

**GECKO EATS ABDOMEN OF *ASOTA CARICAE*
(FABRICIUS, 1775) (LEPIDOPTERA: EREBIDAE:
AGANAINAE)**

SEM CORDIAL

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Aganainae is a relatively small subfamily of Erebidae. All members are believed to contain poisonous substances in the body in the adult stage, which protect them against predators. *Asota caricae* is widespread, ranging from the Indian subcontinent through Indo-China to the Philippines. It feeds on *Ficus* species in the larval stage and both the larva and the adult are reported to cause allergic reactions which are occasionally fatal in susceptible humans in India, since they contain a suite of poisonous chemicals including histamines, imidazole and peptides (Wills, *et al.*, 2016).

On 08.viii.2020, a specimen of *A. caricae* was observed on a red palm plant (*Cyrtostachys renda*) at 0947 in a garden in Fairview, Quezon City, Philippines. It fluttered briefly and was snapped by an Asian house gecko (*Hemidactylus frenatus*). It was next observed to struggle weakly, having been caught by the wings in the jaws of the gecko. It was expected that the gecko was inexperienced and would not be able to eat the moth, once the distasteful chemicals in the moth were tasted by the gecko. At 1700 on the same day, the moth was found perched on a leaf of the same red palm plant; apparently, the moth flew off and settled nearby. Upon

examining it, it was noted that though the moth was alive, it lacked an abdomen. The gecko appears to have bitten off and eaten the abdomen of the moth.

In poisonous butterflies like *Danaus plexippus*, it was believed that the poisons were stored in the abdomen and therefore these were used in experiments to determine the palatability of the butterfly with caged jays as predators (Ritland & Brower, 1991). However, in the case of *A. caricae*, when disturbed, the moth exudes an oily liquid from apertures on the thorax, both dorsally and ventrally. This appears to deter predators. In the case of the gecko, it seems that the reptile has learnt to recognise the moth and understood that although the thorax is noxious, the abdomen is edible. The gecko was not observed again on that or subsequent days.

References

Ritland, D.B. & L.P. Brower. 1991. The viceroy butterfly is not a batesian mimic. *Nature* 350: 497-498.
Wills, P.J., Mohan A., Mohan N., Raghuvveeran V., P. Sachidanandan, T.M. Jacob, Madhavan L., R.V. Thampah & K.K. Varma. 2016. Population explosions of Tiger Moth lead to lepidopterism mimicking infectious fever outbreaks. *PLoS ONE* 11(4): e0152787.



Fig.1: Geko eating *A. caricae*



Fig.2: Live *A. caricae* with missing abdomen, dorsal view



Fig.3: Live *A. caricae* with missing abdomen, lateral view



Fig.4: Live *A. caricae* with missing abdomen, ventral view