

Introduction & Key to Mites

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Two-spotted Spider Mite (Eugene Nelson, Bugwood.org)

Although mites differ from insects in several ways, their damage to ornamental plants resembles that of thrips and lace bugs. Most mites have eight legs as adults (adult insects usually have six). Mites do not have wings (some adult insects have wings) but can be aerially dispersed by breezes and winds more or less like aerial plankton, particularly in hot, dry weather. It is thought the mouthparts (chelae) of mites evolved from legs with a prehensile joint, (the digitus mobilis) which allows the mite to chew with a vertical, scissors like action. In spider mites, broad mites, and cyclamen mites, the chelae have evolved into sharp mouthparts that mites use to pierce the surface of the plants they feed on in order to suck out the contents of the plant cells. Mites evidently inject saliva as they feed for one of the first symptoms of broad mite and cyclamen mite feeding is failure of the

host plant to blossom. Infested plants then exhibit a variety of plant growth regulator symptoms including twisted and distorted growth, and shortened internodes and petioles.

Key to the most common mites found on flowers and foliage plants

1. Mites visible to the naked eye; infested plant may be discolored but usually not distorted by feeding.....2

1.' Mites not visible without at least a 10 X hand lens; infested plants usually cease blooming and have shortened internodes, distorted leaves and stems, and blasted buds.....3

2. **Twospotted spider mite.** Mites feeding on foliage and causing tiny chlorotic spots, mites sometimes accompanied by fine silk webbing.

2.' **Bulb mites.** Mites feeding primarily in the bulbs of Easter lilies.

3. **Broad mite.** Egg oval, about 0.08 millimeter long, covered with minute white bumps; female translucent brown and about 0.2 millimeter long, shaped like a fat football.

3.' **Cyclamen mite.** Egg oval, about 0.1 millimeter long, without minute bumps; female translucent brown, about 0.3 millimeter long, shaped like a skinny football.

