

(revision date:3/10/2017)

Walnut: Walnut husk fly

Use *Integrated Pest Management (IPM)* for successful plant problem management.

Biology

Adult walnut husk flies are slightly smaller than a house fly. They are brown with a yellow mark on the back, and the otherwise clear wings are marked with dark bands. Females lay eggs on walnut husks in mid- to late summer. The white to yellow maggots are up to 3/16" long and feed in the husks, causing soft, blackened areas. Husk tissue is destroyed and the nut shell and kernel may be stained, reducing quality. Early infestations may also cause kernels to shrivel. Mature larvae drop to the ground and overwinter. Husk fly damage may be confused with blight, but blighted areas on husks are usually hard, sunken, and cracked. Most English walnuts are considered to be very susceptible, but black walnuts are the favored hosts.

Management Options

Non-Chemical Management

- ~ Rake up and destroy fallen infested nuts.
- ~ Naturally-occurring predators and parasites also aid in controlling populations. Avoid use of broad-spectrum insecticides which kill beneficial insects.

Select non-chemical management options as your first choice!

Chemical Management

IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides

Do not make applications after husk split. Control is directed against adults to prevent egg-laying, so timing is critical. Begin monitoring for adult flies by mid-July using yellow sticky traps or green spherical traps. Apply first treatment within 10 days after catches in fly traps show a sharp or steady increase over a 3-day period (usually around early or mid-August). If using kaolin clay (Surround At Home), be aware that it will suppress egg-laying but does not control adult flies, so supplemental treatment may be required. Apply kaolin clay every 7-14 days until husk split. Do not apply other products more than twice during the growing season. The second application (if needed) is administered 3-4 weeks after the first. Esfenvalerate is toxic to bees. Do not apply products containing esfenvalerate on or near blooming plants. To minimize risk to bees, apply in the evening after bees have stopped foraging for the day. Homeowners should not make foliar applications to trees over 10 ft tall. Consult a commercial pesticide applicator for treatment of trees and shrubs over 10 ft. tall.

Listed below are examples of pesticides that are legal in Washington. Always read and follow all label directions.

- ~ Bayer Advanced Natria Neem Oil RTU/Roses, Flowers, Fruits & Vegetables [Organic]
 - active ingredient: clarified hydrophobic extract of neem oil
 - EPA reg no: 70051-13-72155
- ~ Bug Buster-O [Organic]
 - active ingredient: pyrethrins
 - EPA reg no: 1021-1771-54705
- ~ Bull's-Eye Bioinsecticide
 - active ingredient: spinosad (spinosyn A+D)
 - EPA reg no: 62719-314-56872
- ~ ferti-lome Borer, Bagworm, Tent Caterpillar & Leafminer Spray
 - active ingredient: spinosad (spinosyn A+D)
 - EPA reg no: 62719-314-7401
- ~ Monterey Garden Insect Spray [Organic]
 - active ingredient: spinosad (spinosyn A+D)
 - EPA reg no: 62719-314-54705

- ~ Safer Brand BioNEEM Multi-Purpose Insecticide & Repellent Conc [Organic]
 - *active ingredient: azadirachtin*
 - *EPA reg no: 70051-6-42697*
- ~ Surround At Home Crop Protectant
 - *active ingredient: kaolin clay*
 - *EPA reg no: 61842-18-56872*
- ~ This list may not include all products registered for this use.

Walnut: Walnut husk fly

Images



~ Caption: Walnut husk fly damage
~ Photo by: A.L. Antonelli



~ Caption: Walnut husk fly larva
~ Photo by: L.J. du Toit