Those frangipani worms

By KRIS SOOKDEO

IF YOU have the good fortune of being able to maintain a garden in your yard or perhaps grew up in the countryside or suburbs where your parents had one, it is quite likely that you encountered a frangipani tree (Plumeria sp.) at some point.

And, if you were a diligent naturalist at heart and spent some time around that tree you probably would have seen some brightly-coloured caterpillars on it at some time. Commonly called frangipani worms, these are not worms at all. These are actually the caterpillars of a species of moth.

The moth is the tetro sphinx (Pseudosphinx tetrio) and if you have frangipani trees nearby you have probably seen it at night, attracted to the lights in your house. The moths themselves are large and unremarkable in their colouration, being greyish brown with dark markings, but the caterpillars are extraordinarily marked with contrasting yellow stripes on black. Their head is orange as are their "feet", more properly referred to as prolegs. They can get quite large as caterpillars go, with many specimens growing up to 12 cm in length.

Not many people realise that the caterpillars of butterflies and moths tend to be restricted to particular plants as a food source. The caterpillars of the tetro sphinx, for example, are only known to feed on the frangipani and allamanda, both members of the family Apocynaceae. The presence of these moths in Trinidad and Tobago then poses a curious natural history problem. The frangipani and allamanda are not naturally found here. If these moths feed only on frangipani and allamanda, did they only recently colonise the island when these plants were introduced to our gardens? Or is there an undiscovered indigenous food source that these moths fed on prior to the arrival of frangipani and allamanda?

As you might guess, the bright markings of the caterpillar serve as a warning. Throughout the animal kingdom, bright colours usually serve to indicate that the animal is poisonous or distasteful and the tetro sphinx caterpillars are indeed unpleasant to eat.

Occasionally, caterpillars which eat plants that contain toxic compounds are able to sequester some of those compounds in their own tissues and this accounts for the taste of our caterpillars as well. Any predator, such as a bird, that tries to eat one caterpillar, will quickly realise its mistake and avoid eating other similar caterpillars, therefore offering all similarly marked caterpillars some degree of protection from predation.

When a caterpillar has eaten its fill of leaves and is ready to pupate, it will abandon the food plant and wander off in search of a sheltered spot. This is a perilous journey in the urban environment, and many get accidentally squashed by feet or tyre before finding a suitable refuge. Those that make it to safety, will form into a hard brown chrysalis. You may have found these from time to time in your flower pots or under other objects in your garden. Eventually, the adult moth emerges and flies off in search of a mate. So the next time you see your favourite frangipani being devoured by a multitude of caterpillars, spare a thought for these interesting mini-beasts. They will soon be gone and the tree will survive the assault — just another cycle of life in our island's amazing natural history.

For more information on our natural environment contact the Trinidad and Tobago Field Naturalists' Club at admin@ttfncc.org or visit the website at www.ttfncc.org on Facebook and YouTube. The Club's next monthly meeting and lecture is on May 14 at St. Mary's College, Port-of-Spain and the lecture topic is "Eathy mate-choice behaviour" by Heather Ayal of Carleton University, Canada.