



Figure S6.1. A rose leaf that has numerous 'stipples' caused by feeding by the two-spotted spider mite *Tetranychus urticae*. This spider mite has a very broad host range and is an economic pest around the world. It is possibly a species complex, and different populations have different resistances to pesticides, diapause intensities, and other biological attributes. (Photo by Jack Kelly Clark, University of California Statewide Integrated Pest Management Program.)



Figure S6.2A. Life stages of *Tetranychus gloveri*, including eggs, quiescent nymphs, and adult females. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.2B. *Panonychus citri* adult females and eggs on a citrus leaf. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.2.C. *Tetranychus evansi*, all life stages. Note webbing and exuviae from molts. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.2. D. Pacific spider mite, *Tetranychus pacificus*, female. (Photo D by Jack Kelly Clark, University of California Statewide Integrated Pest Management Program.)



Figure S6.3. Two-spotted spider mite, *Tetranychus urticae*, females and immatures. (Photo by Jim Castner, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.4. Eggs of the two-spotted spider mite *Tetranychus urticae* have recently been deposited. No eyespots of the developing larva are visible. Note that there are very fine strands of silk on the leaf surface deposited by the active stages as they move about. (Photo by Jack Kelly Clark, University of California Statewide Integrated Pest Management Program.)



Figure S6.5. A *Tetranychus urticae* egg that is nearly ready to hatch. Note the two red eyes of the larva within. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.6.A. Male of *Tetranychus gloveri* guarding a female quiescent deutonymph. The exuvium of the female is just starting to split. This male will mate with the female shortly after she emerges from the exuvium. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.6.B. Male of *T. urticae* guarding female deutonymph. A female nymph is feeding to the right and eggs and a small quiescent nymph are present, as well. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.6C. Male of *T. gloveri* guarding a quiescent female deutonymph (right). This pair is suspended slightly above the leaf surface on a fine mat of webbing. At left, a male is mating with a newly emerged adult female. The male bends his opisthosoma up to insert his aedeagus into the genital opening of the female. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.6.D. Two males of *T. urticae* guarding and sparring over a quiescent female deutonymph (nearly hidden). Usually the larger male will 'win' the battle to mate with the female. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.7.A. *Tetranychus urticae* and other *Tetranychus* species produce copious webbing that is easily seen when populations become dense. These mites are walking about on the fine webbing. Webbing provides protection from desiccation and from some predators. Dense webbing also makes it difficult to deliver pesticide sprays to control these mites. (Photo by Jim Castner, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.7.B. Once host plants are severely damaged, newly emerged (nongravid) adult females move to the top of the plant, where they can be dispersed by the wind. Note the mass of spider mites on the top right of the plant. (Photo by Jim Castner, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.8. Adult female of the European red mite *Panonychus ulmi*. Note the bases of the setae are white, which discriminates this species from citrus red mite, *P. citri*, which has red setal bases. This mite is often found on apples, almonds, and other deciduous tree crops. (Photo by Jack Kelly Clark, University of California Statewide Integrated Pest Management Program.)



Figure S6.9. Eggs of *Panonychus ulmi* have stipes on them (see central egg). Silk strands (not visible here) run from the stipe to the leaf to help hold the eggs on the host. The eggs deposited on twigs or branches are in diapause and overwinter in this condition. (Photo by Jack Kelly Clark, University of California Statewide Integrated Pest Management Program.)



Figure S6.10. The brown almond mite *Bryobia rubrioculus* is a pest of pome and stone fruits. Note the female has elongated legs I and red eyes. During the day, this mite may be found on twigs or bark of trees. It deposits eggs on twigs and usually has two generations a year. The overwintering egg in diapause may be deposited on twigs as early as June in the Northern Hemisphere. (Photo by Jack Kelly Clark, University of California Integrated Pest Management Program.)

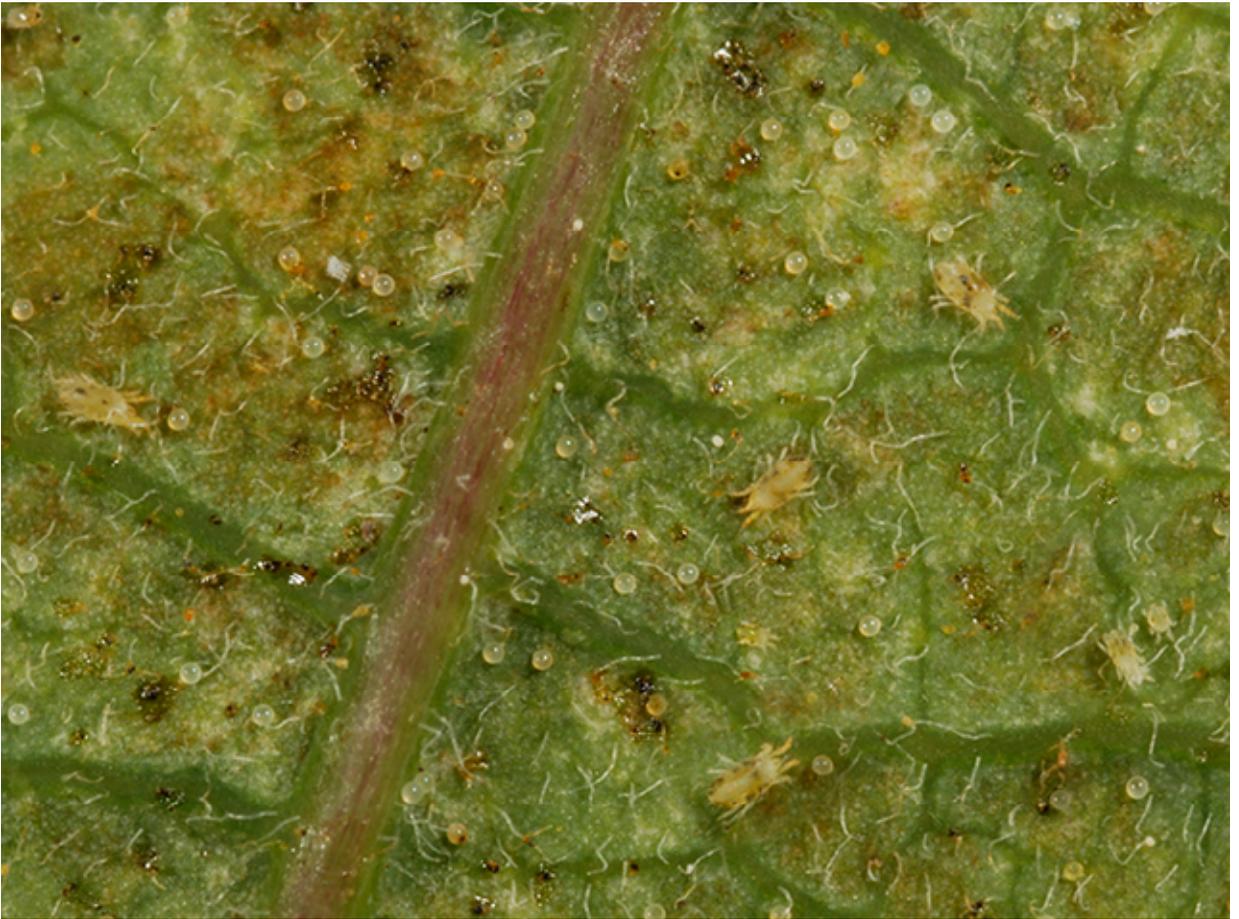


Figure S6.11. A. *Eotetranychus lewisi* feeding on under surface of a poinsettia leaf. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.11. B. Yellowing and wilting of mature poinsettia foliage. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.12. *Eutetranychus banksi* is the Texas citrus mite, which is found in the Americas on citrus, almond, croton, fig, and castor beans. The male is on the left and the female is on the right. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)



Figure S6.13. Cassava green mite female, *Mononychellus carribeanae*, on cassava in Florida. Related species of *Mononychellus* also are known as the cassava green mite. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)

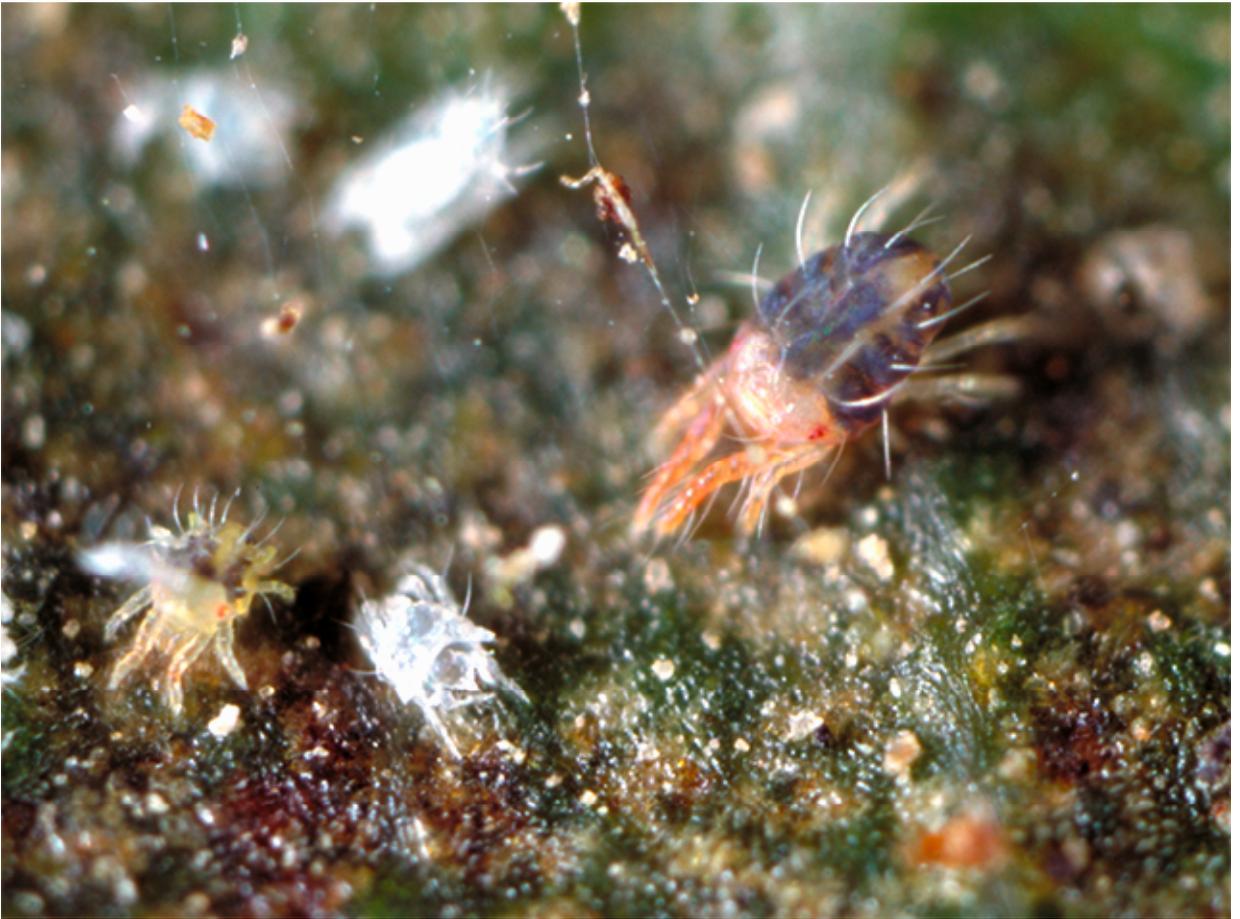


Figure S6.14.A. *Oligonychus punicae*, the avocado mite. (Photo by Jack Kelly Clark, University of California Statewide Integrated Pest Management Program.)



Figure S6.14.B. Damage (bronzing) caused by feeding of *O. punicae* on avocado (Photo by Phil A. Phillips, University of California Statewide Integrated Pest Management Program.)



Figure S6.15. Gorse plants with damaged foliage from feeding by *Tetranychus lintearius*, a tetranychid introduced into New Zealand for biological control of this 'weed'. The bottom photo shows dense silk mats produced by these gorse mites. Note the hanging 'string' of gorse mite females ready to disperse aerially. (Photos by Hugh Gourlay, Landcare Research, New Zealand.)

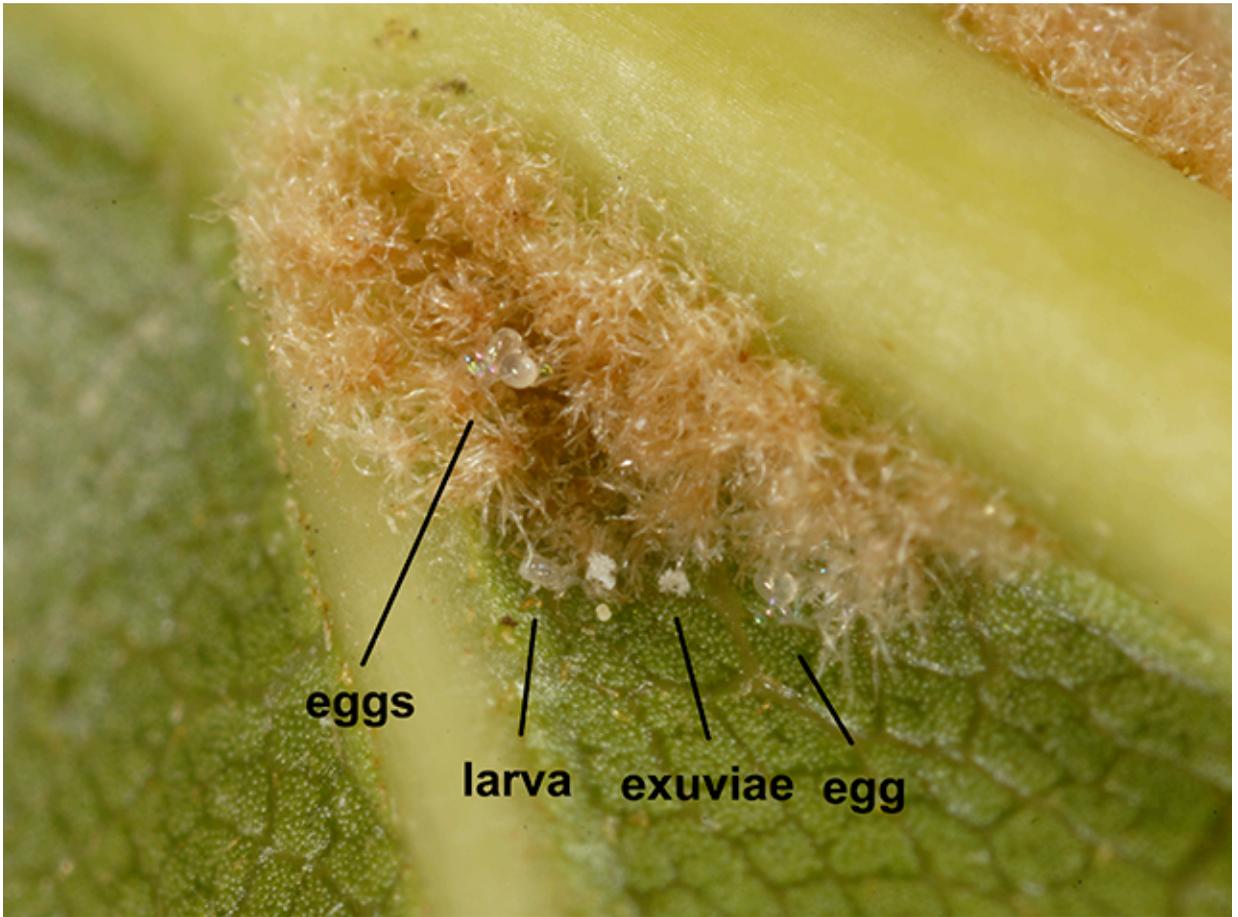


Figure S6.16. An example of an acarodomatia (or domatia) that can serve as resting and oviposition sites for predatory mites. The eggs, larva, and exuviae present are from a predatory phytoseiid. (Photo by Lyle Buss, Department of Entomology and Nematology, University of Florida, Gainesville.)