SPIDER MITES

IDENTIFICATION

Best Practices Mites are 8-legged arachnids, the most common being the "spider" mite. They are a tiny $1/20^{th}$ to $1/60^{t}$ of an inch long and look like moving dots in red, yellow, green, or brown. Because of their tiny size they can be very difficult to spot. Try shaking a damaged leaf over a sheet of white paper. If tiny specks appear and move, there's a good bet it's spider mites. Spider-like webbing on plants is another sign of their presence. Mites can travel from plant to plant on the wind and overwinter in several stages of development.

DAMAGE

Mites pierce into plants to feed on their sap. This activity weakens the plant and creates discolored spots, streaking or scarring on leaves, as well as causes them to turn a yellow-bronze or curl. This damage can lead to leaf drop and may eventually kill the plant. As mites reproduce very quickly a few can rapidly lead to a serious infestation.

SOLUTIONS – Best Practices

Identification: If plants develop webbing, discolored spots, or appear to yellow or wilt inspect the leaves, top and bottom closely and determine which pest is present.

Monitor/Establish Threshold: Inspecting your plants regularly is essential for early detection. The easiest way to successfully rid plants of pests is to catch them early.

Prevention: Weak, under-potted, and stressed plants are more likely to become infested with these pests. Keeping your plants properly watered, fertilized, and healthy overall is the best way to avoid attracting them.

Employ a combination of solutions: On outdoor plants forcefully spraying plants with water can help reduce populations. Prune infested leaves, twigs and branches and remove them from your property. For houseplants, isolating the infected plant will help prevent spread. Introducing green lacewings, predatory mites, beetles, or midges, natural predators of these pests, can help reduce populations. For larger infestations coating leaves with neem or horticultural oil can smother mites. Multiple applications, around every 10 days, will probably be necessary. Be aware that mites are most active in hot, dry weather, conditions that can make using oils dangerous to the plants. Many systemic insecticides are ineffective against spider mites as they aren't insects (they're arachnids). Regardless of method/product used ALWAYS read and follow package instructions, and NEVER spray when beneficial insects are present.

FURTHER RESEARCH

http://extension.oregonstate.edu/gardening/how-detect-houseplant-and-greenhouse-pests

https://greenmethods.com/spider-mite-control/

http://www.ipm.ucdavis.edu/

http://ipmguidelines.org/home/content/book2/ch06/default.asp

