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NEWSPAPER ARTICLES

Mealybugs (December 16, 2023)

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You may find fuzzy clumps of something white on your plants and think it's mold or mildew at first. But most likely, you're dealing with mealybugs.

Identification:

Mealybugs have soft, oval, pinkish-purple bodies. But they often appear white or light gray because they are covered with a white, cotton-like wax. They vary in size from 1/20 - 1/5 of an inch long. Their bodies are distinctly segmented and often have wax filaments extending from the sides of their body. They are closely related to scales, but they lack the scale covers.



The life cycle of the mealybug consists of three stages. The cycle begins with the egg. The female lays 100-200 eggs in cottony egg sacs. The egg sacs may be attached to almost any part of the plant.

The eggs hatch into nymphs or crawlers. They are yellow to orange or pink. They lack wax and are very mobile. They start excreting a waxy covering once they settle down and begin to feed. Nymphs molt through several instars before becoming an adult. (An instar is a developmental stage between each molt until sexual maturity is achieved. The only way for the insect to grow is to shed its exoskeleton.) The adult females are wingless and look like nymphs. But the adult males are tiny two-winged insects and are rarely seen.

Depending on the mealybug species, a mealybug may have between 2 to 6 generations per year. When conditions are favorable, all stages of the life cycle may be present at one time on the same plant. Mealybugs may over-winter as eggs or first-stage nymphs on deciduous plants such as grapes.

Damage to plants:

Like soft scales, mealybugs produce honeydew, which is a sticky, sweet substance that can cause black sooty mold. You will often find ants nearby because the ants are attracted to the honeydew.

Mealybugs have piercing/sucking mouth parts that allow them to penetrate the interior of a plant and suck the sap. This reduces the plant vigor. Then, the sticky honeydew and wax they produce reduce the fruit's appearance. A large population of mealybugs on a plant can slow plant growth and cause leaf drop.

Where they are found:

Mealybugs are usually found in groups in somewhat protected areas of the plant, such as between two touching fruits, where two branches meet, near the ground, or between two touching leaves. Mealybugs are more common in areas of warm weather without cold winters.

The plants most commonly affected by mealybugs are fruit trees, especially citrus. They can also be a problem for grapes. Many woody ornamental plants and herbaceous perennials (cactus, heuchera, ficus, fuchsia, gardenia, hibiscus, jasmine, mimosa, oleander) can also be infested with mealybugs. Indoor plants and those growing in greenhouses are also vulnerable because of the year-round mild temperatures.

Management:

The best way to manage mealybugs is by prevention. Choose plants known to be less prone to mealybug problems and inspect plants for mealybugs before bringing them home. Since adult mealybugs are not very mobile, they don't rapidly disperse in the garden on their own. If you find an infestation, handpick or prune them out. Toss away plants that may be the cause of the infestation. Check pots for egg sacs.

Try spraying outdoor plants or trees such as citrus with a powerful stream of water if they are in an exposed area. There are natural enemies that feed on mealybugs and can keep a population under control. Using a broad-spectrum pesticide on your plants to control mealybugs will also harm these natural predators, so it is not recommended as the first line of defense. There is one lady beetle called a mealybug destroyer that is a very important predator of mealybugs and can be purchased.

For indoor plants, where you can't use predators, dab the affected area with a 70% or less solution of rubbing alcohol and repeat as necessary.

Other white-colored insect pests:

There are other insect pests that can be confused with mealybugs because of their color. But if you know what a mealybug looks like, look closely and pay attention to where it is located on the plant, and you can properly identify it as a mealybug.

Whiteflies are similar in size to mealybugs, but they have wings and are much more mobile than adult mealybugs. Clothes moths are white colored, but they have wings, and they feed on cloth. You will find them in your closet instead of on your plants. Scales can be white, but they have a hard, unsegmented outer covering. Termites are larger than mealybugs and feed on decaying plant material and wood.

The white wooly aphid looks a lot like a mealybug and does similar damage to the plant with its sucking mouthparts. But the wooly aphid creates a white waxy coating on the plant that coats the stem or leaf in a pattern, whereas the mealybug does not produce a similar layer.

In many situations, mealybugs cause mainly cosmetic damage, and it's important to remember that healthy plants can tolerate low populations without significant damage. Handpicking, a strong stream of water, or a dab of alcohol will usually keep them in check. Just like in football, the best defense is a good offense!

The Tulare-Kings Counties Master Gardeners will answer your questions in person:

Visalia Farmer's Market, 1st & 3rd Saturdays, 8 - 11 am, Tulare Co. Courthouse North parking lot

Questions? Call the Master Gardeners:

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