

Pest Profile

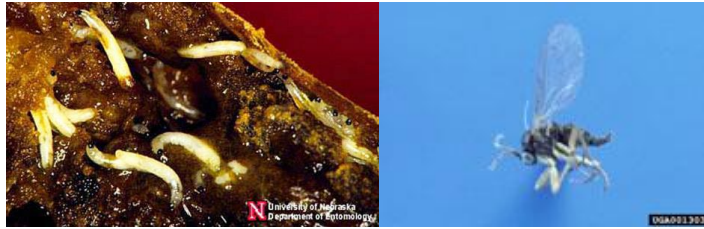


Photo credit: Jim Kalisch, University of Nebraska-Lincoln; Gerald J. Lenhard, Louisiana State University, Bugwood.org

Common Name: Fungus gnats, darkwinged fungus gnats

Scientific Name: *Bradysia coprophila*

Order and Family: Diptera: Sciaridae

Size and Appearance:

	Length (mm)	Appearance
Egg	0.2mm	Smooth oval shaped and shiny white; eggs are laid in moist dirt either in strings or scattered; females lay 100-150 eggs; eggs hatch within 4-6 days.
Larva/Nymph	6mm	Larvae are whitish, slender, and legless; they have a black head and smooth semi-transparent skin; four instars; larvae are full grown in 10-14 days.
Adult	3mm	Dark brown body, small head and thread-like antennae; clear light gray wings; they look like tiny mosquitoes; Y-shaped vein on wings; poor fliers.
Pupa (if applicable)		Pupa are oblong; pupal case made of silk and debris; in soil; pupa lasts 4-7 days.

Type of feeder (Chewing, sucking, etc.): Larvae: Chewing

Host plant/s: The maggots typically only feed on fungus and organic matter, but in high populations they will feed on plant root systems. Some plants that are typically damaged by Fungus gnat larvae are cacti, young orchids, geraniums, lilies, begonias, ferns, chrysanthemums, African violets, carnations, cyclamen, foliage plants, and poinsettias.

Description of Damage (larvae and adults): The adults do not feed on plants, only larvae can be damaging to plants. The maggots will chew on the roots of plants. The maggots will typically feed on root hairs first and then move to the small roots. As a result of feeding, roots can have brown scars. Damage to plants as a result of larvae feeding on the roots include stunted growth of the plants, wilting, leaves turning yellow, leaves dropping, and death of plants. House plants and greenhouse plants are at risk of dying due to damaged roots if high numbers of fungus gnat larvae are in the moist soil. Adults cause no damage but can be a nuisance in some situations. Fungus gnat adults and larvae might be able to transmit fungal diseases such as *Verticillium* and *Pythium*.

References:

- Baker, R.J., Bambara, S.B. (1994, May). Darkwinged fungus gnats. North Carolina State University, Cooperative Extension. Retrieved February 20, 2017 from:
<https://www.ces.ncsu.edu/depts/ent/notes/O&T/flowers/note29/note29.html>
- Bethke, J. A., Dreistadt, S. H. (2013, August). Fungus Gnats. University of California. Retrieved April 4, 2016 from: <http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7448.html>
- Fungus Gnats *Bradysia coprophila* (n.d.). IPM integrated pest management. Retrieved February 20, 2017 from: http://ipm.uiuc.edu/insects/fungus_gnats/
- Lenhard, G. J. (2016). Darkwinged fungus gnats. Louisiana State University, Bugwood.org Retrieved April 04, 2016, from <http://www.insectimages.org/browse/detail.cfm?imgnum=0013033>
- Mead, F. W., Fasulo, T. R., Kalisch, J. (2001, July). Darkwinged fungus gnats - *Bradysia* spp. Retrieved April 4, 2016 from: http://entnemdept.ufl.edu/creatures/orn/darkwinged_fungus_gnats.htm
- Nielsen, G. R. (1997, January). Fungus Gnats. Retrieved April 4, 2016 from:
<http://pss.uvm.edu/ppp/pubs/el50.htm>
- Sanderson, J.P. (n.d.). Fungus Gnats. Cornell University. Greenhouse Horticulture. Retrieved February 19, 2017 from: <http://www.greenhouse.cornell.edu/pests/pdfs/insects/FG.pdf>