

MUD NEST BUILDING WASPS AND THEIR NEST ARCHITECTURE

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Mud nests of wasps are a common site in buildings and are built on variety of surfaces. A study was conducted to examine the mud nests of wasps in buildings, identify the nesting species and describe their nest architecture.

Several types of buildings in the University of Peradeniya and a few buildings in and around Gampola (Kandy District) were examined for mud nests of wasps. The University buildings examined included; halls of residence, departmental buildings, administrative block, canteens, libraries and recreational buildings. In Gampola, shops, houses and abandoned buildings (a mill and a cattle shed) were examined. On locating a mud nest a record of the nesting wasp species, details of nest structure and the nesting habits of the wasp were made.

Mud nests of 8 species of wasps belonging to 3 families were recorded. They are *Delta maxillosum* (Guél), *Delta* sp., *Delta flavopictum* (Blanch), *Paraleptomenes mephitis* (Cam), and *Subancistrocerus sichelli* (Saccus) of the Family Eumenidae; *Pison rugosum* (Sm.) and *Pison* sp. of the Family Crabronidae and *Sceliphron madrasplatanum* (Fabr.) of the Family Sphecidae.

The most common type of mud nest encountered was of *Delta flavopictum*, which builds an elongated or clump shaped nest on walls, provisioning it with caterpillars. Pot shaped wasp nests found in houses belonged to three *Delta* species that build single pots or clump of pots attached to each other. Office buildings had nests of two species of *Pison* who build clumped nests of two different types; one where the nest cells are externally distinguishable (*P. rugosum*) and the other where it is not so (*Pison* sp.). The remaining three species of wasps build tubular shaped nests either in one plain (*P. mephitis* and *S. sichelli*) or in two plains (*S. madrasplatanum*). No mud nests were encountered in shops located in the center of Gampola town or in abandoned buildings.

Five of the wasp species namely, *D. maxillosum*, *Delta* sp., *D. flavopictum*, *P. mephitis* and *S. sichelli* provisioned their nests with caterpillars while *P. rugosum*, *Pison* sp. and *S. madrasplatanum* used spiders.

Proximity to a source of mud, the surrounding vegetation and whether inhabited by humans or not, appear to determine nest construction in buildings by mud nesting wasps. The nest architecture is species specific enabling the identification of the nesting wasp from its nest.