

Homes of Mud

Article and photographs by RADHA H.S.



THE WIND CHIME WAS STRUNG FROM the curtain rod and needed cleaning. When I got the chime off the rod, it had a familiar looking structure on it: an empty home made of mud. We in Karnataka, a southern state of India, call them *khanajada goodu* or *khanaja's* nest.

Khanajas are wasps, called "mud daubers", who like to build homes made of mud. They build their homes in corners close to the roof or in niches behind windows and even in the folds of thick curtains.

These homes seem sturdy and secure. Sometimes during a cleaning session, if we peeled one off a curtain and dropped it on the ground, it wouldn't break. Cleaning

corners with a long pole invariably broke these homes.

The mud daubers are hardworking creatures. When a female wants to lay an egg, she builds a home. This requires time and energy. She finds some mud in a puddle or some other place, then rolls it into a ball and flies up to the chosen spot. Here she uses the mud to make herself a home. Using her jaws and her saliva, she shapes it as required: like organ-pipes, hillocks, ovals or just a big untidy SPLAT!

Mud dauber homes can have one or more rooms inside. After the home is built, the female stings and paralyzes a spider and leaves it inside the nest. She lays an egg on the spider, seals the nest with mud and flies away. The home on my wind chime looked like pot-shaped hillocks, which had three holes in it. Maybe each had held an egg.

The larval wasp which emerges feeds on the spider left by its mother. Then it spins a cocoon inside the nest and leaves the nest when it has become an adult wasp.

I placed the wind chime on my table, where it jostled for space with my monitor, speakers, keyboard and other stuff. My table was right next to a window, under which were plenty of potted plants.

As I worked that afternoon, I had an unexpected visitor: a *khanaja*. I was startled for a moment. It had a very restless sort of flying pattern. Wasps sting, and I was worried my constant tapping on the

keyboard might annoy it into stinging me.

I would get photographs, I thought. Easier said than done! My visitor was black and about 18 millimetres long. Beautiful shades of blue were visible to my eye. Fluttering wings kept the wasp in motion. Most times, by the time I focused and clicked, the wasp had decided to find a new perch on the wind chime! I ended up with innumerable pictures of everything but the mud dauber.

Later I looked up my mud dauber on the Internet. I had been wrong about the sting. Mud daubers are solitary creatures and rarely sting people. In fact, they help us by using some of our large spider population as food for their young.

Also, the blue and black mud dauber which had visited and checked out the accommodation does not build mud homes. This species uses the nests abandoned by other kinds of mud daubers.

The next day, she was back. I decided my visitor was a "she" as it is the females who normally check out homes for laying eggs. She inspected the home from all directions. She even checked out the inside by diving in until even her slender waist disappeared through the holes.

She came every day for the next seven or eight days. Sometimes she visited twice—morning and afternoon. I hoped to see her carrying in a spider, but no such luck. We got to be quite friendly. I continued my tapping on the keyboard while she continued her inspection, without getting in each other's way.

Then one afternoon I saw a wet patch on the nest. My mud dauber had liked the neighbourhood and had decided to lay

her egg in the nest on the wind chime, I decided with glee. She must have stocked a spider and laid an egg in the chamber before sealing it.

From then on I thought she would not return. Funnily enough, she did. She would fly around the wind chime, sit on the nest, flutter around as restlessly as before and go away. Soon, she stopped visiting.

I started mothering the nest. I stopped people from picking it up. I kept imagining a wasp breaking the mud seal and flying off. Nothing of this sort ever happened. Months passed. One day I discovered the mud home coming off the wind chime. And the chamber, which my mud dauber had sealed, had never opened. So what had happened to my mud dauber's egg?

I got curious and checked inside the nest. The inside was smooth, but empty. And there was a hole in the sealed chamber opening into another of the chambers, which also had a hole in it. That is where my mud dauber's little one had flown out from, hoodwinking me! ■



In this cross-section of a mud dauber nest the three chambers on the left contain mud dauber larvae. The larvae eat a paralysed spider left by their mother and then spin a cocoon like the ones in the four chambers on the right. The larvae will hatch from these cocoons as adult wasps.