



GREEN TIPS

Department of Horticulture - Michigan State University

Solitary Wasps

There are many species of wasps (yellow jackets, paper wasps, hornets, mud daubers, spider wasps and cicada killers) and all are beneficial by virtue of their predatory habits. However, since these insects can sting, they can be a considerable nuisance.

Wasps can be divided into two groups, based on their habits. Social wasps construct small to large-sized nests of grey paper, which may contain 50 to 5000 individuals. On the other hand, solitary wasps are not colonial, and they nest in the ground or in tubular mud nests.

Solitary wasps differ from the social wasps in nesting habits and life cycle. Solitary wasps have no worker caste; the queens "care" for their own young. Therefore, solitary wasps usually have a single nest, or a small group of nests. Solitary wasp queens use their sting to paralyze their prey (flies, caterpillars, spiders, etc.), rather than to defend their nest(s). Therefore, solitary wasps are non-aggressive and rarely sting (unless touched or caught in the clothing).

Two species of solitary wasps are most frequently encountered - mud daubers and cicada killers.

Mud Daubers

The mud dauber wasps are medium to large-sized, shiny black or metallic blue-black wasps with slender abdomens. They build finger-like nests of mud, which are usually attached to flat, vertical surfaces. The queens provision their nests with paralyzed prey and then leave the young to develop on their own.

Control can be achieved by killing the offending adult wasps with a fly swatter or "wasp and hornet" aerosol spray. Remove and destroy the mud nests to prevent emergence of the

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developing young.

Cicada Killers

Cicada killers are large (1-1/2 inch or longer) wasps with dark brown bodies and black abdomens with yellow markings. They are ground nesters that prefer sandy or other well-drained soils, and the queens dig tunnel-like chambers. The adults are active in the summer, usually after early July. They are frequently seen flying about in the nesting areas. The queens search for cicadas to provision their nests (hence the common name). Each chamber in the nest (often as many as 16) is supplied with a paralyzed cicada and a wasp egg. When the larva hatches, it feeds on the cicada. Later the larva pupates and the wasp hibernates in the nest as an immature adult.

To control, locate the nests during the daylight hours when they are easily spotted because of the large amounts of soil excavated from the nests. Mark them, if necessary, so you can find them at night. These wasps are large, but non-aggressive, although they do have a potent sting. All insecticidal treatments **MUST** be done late at night or in the pre-dawn hours when the wasps are in the nests and when it is cool (preferably less than 60 degrees F). Use a flashlight covered with red cellophane for lighting. Apply a properly labeled insecticide into each nest entrance and then fill the hole with a handful of moist soil.

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