

Dryad Tree & Shrub Diagnostics, LLC

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ONLY THE GOOD DIE YOUNG

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Retaining beneficial organisms in the garden.

If you are a Certified Applicator and don't have a hand lens with you during your hours in the field..... Tsk, Tsk. Part of your training is to be able to identify the pest you are targeting so you can choose your control carefully. Unless Kryptonite causes you to wince, you need a magnifier. A hand lens, magnifying glass, macro scope or a round bottle, it doesn't matter as long as you can see up close and personal. Is it rust, mites or pollen? A 'shake test' is a diagnostic method and a hand lens confirms educated guesses.

The time is here to address certain insects in the landscape that are being extinguished in their youth when they were only here to help. Beneficial larva can be very sensitive to all pesticides, no matter the mode of action. Systemic 'preventative' pesticides can have long term damage. We tend to "Target the Beneficial" with our practices, when the pest population builds to a damaging level is when a plant 'calls' for help. That is also when we 'see and spray'. Essentially targeting beneficial insect we didn't even look for or recognize.

Dealing with Cottony Maple Scale: Soon the phones are going to ring off the hook for control of the white cotton all over trees. This is the time for your expertise to shine. Tell the homeowner to be calm. This is a 'dormant' stage, an egg sac; no harm is being done to their trees at this time. The female that caused all the sticky residue, "honeydew" all over their cars in the early spring is dead. She's the 'cap' of the egg sac. She 'died of exhaustion' (not the scientific explanation). These egg sacs actually draw in beneficial insects. They are an unprotected food source.

When you are on site you will show your client that most of the egg sacs are not the neat, lined, cottony material that was initially laid. The surfaces of the egg sacs become rough and disturbed. Pull back a couple of the sacs. Very often you will locate a stage of a beneficial that looks like a mealy bug. It is a LADY BUG! You will also see lady bugs in their larval 'alligator' stage, black with orange markings. Lacewing larvae are usually present but not in the populations of the Lady bug. They are thin and resemble thrips with large pincers. Other predators may not be seen but you will need to observe and see that the egg sacs are indeed being disturbed and devoured. You are going to leave them alone...for now. You'll be back when they hatch. They're young, soft, and easy to kill with less toxic materials. 'Insecticidal Soaps or Oils' will do a fine job on the crawlers. The degree days are 802-1265 for crawlers. Some phenologic indicators are Privet, Mock orange and Linden. Insecticidal oil at 2% rate is very effective against the over-wintering adult before bud break, as well as the crawler stages later in the season.

Dealing with Aphids

Many beneficial insects attack aphids. Once you learn to identify them you will see how numerous they can be and will allow them to work for you. Part of the equation is to leave them enough pests for them to feed on and allow them to stay in the landscape.

Look closely at aphid infestations with your hand lens. Most likely you'll see lady bug larva. You may also see brown, puffy, shiny, almost 'papery' aphids. They are called mummies. The aphids have been parasitized by a small wasp that has laid an egg inside. A new adult will emerge to continue the cycle. Abandoned 'mummies' will have a tiny perfect circle cut out of them.

Among this population of aphids may be a very short 'caterpillar-type' insect. It will be lime green and pink. This is a very effective aphid control called a Flower fly larva. Larva are young, they tend to be voracious. They're also very sensitive to pesticides. In the path of a flower fly, you'll observe aphid skeletons. The Flower fly adult is a common Beneficial insect around perennial gardens. They're everywhere. They are small, shiny, 'bee-like' insects that hover. They are searching for food. If one hovers around you, you're safe..... Unless you happen to be covered with aphids.

If the tips of the aphid infested plants are aesthetically unpleasing, cut them off and put them inside the plant or lay it underneath. Allow the beneficial insects to finish their feeding. They will continue to reproduce in the landscape. Don't apply any other controls.

Once you get used to trusting your judgment, you'll be more confident about using less pesticides. Professional Certified Applicator becomes more than a license to spray. It becomes a responsibility to know when to use your experience and refrain from using unnecessary pesticides. There's a lot of work in most landscapes, allow some of the 'good guys' to help, and your client will think you are Superman.

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