Drought and intense heat have combined to bring out an army of spider mites.

Spider mites are prolific arthropods, related to ticks and spiders, that attack most types of plants and suck the water and life out of them, says Diane Alston, Utah State University entomologist. They are only about 1/60 of an inch long and make the leaves appear dirty due to their copious webbing and adhering dust. They feed primarily on leaves, but can also feed on fruits. At first, symptoms are white stippling, turning to bronzing or silvery as mite feeding increases, and finally resulting in complete browning or death of foliage when damage is severe, she says.

How do you know for sure that spider mites are present? Shake suspected mite infested leaves over a white sheet of paper. If the small dots that fall to the paper walk around, they are spider mites, Alston suggests.

The only way to slow them down is good plant care that includes adequate water, fertilization and reduction of stress, she says. Water-stressed plants attract mites. Water adequately and if possible, sprinkler-irrigate occasionally to wet the leaves, unless this may cause other problems. A stiff hose down can wash off some mites and the moist environment deters their population growth.

“A few plants are more likely to attract mites, including some weeds,” Alston says. “Field bindweed, morning glory, mallow and knotweed are attractive weed hosts. You might think that this is an easy way to get rid of some of these pesky weeds, but when the mites have had their fill of bindweed, they will likely move over to your ornamentals.”

Predatory mites that prey on spider mites occur naturally, she says. They are more prevalent on perennial plants, such as fruit trees, caneberries and some ornamentals where they can overwinter and find spider mite prey year after year. Predator mites can be purchased and released, but generally the native species perform better in home yards and gardens. Avoid insecticides that are nonselective to help preserve the predators. Examples of insecticides that can kill predaceous mites include carbaryl (Sevin), malathion, pyrethroid insecticides, such as Asana, Pounce, Tempo and Talstar and miticides such as Kelthane and Vendex.

Soap and oil can help control spider mites by disrupting their cuticle (skeleton on the outside) and causing suffocation, Alston says. Insecticidal soap and horticultural oil (1 to 1.5
percent solution) should be applied at dusk for best effects. If applied in the heat of the day, the products will dry too quickly giving reduced effect and can burn plant leaves. Soap and oil applications should be made two or three times, 5 to 7 days apart for better kill of mites.

Chemicals that specifically target mites, such as Kelthane and Vendex, should only be used in cases where mite populations are high and severe plant damage is likely, she adds. They are effective in killing spider mites, but also kill most beneficial arthropods. Following use of a miticide, resurgence of spider mite populations is common, requiring additional treatments. And beneficial arthropods may be diminished for several years.

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran’s status. USU’s policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions.

Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran’s status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities.

This publication is issued in furtherance of Cooperative Extension work. Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jack M. Payne, Vice President and Director, Cooperative Extension Service, Utah State University. (EP/07/2002/DF)