal for fungal leaf spot diseases such as those on rose or sand cherry to develop. They need periods of up to 10 hours of moisture combined with temperatures between 50 and 70 degrees F.

Powdery Mildew



Apple powdery mildew (Podosphaere leucotricha) was observed on bradford pear in Salt Lake County. It is a fungal disease that affects apple, pear, quince, and other rosaceous plants.

Because it overwinters in infected terminal buds, it is difficult to prevent new infections. As leaves expand, the fungus sporulates, infecting the succulent new tissue, and new infections occur throughout the summer. Managing powdery mildew is best done through prevention.

Treatment: potassium bicarbonate (Kaligreen, MilStop), lime sulfur, myclobutanil (Rally, Eagle), neem oil, horticultural oil (Sunspray, Prescription Treatment, etc.), rubigan, etc.

Production Information

How to Read a Pesticide Label

As Extension personnel, we are constantly advising to "read the pesticide label" before making any applications. Understanding the material you are using, how it is applied, in what rate, is important for the safety of yourself, others, the host plant, and the environment. Also, proper application is required by law. Described below are the parts of a typical pesticide label.

I. Trade Name/Brand Name

This is the name of the product that the manufacturer has created. Examples include "Sunspray," "Pounce," "Warrior," etc.

2. Active Ingredient

The active ingredient, or A.I., is the material that is working to kill the target pest. On a label, the percentage of the A.I. is provided. The A.I. is usually listed as an EPA-approved common name of the chemical. For example, the chemical name for imidacloprid is I-((6-Chloro-3-pyridinyl)methyl)-N-nitro-2-imidazolidinimine.

In these advisories, the materials listed after the "Treatments" are the active ingredients. The products in the parentheses are the trade names that use the active ingredient listed.

3. Other/Inert Ingredients

These ingredients do not work to control the target pest, but are sometimes added to the product to improve effectiveness (as a dissolving agent, surfactant, etc.)

Other general information on the label includes the EPA registration number (4), formulation (for example, wettable powder--WP, dust-D, emulsifiable concentrate-EC, etc.), manufacturer's address (5), and net contents (6).

7. Precautionary Statements

This section provides information on hazards to humans, animals, the environment, and physical or chemical hazards. Each pesticide label has a "signal word" (8).

- "Danger" is highly toxic and can cause severe human harm. If illness can occur through oral, dermal, or inhalation, "Poison" and a red skull-and-crossbones will accompany the signal word.
- · "Warning" is moderately toxic
- "Caution" is mildly toxic.

First aid information (9) will usually follow precautionary statements.

10. Directions for Use

Use Classification

Pesticides are labeled as either general use, or restricted

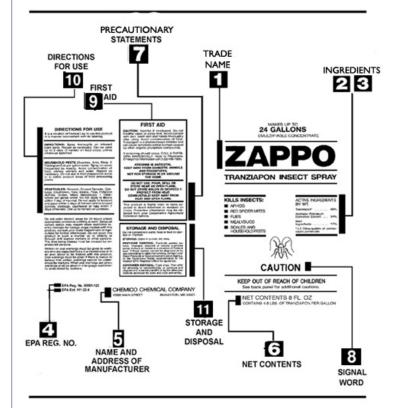
use. Applying a restricted use pesticide in Utah requires an applicator's license through the Utah Department of Agriculture and Food.

Directions for use include:

- · the crops to which the product may be applied
- · the pests that the product targets
- · amount to use
- · method of application
- · timing of application
- · pre-harvest interval
- · re-entry period
- · other limitations

11. Storage and Disposal

Storage information such as temperature and light requirements, are provided to prevent the breakdown of the material. This section also explains how to deal with the unused portion of the product and the container.



Example of a pesticide label. Numbers on this label correspond to numbers in the article text.

 $\begin{tabular}{ll} Modified from: {\it Pesticide Applicator Training Manual}, Cornell University, Ithaca, NY \end{tabular}$

Degree Days and Pest Monitoring Timeline

Upcoming Monitoring/Insect Activity

Pest	Host(s)	Degree Day Timing (base 50)	Indicator Plant
Birch leafminer	European white, pa- per, and gray birches	Adults fly at 175-215 DD	Redbud begin bloom
European pine shoot moth	Two- and three- needled pines	Larvae move to new shoots at 50-220 DD	Red maple first bloom
Western tent caterpillar	variety of deciduous trees	Eggs begin hatching at 100 DD	Forsythia full bloom
Cottonwood leaf beetle	cottonwood, other poplars	Larvae begin feeding at 100 DD	Forsythia full bloom
Engraver beetles	Fir, spruce	Adults begin emerging at 112 DD	Star magnolia end bloom
Cankerworm	variety of deciduous trees	Eggs begin hatching at 150 DD	Tatarian honeysuckle bloom
Forest tent caterpillar	variety of deciduous trees	Larvae begin hatching at 125 DD	Bradford pear full bloom

Current Degree Days (base 50)

March I - Wednesday, April 30

County	Location	GDD (50)
Box Elder	Perry	116
Cache	North Logan	86
	River Heights	80
	Smithfield	80
Carbon	Price	156
Davis	Kaysville	125
Grand	Castle Valley	336
Salt Lake	SLC	150
	West Valley City	148
Tooele	Erda	151
	Grantsville	181
	Tooele	150

County	Location	GDD (50)
Utah	Alpine	117
	Genola	161
	Orem	127
	Payson	135
	Provo	160
	Santaquin	131
	West Mountain	154
Weber	Pleasant View	129

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.

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