



GALL MITES OF DECIDUOUS SHADE TREES

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Symptoms and Damage

Mites are minute often microscopic relatives of spiders many of which feed on a variety of plants and trees. Certain species of mites cause deformities on shade tree foliage by their feeding, particularly on maples. The tiny mites generally pass unnoticed but their damage, commonly in the form of galls, knobs, bumps, or patches of colorful sugary-like material is readily apparent and provokes inquiries. Severe infestation may distort and disfigure foliage. The galls are not detrimental to the health of the tree.

Life History and Habits

Most galls of deciduous trees are caused by Eriophyid mites. The mites overwinter as adults in bark crevices and underneath bark scales. In the spring the adults move to opening buds where they feed on unfolding leaves. Their feeding causes deformities to occur in the form of pouches or galls within which the mite continues to feed and lay eggs. The eggs hatch in about a week and the young developing nymphs remain enclosed within the protection of the gall where they feed and grow to maturity. Upon maturity the mites emerge and may infest new foliage if early enough in the summer. By early August gall mites go into hibernation.

Maple bladder galls caused by *Vasates quadripedes* (Shimer) are very common on silver and red maples. They are bladder or sac-like, 2-3 mm in diameter, green at first, later turning red. The galls may be so numerous as to practically cover the upper surfaces of some leaves, seriously deforming them. Another information sheet on this gall alone is available.

Spindle shaped galls, caused by *Vasates aceris - crummena* are more common on sugar maples than red and silver maples. These are slender, erect galls about 5 mm high and thick as the lead of a pencil. The galls project from the upper leaf surfaces.

Other mite damage on foliage is in the form of a reddish or yellowish sugar-like surface coating or erineum on the surface of maple leaves. The patches are felt-like and consist of mats of numerous microscopic galls and leaf hairs within which the mites are concealed. A number of mites cause these, on different hardwoods.

Numerous other gall-like formations or deformities which look like tiny mittens, fingers or lumps also occur on the foliage of various hardwoods.

The seed mite gall mite (*Eriophyes betulae*) attacks paper birch and causes proliferation of the buds on some branches. These "stubby" clusters of buds or witches brooms are frequently quite large (1-3" across) and often contain many (up to 25 or more) buds. Normally these mites are not abundant although on some trees several bud clumps may occur.

Control*

Actual damage to the trees is negligible; appearance of foliage is the main reason for suggesting control.

Spray twigs and buds with oxythoquinox or carbaryl on a warm day in the spring (April) just as the leaf buds are swelling. Be sure to dilute and apply the miticide in accordance with label instructions and precautions. Dormant oil sprays applied prior to bud break are also effective in controlling mites, however, carefully check the label caution statements since oil sprays must not be used on Japanese maples, beech, birch, hickory, walnut, butternut, or other oil-sensitive plants.

***NOTE:** Pesticide recommendations are contingent on continued EPA and Maine Board of Pesticides Control registration and are subject to change.

Caution

For your own protection and that of the environment read the pesticide label and apply the pesticide only in strict accordance with label directions and precautions.