

Spider Mites

Order Acari, Family Tetranychidae

Spider mites are among the most common and serious pests of greenhouse and nursery crops. The two-spotted spider mite, *Tetranychus urticae*, probably causes the most problems because of its wide host plant range and ability to rapidly develop pesticide resistance. Spider mites are tiny – adults are about 1/50-inch long - and have puncturing–sucking mouthparts. Spider mites are usually on undersides of leaves, but may be on/in flowers in heavy infestations. Feeding damage appears as light–colored spots, or stipples on upper leaf surfaces. Heavy infestations can kill plants or cause leaves to drop off, and webbing can cover leaves and flowers resulting in aesthetic injury. Spider mite developmental stages are egg, larva, protonymph, deutonymph, and adult. Development from egg to adult takes about 8 days (77°–95°F, 25°–35°C) to 28 days (50°–68°F, 10°–20°C). Hot and dry conditions are most favorable. Spider mite development is also affected by the host plant, plant nutrition, leaf age, and moisture. Moisture stressed plants often have higher spider mite populations. High moisture slows mite dispersal.

One of the keys to spider mite management is early detection of an infestation. The best way to do this is with a pest scouting and monitoring program. When possible, use alternatives to pesticides to reduce pest numbers. In the case of spider mites, alternatives may include eliminating weeds that harbor mite infestations, maintaining greenhouse temperature and humidity within moderate ranges, and introducing predatory mites.



OHP products registered for control of Spider Mites

OHP Products	Chemical Class	MOA Group	Residual	REI
Judo™	Tetrionic acid	23	30 days	12
Floramite®	Carbazate	25	21-28 days	12
Kontos®	Tetramic Acid	23	21-28 days	24
Sirocco™	Carbazates + Glycosides	6 + UN	28 days	12
Shuttle™ O	Napthoquinone derivative	20B	14 -28 days	12
Triact® 70 **	Clarified hydrophobic extract of Neem oil	M	3-7 days	4

OHP Solutions for control of Spider Mites

Application	REI	Rate per 100 gallons	Remarks
1**	Kontos®	1.7 fluid ounces	Preventative
1	Floramite®	4 to 8 fluid ounces	Rapid activity
2	Judo™	1 to 4 fluid ounces	Translaminar activity; control may be slow at cool temperatures.
3	Sirocco®	3 to 6 fluid ounces	Translaminar activity
4	Shuttle® O	6.4 to 12.8 fluid ounces	Contact – rapid activity
1 Alternative Treatment and or tank mix	Triact® 70 *	½ to 1 gal	Use the lower rate in greenhouses

*Triact or other horticultural oil can be used to reduce a high mite population before applying a conventional miticide. Be sure to follow label instructions and precautions if oils are used.

** Kontos should be applied before mite pressure or populations build.

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