Eriophyid mites

Several species
Order Acari, Family Eriophyidae; leaf vagrant, gall, erinea, rust, or eriophyid mites

Host plants: Many species of eriophyid mites feed on deciduous and coniferous trees and shrubs.

Description: Adult eriophyid mites are elongated and have only two pairs of anterior legs. Most species are much less than 1 mm in length and are variously colored; most are white to yellow. Many species are so minute that a dissecting microscope is needed to confirm their presence.

Life history: There are usually several generations each year. Many species have complex life histories. The biology and habits of many species are still largely unknown. Most activity occurs during cool spring and fall weather.

Overwintering: Bark or bud scales.

Damage symptoms: Eriophyid mites can create erinea galls formed by expanded leaf hairs. Other eriophyid mites create bladder galls, are vagrants on the leaf surface, or distort flowers and foliage. Feeding by vagrants causes red patches (russeting) and leaf stunting.

Monitoring: Look for any of the color changes or abnormalities in leaves or buds described above. In the absence of any obvious cause of such symptoms, use a hand lens or dissecting microscope to inspect foliage more closely. Galls may be broken open to detect the mites within.

Chemical control: Most galls cause aesthetic injury and do not kill their hosts. Spray 7–10 days prior to bud break of the plants. Oils should be applied when plants become active in spring.

Biological control: Predatory phytoseiid mites can usually be found with these herbivorous mites.

Plant mortality risk: Low

Biorational pesticides: abamectin, horticultural oil, insecticidal soap

Conventional pesticides: bifenthrin, carbaryl, dicofol, fenbutatin oxide, lambda-cyhalothrin

Ash flowergalls caused by eriophyid mites. (W53)
Photo: Whitney Cranshaw

Fingergalls on chokecherry caused by eriophyid mites. (W50)
Photo: Whitney Cranshaw

Poplar budgall on alder caused by eriophyid mites. (W52)
Photo: Whitney Cranshaw

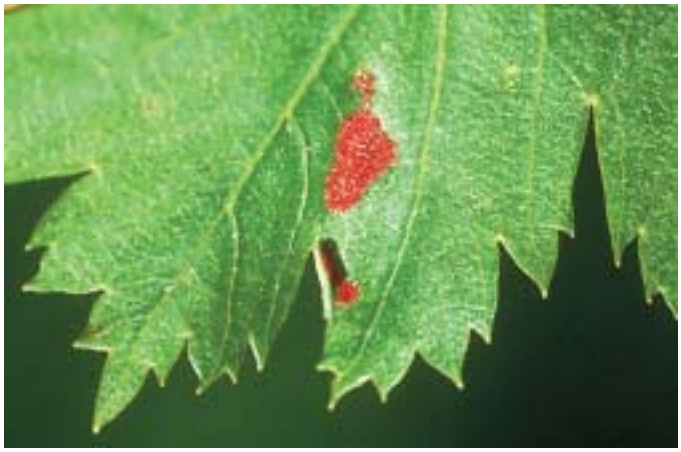
Eriophyid mites (continued)

Pouchgalls on alder caused by eriophyid mites. (W51)
Photo: Whitney Cranshaw

Vagrant eriophyid mite adults; note the elongate cigar shape and the two pairs of legs around the head. (98)
Photo: John Davidson

Pouchgalls on cherry leaves caused by eriophyid mites. (97)
Photo: Kiefer et al. from USDA, ARS, Agric. Handbook. Number 573.

Galls caused by eriophyid mites. (98)
Photo: John Davidson



Erinea on maple caused by eriophyid mites. (W49)
Photo: Whitney Cranshaw

Scanning electron microscope close-up of eriophyid mite showing the elongate cigar shape and the two pair of legs around the head. (99) Photo: Kiefer et al. from USDA, ARS, Agric. Handbook. Number 573.