Kansas State University Extension Entomology Newsletter

For Agribusinesses, Applicators, Consultants, Extension Personnel & Homeowners

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May 12, 2017 No 8

European Elm Flea Weevil

We are seeing damage on elm (*Ulmus* spp.) trees caused by the larval stage of the European elm flea weevil (*Orchestes alni*). Larvae are cream-colored, legless (Figure 1), and found in the mines of leaves. Adults are 3.0 mm in length, red-brown in color with black spots or markings on the abdomen or wing covers (Figure 2).

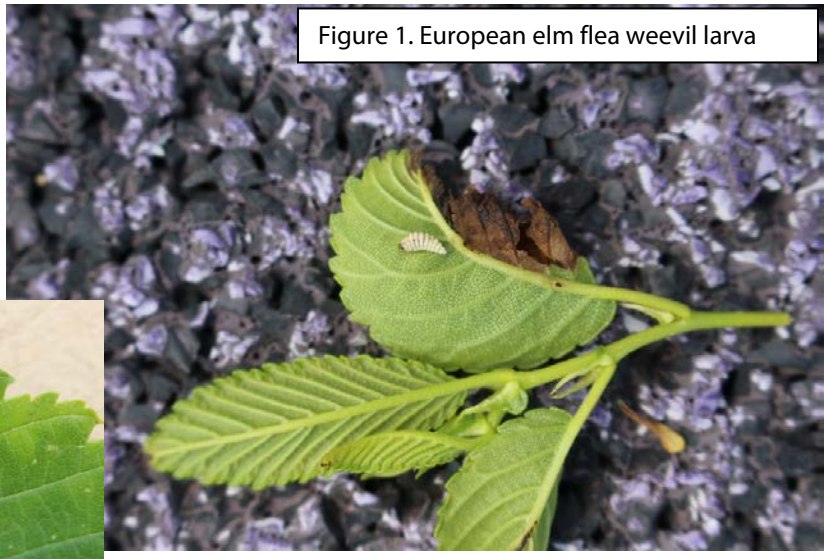

Figure 1. European elm flea weevil larva

Figure 2. Adult European elm flea weevil.

The mouthpart is shaped-like a snout (Figure 3) since they are weevils and the hind legs are thickened and enlarged, which allows the adults to jump when disturbed. Adults are initially active in May, and after mating, females lay eggs in the large mid-veins of new leaves. Eggs hatch into larvae that tunnel through the leaf as they feed (which is occurring now), creating serpentine-like mines that enlarge as larvae mature (Figure 4). Larvae eventually transition into a pupal stage, and then adults emerge in May and June. Adults primarily feed on leaf undersides creating small holes on young leaves (Figure 5). The feeding damage caused by both the larvae and adults will not kill an elm tree; however, extensive feeding may ruin the aesthetic appearance. Adults overwinter under loose bark and in leaf litter under previously infested trees. There is one generation per year in Kansas. Nearly all elm species are susceptible to feeding by the European elm flea weevil especially Siberian elms (*Ulmus pumila*) and certain elm hybrids with Asian parentage.

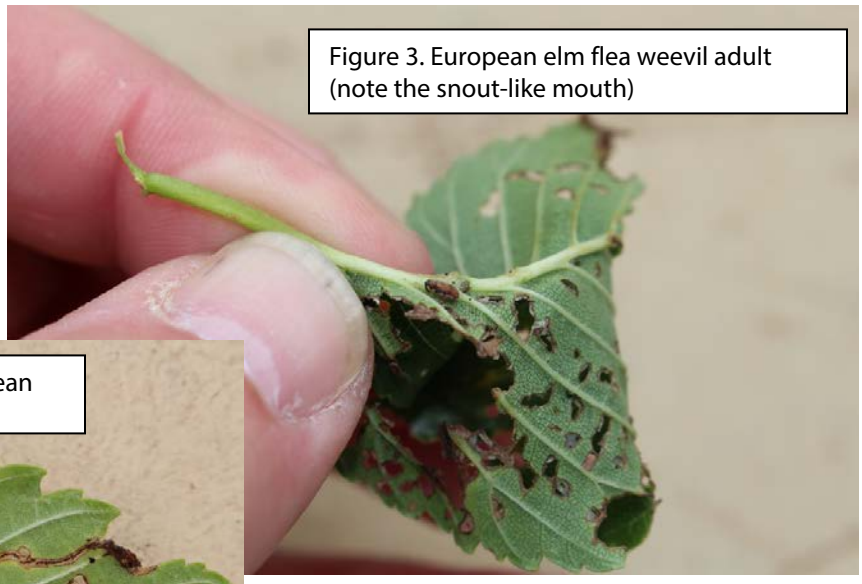

Figure 3. European elm flea weevil adult (note the snout-like mouth)

Figure 4. Serpentine mines created by European elm flea weevil larvae.

Figure 5. Feeding damage caused by European elm flea weevil adult.

Management of European elm flea weevil involves maintaining proper tree health by means of watering, mulching, pruning, and fertilizing. Insecticides may be used to minimize damage; however, insecticides may be difficult to apply to large trees. Insecticides must be applied in May and June in order to suppress adult populations. A number of insecticides may be used including: acephate (Orthene), imidacloprid (Merit), or carbaryl (Sevin). However, if damage is not extensive, especially on large trees, then there be no rationale for using insecticides. For more information regarding European elm flea weevil management contact your county or state extension specialist.

Raymond Cloyd

HOME

Termites vs Ants

Termite and ant colonies have been very active over the past week or so and are producing reproductives or 'swarmers'. We have seen flying/fluttering individuals every place we have stopped throughout north central Kansas, as long as it was between about 10am and 4pm. Thus, we have received many calls regarding the differences between reproductive ants versus reproductive termites, in both cases often just referred to as 'swarmers'. This swarming behavior seems to be initiated about the same time each year for both ants and termites as the same type of warm, wet weather evidently triggers both. Thus, it is imperative to be able to distinguish the two as they do very different kinds of damage and consequently require different management plans.

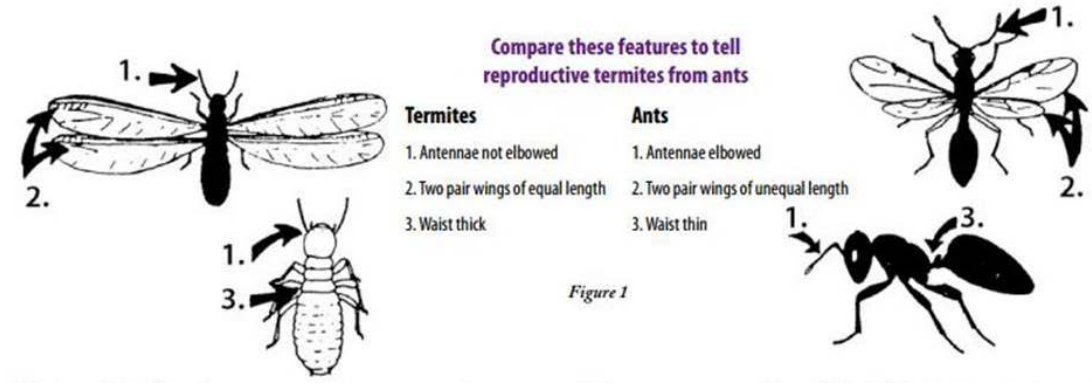

Figure 1

Termite reproductives, or swarmers, are dark brown to black, with transparent or translucent wings of equal size, and the dark body is cigar shaped, having no noticeable body divisions or waist. Termite antennae are straight and lack a club on the end. Ant reproductives, or swarmers, are also dark brown to black with transparent or translucent wings, but the fore or front wings are a little longer than the bottom or back wings. Ant antennae are elbowed, coming out perpendicular to the head then bending forward at a 90 degree angle.

For more information on ant identification, biology, and control, please visit:
https://www.bookstore.ksre.ksu.edu/pubs/MF2887.pdf

For more information on termite identification, biology, and control, please visit:
http://www.bookstore.ksre.ksu.edu/pubs/mf722.pdf

Jeff Whitworth Holly Schwarting

Insect Diagnostic Laboratory Report

http://entomology.k-state.edu/extension/diagnostician/recent-samples.html

Eva Zurek

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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