

Insect Pests of Desert-Grown Alfalfa: Egyptian Alfalfa Weevil

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The Egyptian alfalfa weevil (EAW), *Hypera brunneipennis* (The Egyptian strain of *H. postica*) is a major winter pest of AZ alfalfa. EAW adults are small (0.25 inch) and gray-brown with ridges on their hardened forewings (Fig. A, B). They have a distinct, extended snout (Fig. C). EAW may be confused with clover root curculio, a non-economic weevil, which looks similar to but is about two-thirds the size of EAW and has a short, blunt snout (Fig. D). Young EAW larvae are yellow-green with a brown head. They are often difficult to find because they hide in tightly folded young leaves. The older larvae are darker green with a white line down the center of their back and a distinct brown head capsule (Fig. E). Fully-grown larvae are 0.25 inches long. EAW larvae may be confused with syrphid larvae (Fig. F) (a valuable natural enemy), which lack a head capsule on their tapered head, or with lepidopteran larvae (Fig. G) (summer pests), which have legs and rarely occur simultaneously in the field; EAW is legless.

EAW is active December–April. Adults aestivate (summer hibernation) under loose bark or other sheltered place. In late fall or early winter, adults emerge and migrate to alfalfa fields. Females insert eggs into alfalfa stems (Fig. H). Once hatched, the larvae feed on leaves and terminal buds, causing skeletonization, bronzing and stunted growth. Larvae are the most damaging stage. Adult weevils also feed on alfalfa leaflets and stems but generally do not cause significant damage. **EAW is most damaging to the second cutting, but may also damage the third.**

No resistant non-dormant commercial cultivar exists. Varieties with rapid spring growth may be more tolerant of weevil damage. **Early harvesting can mitigate damage, but surviving larvae under windrows may reduce growth.**

Begin monitoring for EAW when temperatures drop below 42° F (usually in January) with 180° sweep net samples from 4 areas in the field (5 sweeps / area) 2x / week. **Treat when an average of 20 larvae per sweep is found.** If averages of 15–20 larvae / sweep are found just prior to harvest, application of an appropriately short pre-harvest interval insecticide may be needed to reduce damage to regrowth, especially under the windrow.

Also see:

<http://www.ipm.ucdavis.edu/PMG/C001/m001yi01.html>

Ellsworth, P.C. and K. Rice. 2010. Invertebrates: Insects & Mites Management on Alfalfa. In: Fournier, A., J. Peterson & J. Reding (Eds.) Arizona Pest Control Advisor Study Manual. The Arizona Crop Protection Association.

Summers, C.G., L.D. Godfrey, and E.T. Natwick. 2008. Managing Insects in Alfalfa. In: Irrigated Alfalfa Management for Mediterranean and Desert Zones (eds. C.G. Summers and D.H. Putnam). University of California Alfalfa Workgroup. UC ANR. Publication 3512: 131–153.

http://alfalfa.ucdavis.edu/IrrigatedAlfalfa/pdfs/UCAlfalfa8295Insects_free.pdf

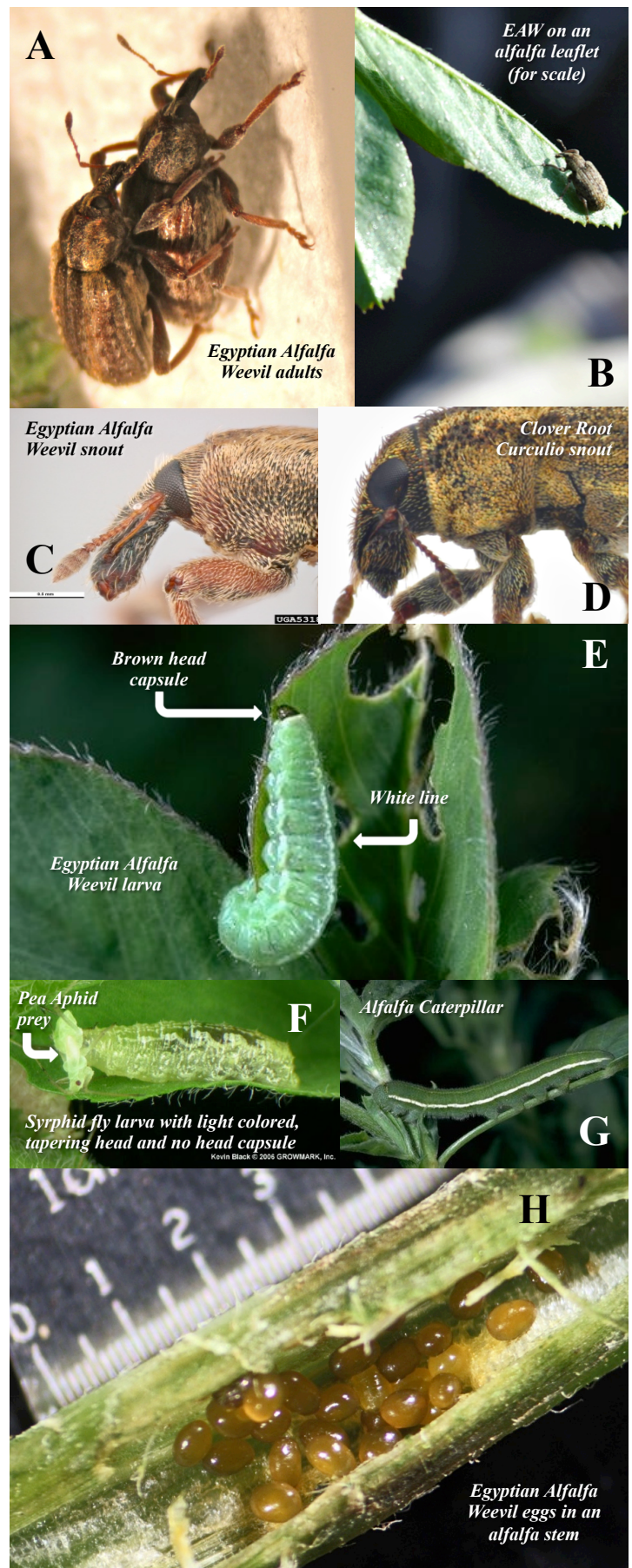


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