

“Black Olive” or Bucida Caterpillar (*Characoma nilotica*) a Nuisance Pest

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The bucida caterpillar is 5/16 inch long caterpillar and during outbreak years, can defoliate many bucida trees by early May. Photo by D. L. Wagner, U. Conn.



These “black olive” trees were turned onto brown olive trees in early May (2002) by the bucida caterpillar. They refoliated about 6 weeks later.



Above: Young larvae feed on the flowers of the ‘Shady Lady’ “black olive”, four larvae are indicated on this flower cluster by red dots.

Right: Staining due to caterpillar frass heads toward a parking lot drain.

Photo by Mike Malloy.



A little caterpillar can defoliate “black olive” and its finer textured variety ‘Shady Lady’ “black olive” (*Bucida buceras*). Nuisance calls (complaints about the caterpillars, not the calls) usually start in mid to late April. People start fussing about the caterpillars rappelling around and dropping out of the canopy and getting in their faces. Because of this behavior, some landscapers have nicknamed them the “bungee caterpillars”, but their scientific name is *Characoma nilotica*.

Later, after the flowers have been consumed the move on to the upper canopies of infested trees causing them to turn brown and defoliate. Because “black olive” trees are not in the olive family, I will refer to them as bucida or bucida trees. Back in 2002, the bucida canopies were 50 to 100% browned and defoliated. This much leaf loss early in the growing season, in early May, is major stress if not sure death for some tree species. Certain streets of Naples reminded me of October leaf drop in Ohio, with all of the leaf litter. But the bucida trees quickly refoliated within four to six weeks without any negative long-term effects. They are reported to also feed on buttonwood (*Conocarpus erectus*), but I’ve never observed it.

Oddly, these caterpillars are more into vandalizing the trees rather than consuming them for food. Young larvae initially feed on the delicate flower clusters. They float around on silken threads even when there is no wind, perhaps looking for more flowers to feed on in the lower canopy. Later, larger larvae will chew some foliage, lightly skeletonizing the lower leaf surface. The brown and defoliating leaves are not consumed, but rather the petioles are clipped and the leaves used to create a feeding niche or a place to hide and spin up their little white cocoons. Cocoons are also found in the fruit clusters. The dull gray moths emerge from the cocoons in about three weeks.

Not much information is available on the behavior of this moth. Some years, eggs of a second generation are deposited on 4 to 12 inch long, string bean like galls which develop from the bucida flowers. The larvae then tunnel into the galls and feed inside (Caldwell, 2008). These galls are caused by a tiny mite, *Eriophyes buceras*, which feed on the developing flower bud. The mites flourish and millions can be found inside the gall when it is cut open. This gall can be straight or curl and was the reason for one of the earlier common names, ox-horn bucida.

The severe, rusty staining is due primarily to the frass of the caterpillar. The bucida leaves have tannins, much like oak and tea leaves which may cause a lighter stain. But apparently the tannins are concentrated in the caterpillar frass droppings (waste) and the staining is much more severe. It isn’t the fruit nor the leaves which cause the objectionable staining, it is the caterpillar frass. So some years, when the populations dwindle, you will not have much staining. But when the caterpillar population is in the upswing you will have staining, which will eventually bleach out in the sunlight or weather away after a few months.

Unless the tree has been struggling from poor soil or lack of water, caterpillar management attempts seem to be unwarranted. However, keep a close eye on these defoliated trees as borers reportedly may attack, when trees are in a weakened condition, but I haven’t seen this happen in the last ten years.

If you wish to alleviate the dangling caterpillar annoyance and the staining beneath the tree, applications of pesticides would have to be applied while the caterpillars are small, probably when the trees first start to flower, say sometime in the first two weeks of April. If they are caught early, the staining damage could be minimized. However these little caterpillars are usually not noticed until the damage has been done and it is too late to spray. A product with B.t. or spinosad as the active ingredients would be the “soft” pesticide product of choice. If the larvae are larger, Talstar (bifenthrin) will provide quick knock-down. I have not observed bees attracted to the flowers, so there would be no impact to the bee populations.

Literature Cited

Caldwell, D.L. 2008. Staining associated with oxhorn bucida (“black olive”) trees (*Bucida buceras*): The caterpillar and the eriophyid mite connection. Proc. Fla. State Hort. Soc. 121:360-362.

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