

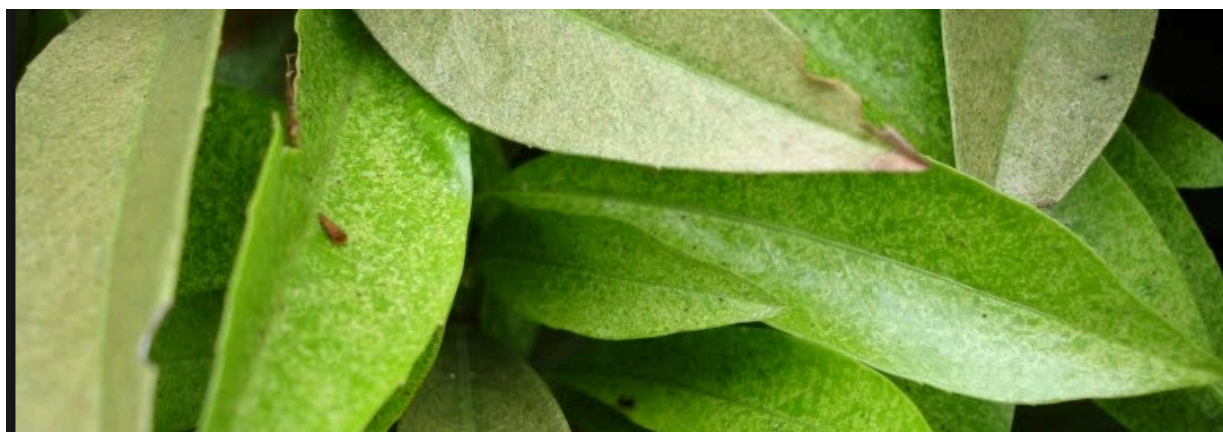


Galls and Rust made by Mites

Eric Day, Manager, Insect Identification Laboratory.

Galls are abnormal growths of plant tissue induced by insects and other organisms. Gall-making parasites release growth-regulating chemicals as they feed, causing adjacent plant tissues to form a gall. The parasite then develops within the relative security of the gall. Galls come in an endless variety of forms. Many are strikingly colored or curiously shaped. Each gall-making species causes a gall structurally different from all others. By noting the type of host plant and the structure of the gall, one can identify the gall-making mite without actually seeing it.

Mite Galls: Mites that cause galls are members of the family Eriophyidae. They are not insects. Many eriophyid mites live in buds or are free-living on the surface of leaves and do not produce galls.



Rust Mites: Some are serious pests; the Privet Rust Mite, Hemlock Rust Mite, and Juniper Bud Mite are examples. Shown above is damage from the Privet rust mite. Note the fine stippling; as damage advances the foliage takes on a brownish or rusted appearance. Photo by Frank Hale, University of Tennessee.

Damage and Control:

Controlling gall insects is difficult, and at present there are no insecticides registered for this use by homeowners. Any treatment applied after galls are already present is useless, because galls will not go away even if the parasite is killed. Fortunately, the vast majority of galls are not particularly injurious and are of no economic significance. Most plants can support a large number of galls and continue to grow normally. Pruning out heavily galled portions of a plant is sometimes feasible and may help reduce populations of the gall insects. When this is not possible, it is best to accept galls as curiosities of nature—enjoy watching their development if you are interested; simply ignore them if you are not.

See also VCE fact sheets on Gall Wasps and Gall Aphids.



Erineum Galls are dense, felt-like patches of plant hairs. On maple, erineum galls are sometimes red, while on alder, beech, and poplar, they are buff-colored. Image Citation:^(?) USDA Forest Service - Northeastern Area Archive, USDA Forest Service, Bugwood.org



Blister Galls are irregular, blister-like swellings on leaves. Walnut and butternut are especially susceptible hosts. Image Citation:^(?) Whitney Cranshaw, Colorado State University, Bugwood.org

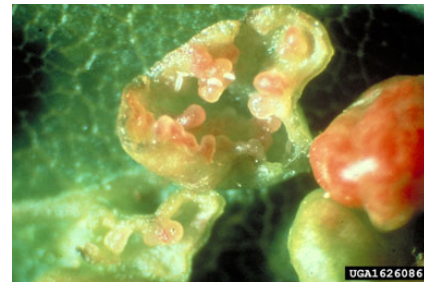


Leaf Roll Galls are often seen on pecan. Gall mites live within the narrow enfoldings of the leaf edges.

Image Citation: Eric R. Day, Virginia Polytechnic Institute and State University, Bugwood.org



Spindle galls occur on maple and other hosts. Each gall can contain up to a hundred mites. Image Citation: Milan Zubrik, Forest Research Institute - Slovakia, Bugwood.org.



Bladder galls occur on maple, this one is broken open to show the tiny mites. Image Citation: John A. Weidhass, Virginia Polytechnic Institute and State University, Bugwood.org.



Bladder galls on maple leaf Image Citation: Ronald S. Kelley, Vermont Department of Forests, Parks and Recreation, Bugwood.org.