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Large hairy striped caterpillars

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Of late, there have been reports of “large caterpillars” seemingly appearing out of nowhere. One of two related caterpillar species account for these reports: **yellow-necked caterpillars**. The related species is the **walnut caterpillar**. Actually, both species have been in our presence throughout the summer but have gone unnoticed because, due to their “initial” small size, they did not cause noticeable feeding damage which would have alerted us to their presence. It was not until now when they approached their final ravenous feeding stage that defoliated trees caught the attention of onlookers.



Defoliated Oak



Defoliated Walnut

In addition, caterpillars have become very evident when (after completing their feeding cycle) they descended to the ground and wandered about as they sought secluded sites in which to construct cocoons in which they will overwinter.

Both species are caterpillars of Notodontid moths (collectively called “Prominents”). The most definitive feature separating the two is the presence of scalloped margins on the forewings of the yellow-necked caterpillar moth.

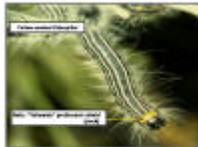


Yellow-necked Caterpillar Moth

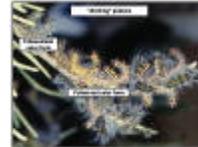
Walnut Caterpillar Moth

Moths generally go unnoticed because they are active at night. And, during the day, the cryptically colored and patterned moths escape detection because they remain motionless as well as blending into their surroundings. Both species are simultaneously active, mating and depositing eggs in early summer.

Yellow-necked caterpillars are aptly named for the yellow to yellow-orange prothoracic shield immediately behind their black head capsule. These somewhat hairy “striped caterpillars” have two color forms: the yellow-red and yellow-black.



Yellow-necked Caterpillar



"Arching" posture

Walnut caterpillars also have two color forms. When young, all are “brick-red”. After the final molt, all larvae are dark grey and covered with exceedingly long white hairs (they look as though they have had a “bad hair day”) (no available image). Walnut caterpillars have the unusual habit of moving from their feeding sites in tree canopies to the sides of tree trunks where they gather and simultaneously molt. The resulting mass of cast skins is an additional indicator of their presence.



Clustered Walnut Caterpillars preparing to molt



Shed skins

Host range tends to help separate these two species. Walnut caterpillars have a feeding preference for their namesake tree, as well as pecan and hickory. Yellow-necked caterpillars have a wide host range but seemingly favor apple/flowering crab and oak. Either species can cross over to each other's preferred hosts.

The larvae of both species exhibit an unusual reflex posture: when startled and in unison, larvae will “arch” by elevating/lifting both their front and rear ends (see the above yellow-necked caterpillar image).

It should be noted that defoliation of trees is more aesthetically objectionable than detrimental to overall tree health. Devoured foliage had completed most of the current-season's photosynthetic activities. Auxiliary buds remain intact and will produce the ensuing year's foliage.



Oak - Viable auxiliary buds



Walnut - Viable auxiliary buds

Bob Bauernfeind

Insecticidal Seed Treatment Options for Wheat.

Seed treatment options for wheat are rapidly changing. For many years Lindane seed treatments have been used to protect seed wheat from attack by various seed attacking insects such as wireworms and false wireworms.

EPA has issued final orders canceling the registrations of all remaining pesticide products containing lindane. In July 2006, EPA received formal requests to voluntarily cancel their lindane pesticide product registrations from all registrants, first Chemtura USA Corporation, followed by AGSCO Inc., Drexel Chemical Company, and JLM International, Inc. The Agency received no substantive comments in response to an August 23, 2006, Federal Register notice announcing its receipt of these requests and inviting public comment. Therefore, as announced in the [Federal Register on December 13, 2006](#), EPA has granted the voluntary cancellation requests, and sent cancellation orders to the registrants. Technical (manufacturing use) products were cancelled effective October 4, 2006, and the last date for use of these products will be July 1, 2007. Cancellation of end-use product registrations will be effective on July 1, 2007, and the last use date for these products will be October 1, 2009. The Agency expects that all existing stocks of lindane will be depleted by that time. This action results in the cancellation of all remaining lindane pesticide products registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for use in the United States.

In a quick review this week most if not all of the manufactures have stopped selling these products. However, materials already in the supply line can still be used, and probably should be used to avoid disposal issues later on.

This means that for many of those that have used Lindane seed treatments in the past it will be time to shop for new methods of controlling some of these fall pests. The good news is that there are newer products (Imidacloprid (DynaShield Imidacloprid, Gaucho (Various Formulations), Imida, Raxil MD-W, and Senator) and Thiamethoxam (Cruiser)) available and the new products not only control wireworms but depending on the rates used can provide control or suppression of several seedling pests such as bird cherry-oat aphid, Hessian fly, greenbug, Russian wheat aphid and even grasshoppers. However all of these products appear to be applied to the seed using specially designed liquid or slurry seed treatment equipment, and none appear to be labeled for any type planter box application that was common with the lindane seed treatments. Thus, if you have not done so already, you may want to check with you local seed and chemical suppliers and make a plan on what seed treatment option you will use this season.

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Sincerely,

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