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SP290-F Maple Leaf Pouch Galls

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Agricultural Extension Service
The University of Tennessee
SP290F

Insects

Maple Leaf Pouch Galls

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Originally Developed by Harry E. Williams, Professor Emeritus
Entomology and Plant Pathology

Eriophyid mite species cause a variety of pouch galls on red, sugar and silver maples. Pouch gall formation, a localized growth reaction of the infested plant, occurs as a result of mite feeding activity. The species of mite can be identified by the specific characteristics of the gall on the host plant.

Maple Bladder Gall

Feeding by the maple bladder gall mite, *Vasates quadripedes*, causes a pouch-like growth known as bladder gall on the upper leaf surface of red and silver maples. The galls are variable in shape, rounded or elongated. They are usually crowded and numerous at the base part of the leaf between the larger veins.

The exterior of the galls appears wrinkled and glossy. They change from yellowish green or dark green progressively to pink, brown and finally black. The interior of the gall is hollow. The exit for the new generation of mites is from the underside of the leaf.

Maple Spindle or Finger Gall

The spindle or finger gall mite, *Vasates aceriscrumena*, is common on sugar maples. The galls are elongated, pointed or spindle-shaped. They are variable in size up to 0.2 inch in length and tend to crowd at the tip end of the leaf blade. The galls vary from greenish tinged with yellow to pink to crimson. The interior of the gall is thin-walled and the exit hole is on the underside of the leaf.

Life History of Eriophyid Mites

The mites exit the galls in the fall and migrate to terminal buds of the host tree. The mites enter the buds and overwinter under the bark scales.

In the spring, the mites ride out on the growing leaves. Mite feeding results in the formation of galls. The mites then enter the galls, lay eggs and die. The summer generation of mites occupies the galls during the summer.

Injury to the Maple Trees

Heavy mite infestation and gall formation causes discoloration and distortion. Usually the infestation levels do not cause severe stress in the tree.

Control Measures

In early spring before leaf buds break, spray bark with dormant oil. Some varieties of maples are susceptible to oil injury. Early in the spring when the leaves are about one-fourth expanded, spray with one of the listed insecticide/miticides (Table 1). Mites are exposed on the leaf surface at this time. Cover the upper and lower leaf surfaces with the spray, and repeat the application in 10 days.

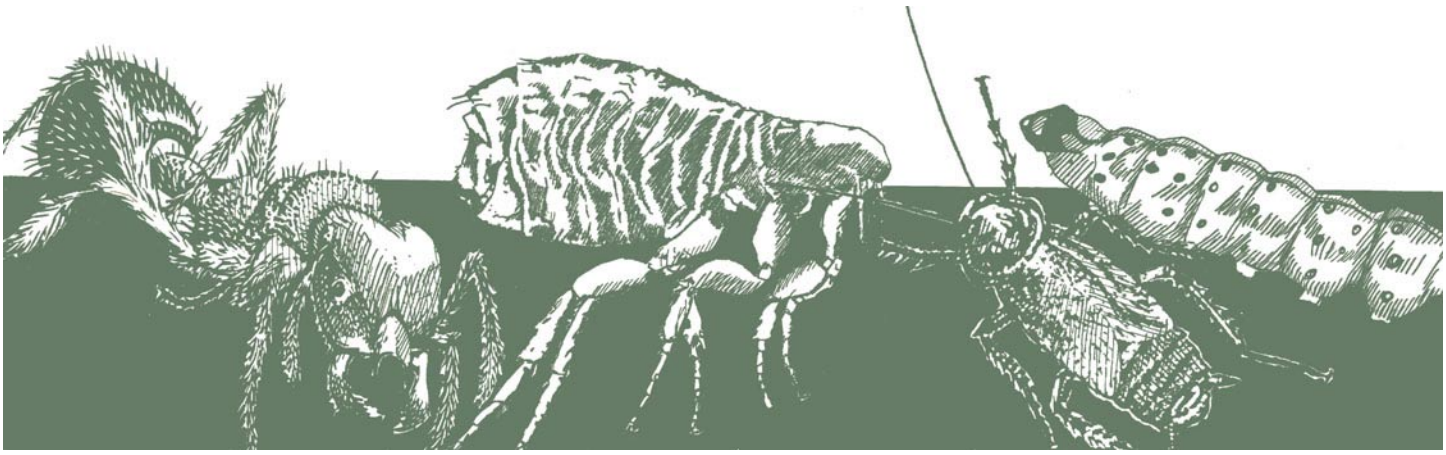

Table 1. Chemical Control for Gall Mites on Maple:

Insecticide (Brand Name)	Formulation	100 Gallons*	1 Gallon*
carbaryl (Sevin)	80% S	1¼ lb	1¼ Tbs
dicofol (Kelthane)✣	50 WSP	½ - 1 lb (high-volume sprayers) ½ - 1 lb per acre (low-volume sprayers)	— —
insecticidal soap (M-Pede)	49% a.i.	1-2% insecticidal soap in finished spray mixture (i.e., 2 gal soap in 98 gal water)	
(Safer Insecticidal Soap)	49% a.i.	—	5 Tbs
horticultural oil (SunSpray Ultra-Fine Oil)	98.8% paraffinic oil	1-2% oil in finished spray mixture	2.5-5 Tbs

** Amount of formulation/water volume*
✣ Not for use on residential home lawns or residential ornamentals.

Maple bladder gall

This factsheet is available in full color on the University of Tennessee Extension Website at http://www.utextension.edu/publications/pests/default.asp.

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