TEXAS A&M AGRILIFE EXTENSION

Cochineal Scale on Prickly Pear Cactus

Cochineal scale insects are found on prickly pear cactus. These insects can be mistaken for fungus as they exude a cottony white covering to protect themselves. If you decide to take a closer look, under the cottony mass you will discover a small, oval insect that is wingless and has piercing-sucking mouthparts. Females are about 1/16 of an inch in length with males being around 1/32 of an inch long. Males look more like typical insects in that they have wings and legs (adult females do not). Males also have two filaments that extend from the tip of the abdomen.

Cochineal insects feed exclusively on prickly pear cactus. The insects insert their mouthparts into the cactus pads and suck out plant juices. Feeding can cause yellowing of cactus pads and heavy infestations can lead to browning and possible death of the plant.

As the female feeds, she produces eggs underneath the protective covering. Once the eggs hatch, first instar nymphs, called crawlers, emerge. Crawlers can move to different areas before they settle down to feed. They may stay near their mother, move to nearby cactus pads or be dispersed by wind to new plants. Once crawlers are settled in their new location, they begin to spin the waxy filament that creates their protective covering.

Since cochineal insects are only mobile in the first instar, control can be as simple as removing infested pads from the plant and disposing of them. Another non-chemical option would be to use a high pressure water spray to dislodge insects from the plant. Less toxic methods could include pesticides such as insecticidal soap, horticultural oil (when temperatures are below 85 degrees), or botanicals with active ingredients such as azadirachtin, d-limonene or pyrethrum. Synthetic products are also available, but are often unnecessary.

If you don’t mind a bit of plant damage or the sight of the scale insects, you can grow them to obtain a beautiful red dye called carmine. These insects have carminic acid in their bodies that creates a bright red dye. The insects were harvested by native peoples from the Southwestern United States, Mexico and South America for their dye. This dye is used in various cosmetic products or food products as coloring for hues of red, pink and purple.

For more information or help with identification, contact Wizzie Brown, Texas A&M AgriLife Extension Service Program Specialist at 512.854.9600. Check out my blog at www.urban-ipm.blogspot.com