



## European red mite

*Panonychus ulmi*

Order Acari, Family Tetranychidae; spider mites

Introduced pest

**Host plants:** Rosaceous plants, including flowering fruit trees and particularly crabapples are preferred, but ash, mountainash, elm, and honeylocust are also susceptible.

**Description:** All stages of this mite are brick red with white spots on the back. Adults and immatures are minute, oval and globular. Adults have four pairs of legs.

**Life history:** Eggs begin to hatch in spring when the earliest blossoms of fruit trees show pink. When temperatures are moderate, these mites require only two weeks to complete one generation. Post-diapause eggs are usually laid on foliage, most frequently on the undersurface, where the mites feed throughout the summer.

**Overwintering:** Eggs on the bark of branches.

**Damage symptoms:** Spider mite feeding on the underside of leaves causes the leaf tops to develop a white stippled appearance. Leaf undersurfaces may be covered with fine webbing. Browning of foliage does not result in significant long term damage.

**Monitoring:** Look for stippled leaves and webbing under leaves from spring through fall.

**Physical control:** None

**Chemical control:** Cool, humid and rainy weather holds mite development to non-damaging levels. There are many natural enemies, which, in sufficient numbers, control the mite. Control measures may not be necessary. If they are required, use a dormant oil in winter, or oil and soap sprays in summer. Conventional insecticides should only be considered in an emergency as they kill natural enemies as well as mites, and, in so doing, most probably cause greater future problems. When pesticides are used, classes should be rotated every 2–3 weeks to reduce the chance of pesticide resistance developing in the mite population.

**Biological control:** Predatory phytoseiid mites can usually be found with these herbivorous mites. Other natural predators of mites include minute pirate bugs, lacewings, certain species of lady beetles, a rove beetle *Oligata oviformis*, and predaceous midges. Mites are also susceptible to viral and fungal diseases.

**Plant mortality risk:** Low

**Biorational pesticides:** abamectin, bifenazate, clofentazine, hexythiazox, horticultural oil, insecticidal soap, pyradiben

**Conventional pesticides:** bifenthrin, chlorpyrifos (nursery only), deltamethrin, dicofol, fenpropathrin, fenbutatin oxide, lambda-cyhalothrin



European red mite adults. (114)

Photo: Dow AgroSciences LLC