

Master Nest Builders

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For thousands of years, man has constructed some of his best dwellings out of the mixture of mud, grass, and water. Perhaps, some of the first humans who were perceptive enough to build their homes out of these basic materials mastered their construction skills by observing certain insect builders. For millions of years, insects have used both mud and grass to build their nests for protection or to house their developing offspring.



This wasp group is named for the nests that are constructed from mud collected by the female. Mud is rolled into a ball, carried to the newly created nest and molded into place with the wasp's mouthparts. The mud dauber that is found on Guam builds a series of cylindrical cells that are eventually plastered over with mud to form a smooth mud nest. Many times, these wasps can be observed gathering water from a leaking faucet or gathering mud from puddles of standing water. They can also be seen flying back and forth from the mud nest

On Guam, there are two notorious mud and grass nest builders – the mud wasps and grass bagworm insects. Both types of insect nests are more of a nuisance than a serious threat to local homes. However, these nests can be quite unsightly if they are not kept under control.

The mud wasp, or more technically known as the mud dauber, is a relatively large wasp, about 1 1/3" long, black-and-yellow, with a long thin waist. It is a solitary wasp (meaning that it lives alone without the help of others) that constructs its nest out of mud in or around homes. Mud daubers do not defend their nests the same way social wasps such as yellow jackets do. Therefore, mud daubers are very unlikely to sting even when they are distributed.

that they are actively constructing.

After constructing the mud nest, the female captures several prey, which on Guam mainly consist of insect caterpillars. The caterpillars are stung and paralyzed before being placed in the nest. A single wasp egg is deposited in each cell with the prey, and then sealed with mud. After all the cells are filled, the female wasp leaves the nest and does not return. The wasp larvae that hatch from the eggs feed on the prey that was left by the female mud dauber. The young wasps will develop inside the cell and emerge as adult wasps to start the whole process over.

There is no proven method that is effective in discouraging wasps from building their nests on the outside of homes. The best advice is prompt and frequent removal of their newly established nests. This procedure will ensure that

the young developing wasp will not make it to adulthood.

As an interesting note, mud daubers should also be regarded as beneficial insects since they are one of the few predatory insects that help reduce the total number of caterpillars that frequently defoliate Guam's most admired Flame tree.

Grass bagworm. Most people don't realize that those little grass-like ornaments that hang from house walls, window seals, and tree limbs are the insect homes of the grass bagworm. The larval stage of this moth makes ½ inch bag-like cases from pieces of grass and silk that it attaches to itself as a shelter to live in.

There may be 300 to 500 eggs in a bag casing. As they hatch, the small blackish larvae crawl out of the bag and spin down on a strand of silk to the ground. As the larvae feeds and grows, it adds bits and pieces of plant material forming a bag-like structure encasement. When

the female is ready to mate, she climbs up a wall, case-in-all, attaches her case by a fine silk thread; she does not fly. These little cases may be found attached not only to house walls but also underneath window seals, benches, or any other structure that is suited to hang their bag-like cases on.

Bagworms are difficult to control because they are often unnoticed hanging from the sides of houses. Insecticides are not recommended to control this pest. The best method of control is to either pick or sweep these bagworm cases off the structure that they are attached to.

Mud daubers and bagworms are unique insects, and homeowners or renters will come across their nests from time to time. For the most part, their nests are more of a cosmetic obstruction than they are harmful.

For more information about these or other home pests, contact your local Cooperative Extension Service on Guam or in Micronesia.

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