

Insec(tc)ure*: Are you insecure about your insect cures?

A UT Urban IPM Lab Newsletter for the Pest Management Industry

Rope, snake, worm or trail of fungus gnat larvae?

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Between June 11 and 27 of this year I received three similar email inquiries, one from Loudon and Blount counties each in East Tennessee and one from Davidson County in Middle Tennessee. Two of the best photos submitted are below.





Figure 1. "Rope" of fungus gnat larvae moving over mulch (top photo) and paving blocks (bottom photo).

The above photos were sent from Maryville where the "worms" were discovered in mulch and on the driveway in the morning. Quite interesting, isn't it? In the past, I have received inquiries regarding a moving mass of maggots, or larval masses moving like a slug on the concrete, or a trail of slimy something climbing a wall. The mass looks like a rope, snake, or large worm, but the individuals look like insect larvae upon closer inspection. Closer inspection yet reveals a "rope" of fungus gnat larvae.

Here's an excerpt of an email that Tami Minert and family of Farragut, TN sent to me to request assistance with identification in June of 2008.

"Saturday evening, June 7 we had a tremendous rainstorm here in Farragut. The following morning while out walking I discovered these tiny white worms with a black dot in long string-like groups. They appeared to be moving in unison. Those at the front would crawl forward and the others in the middle and end would follow along. I discovered many groups of them all over the neighborhood. One of the strings was as long as my arm!!! Once the sun's rays hit them, they died. Two days later, during the night, we had another rain storm and the following morning I found the same type of worms. In one location there were two separate groups that crawled together to form one group. I've attached a picture in hopes that you can help me to discover what these interesting worms are."

Fungus gnat larvae have threadlike, 1/4-inch white bodies with a dark head capsule and typically feed on fungi and decaying organic matter. When larvae are present in "ropes," these "ropes" may be several feet long and can be seen crawling up walls or along driveways where and when rain or moisture has been abundant. The adults are about 1/8-inch long, dark, and slightly resemble a very small mosquito.

Usually we suggest eliminating the food source to control flies such as fungus gnats. In a case like this, where the larvae feed on decaying vegetation or fungus on roots and are found in moist, shady areas such as leaf litter, removing all food sources in a yard would be quite difficult. By mechanically destroying the maggot "rope" and reducing the amount of decaying vegetation in the yard, you may reduce the size of future infestations. Still, it is unlikely that this effort will eliminate them. Drier weather should lessen the chance of future occurrences.

Maybe we're thinking about this all wrong. According to Olli Korhonen, Finnish folk tales describe this moving maggot rope as an "aarremato" or a treasure worm. Right, you guessed it – if you follow the rope, they'll lead you to buried treasure. You can find Olli's video of moving Finnish fungus gnat maggots at <https://www.youtube.com/watch?v=TU2Q8kVs0hU> . Or if you'd like a local video, try this one of a Mt. Juliet larval rope that appears to be more than 4 ft. long, <https://www.facebook.com/SoilPlantPestCenter/videos/828811134398923> .

You can find more information on fungus gnats in the UT Extension fact sheet, SP341C Fungus Gnats by Frank Hale at <https://extension.tennessee.edu/publications/Documents/SP341-C.pdf>.

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