BUG BIZ
Pest Management and Insect Identification Series
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Aleiodes molestus, Troublesome Mummy Wasp

(Hymenoptera: Braconidae)

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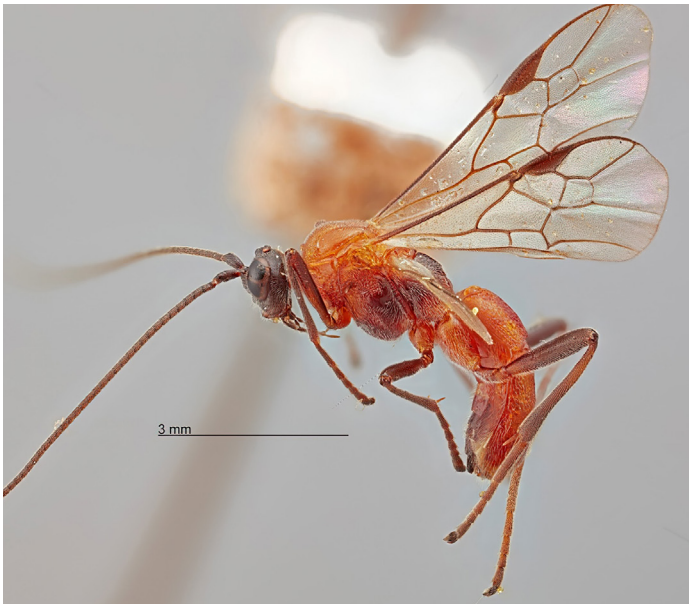
Description

The troublesome mummy wasp is a beneficial braconid parasitoid species commonly found in the southern and central United States, with populations as far north as South Dakota and as far south as Costa Rica. Because of its common name, people may mistakenly believe these wasps sting people, but they are parasitoids of other insects, only affecting host insects. Adults of this species are about ¼ inch (6 mm) in body length, with a black head, propodeum (body part between thorax and abdomen) and legs. The thorax and abdomen are contrasting bright orange. The slender antennae are slightly longer than the body, and each comprises 45 to 47 segments. The propodeum and first and second abdominal segments possess a central dorsal (top) ridge. Females possess ovipositors (egg laying apparatus) that are about 1/10 the length of their abdomens. Males have silvery hairs on the rear abdominal segments.

The troublesome mummy wasp is a member of a large genus of braconid parasitoid wasps that utilize various species of moth caterpillars as hosts. Species level identifications require a specialist in taxonomy or entomology diagnostics. The common name is a reference to the species epithet, "molestus" (troublesome).

Life Cycle

Female troublesome mummy wasps and other related species lay eggs into early growth stages of host caterpillars. Once the wasp larva hatches, it feeds on the internal tissues of the still living host. As the feeding progresses, the host caterpillar prematurely pupates to a deformed mummy husk. Once the host caterpillar is killed, the wasp larva glues the host husk to a surface and pupates within it. After several days, a new adult wasp emerges from its mummified host caterpillar. The species and its relatives are called mummy wasps because of the mummy-like appearance of the dead or dying host.



Lateral view of the Aleiodes molestus, adult female. AgCenter photo by Ilgoo Kang.



Dorsal view of the Aleiodes molestus, adult female. AgCenter photo by Ilgoo Kang.

Ecological Significance and Pest Status

Starting from late April to mid-September, adult troublesome mummy wasps emerge, fly, mate and attack their host caterpillars in open, grassy areas and agricultural fields, including Louisiana soybean fields. Individuals of this wasp species predominately parasitize members of the looper moth complex (subfamily Plusiinae of the family Noctuidae), including most importantly in Louisiana, the soybean looper, *Chrysodeixis includens*. The soybean looper attacks a variety of crop hosts, including soybeans, an important agricultural commodity in Louisiana. In 2018, soybean loopers caused an estimated $16.1 million in damage for Louisiana soybean growers. As a natural enemy of soybean looper, the troublesome mummy wasp plays a vital role in suppressing populations of this pest as a naturally occurring biocontrol agent. Working in tandem with other parasitoid species and proper pest management practices, the troublesome mummy wasp and its counterparts are capable of keeping the soybean looper in check throughout the growing season.



Mummified soybean looper. AgCenter photo by Scott Lee.

References

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Contact Us: For advice about arthropod identification or diagnosis, contact the LSU AgCenter Department of Entomology. Reach the department through the Contact Us webpage: https://bit.ly/36c4awm.

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PUB3862 (online) 11/22

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