

# Insects

## Mud Daubers and Cicada Killers

Karen M. Vail, Assistant Professor, Harry E. Williams, Professor Emeritus  
and Jaimes Yanes, Jr., former Assistant Professor  
Entomology and Plant Pathology

<b>Common Name</b>	<b>Scientific Name</b>
Mud Dauber (Black & Yellow)	<i>Sceliphron caementarium</i> (Drury)
Blue Mud Wasp	<i>Chalybion californicum</i> (Saussure)
Cicada Killer	<i>Sphecius speciosus</i> (Drury)

Mud daubers, mud wasps and cicada killers may become a nuisance when they nest around homes and other structures where people live, work and play. In spite of their formidable appearance, these solitary wasps are not aggressive and controls are rarely needed.

### Identification

The adult mud wasp is nearly 1 inch long and blackish or iridescent blue-black with bluish wings and a more long and slender waist than most other wasps. The black-and-yellow mud dauber is blackish-brown with yellow spots and yellow legs. They build finger-like nests of mud attached to flat surfaces under roofs and outbuildings, under eaves, in attics, etc.

The cicada killer is large (1 1/2 inches or more) with a dark brown body and a black abdomen with yellow markings. It nests in the ground, digging galleries in lawns, gardens and flower beds. Because of their large size, cicada

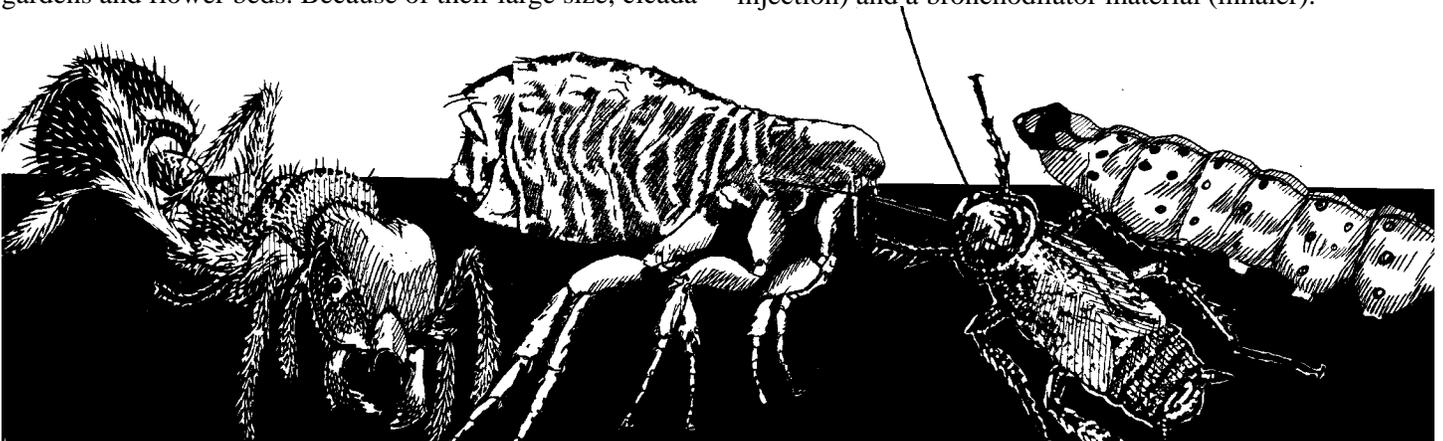
killers are often confused with European hornets. See Extension factsheet SP 290-A for a photograph that compares cicada killers to European hornets.

### Life Cycle and Habits

Solitary wasps are different from the social wasps (yellowjackets, hornets and paper wasps). They have no worker caste and the queens care for their own young. Solitary wasp queens use their sting to paralyze their prey (flies, spiders, caterpillars, cicadas, etc.) rather than to defend their nests. Consequently, these wasps are nonaggressive and rarely sting unless touched or caught in clothing.

### Treatment of Stings

If stung, immediately apply a poultice of a meat tenderizer (an enzyme) to the wound. If the sting is not deep, this will break down the components of the sting fluid, reducing pain. Also, a commercial preparation can be used. Antihistamine ointments and tablets taken orally appear effective in reducing reaction to stings. However, people who are highly sensitive to stings should consider a desensitization procedure in an allergy clinic and consult their physician about medical kits, which may contain antihistamines, aqueous epinephrine (administered by injection) and a bronchodilator material (inhaler).



## Control Measures

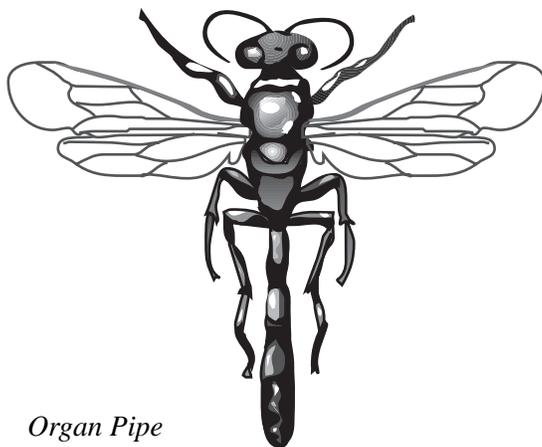
Usually it is not necessary to control mud daubers and wasps or cicada killers unless they are a nuisance. Sometimes, when painting buildings, removing the mud tube nests containing wasps is necessary. Also, the nesting activity of cicada killers may damage lawns and flower and vegetable gardens, especially when many cicadas are in the area and cicada killer populations are high.

**Insecticides:** Chemical control should be considered as a last resort, because these wasps are not aggressive and do not sting unless forced.

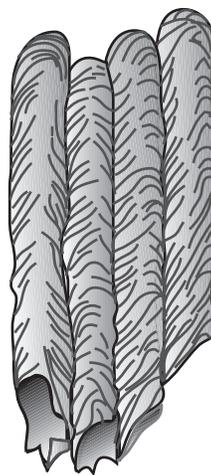
Mud dauber nests can simply be removed with a putty knife. Control adult wasps with a fly swatter or a wasp and hornet aerosol spray containing synergized pyrethrins or resmethrin. After using insecticides, scrape away the nest

and dispose of it to prevent emergence of developing young and attacks by scavenging dermestid beetles.

Cicada killer wasps will fly near people, but females will not sting unless provoked. Females excavate a burrow and lay an egg on a paralyzed cicada which the larvae feed upon. If control is necessary, locate the nests during the daylight hours (a large amount of soil will appear excavated from each nest). Treat late at night or before dawn when wasps are in their nests and it is cool, ideally less than 60 degrees F. Use a flashlight covered with red cellophane for lighting. You can apply: carbaryl (Sevin), bendiocarb (Ficam D) or pyrethrins (Drione) dust, or wasp and hornet killer spray or foam into each nest entrance. Cover with a handful of moist soil. A can of Whitmire Wasp Freeze is useful.



*Organ Pipe  
Mud Dauber*



### Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store, or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label. Persons who do not obey the law will be subject to penalties.

### Disclaimer Statement

Pesticides recommended in this publication were registered for the prescribed uses when printed. Pesticides registrations are continuously reviewed. Should registration of a recommended pesticide be canceled, it would no longer be recommended by the University of Tennessee. Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others which may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product.



SP341T-2.5M-9/98(Rev) E12-2015-00-044-99

*A State Partner in the Cooperative Extension System*

The Agricultural Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex or disability and is an Equal Opportunity Employer.  
COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS  
The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture,  
and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914.

Agricultural Extension Service  
Billy G. Hicks, Dean