Elm eriophyid mite
_Aceria parulmi_
Order Acari, Family Eriophyidae; leaf vagrant, gall, erinea, rust, or eriophyid mites
Native pest

Host plants: American elm

Description: Adult elm eriophyid mites are erinea forming mites. Adults have only two pairs of legs and are less than 1 mm in length, so a hand lens is needed to confirm their presence.

Life history: Gall growth is stimulated in spring by females injecting saliva into new elm leaves. Mites then move into these galls of swollen leaf tissue on the undersides of leaves. Several generations are completed during the summer. When the galls dry the mites move to developing buds to overwinter.

Overwintering: Bark crevices.

Damage symptoms: White patches of felt-like tissue, which dry and brown in summer.

Monitoring: Look for galls on leaves. In the absence of any obvious cause of such symptoms, use a hand lens to inspect foliage more closely to look for mites initiating erineum.

Chemical control: These erinea galls produce little damage to the host plant, so control is not warranted.

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, fenbutatin oxide, lambda-cyhalothrin

Elm eriophyid mite erinea on the underside of an elm leaf. Erinea are formed by expanded leaf hairs. Mites live among hairs. There is no opening into the leaf. (91)
Photo: John Davidson