
doi:10.3853/j.0067-1975.2.1895.1205

ISSN 0067-1975

Published by the Australian Museum, Sydney
CASE OF PRESUMED PROTECTIVE IMITATION.—SKUSE.

91

The detailed description is as follows:

**Animal** (fig. 1)—in spirits, with two small left and right mantle lobes, foot in length the shell's diameter, with pedal line, oblique grooves and caudal mucous pore, apparently surmounted by a horn, sole tripartite.

**Genitalia** (fig. 2)—penis broad, much twisted, containing a large blunt papilla, epiphallus more than twice the length of penis; vas deferens long, bound to wall of atrium. Spermatheca boot-shaped, duct moderately long. Base of vagina black, lobed, containing no follicles.

**Jaw** (fig. 4)—rather thin, arcuate, smooth, broad, without central projection.

In a slightly torn radula (fig. 3) I counted $140 = 4 = 12 = 1 = 12 = 4 = 140$ teeth in 103 rows. Rachidian twice as long as wide, basal plate rather hour-glass shaped, central cusp ovate-lanceolate, projecting half its length over the succeeding plate; small side cusps with distinct cutting points arise at two-thirds the length of the basal plate. Immediate laterals have the entocone suppressed, the ectocone appears as a small hook, the mesocone being broadly ovate. For three or four transition teeth the ectocone rapidly ascends the mesocone rapidly ascends the mesocone, till each of equal size form the bifid cusps of the marginals. These are minute, sinuous, and very numerous.

---

ON A CASE OF PRESUMED PROTECTIVE IMITATION.

BY FREDERICK A. A. SKUSE.

(Entomologist to the Australian Museum.)

[Plate XXII.]

That wonderful Hepialid, *Leto stacyi*, Scott, seems to claim a place among those famous examples of a similar nature advanced by Bates, Wallace, and others. The protective resemblances among animals is an established fact, and it is unnecessary to quote classical instances. But I cannot find any reference to such a protective feature as that of a moth which resembles *in situ* an approach to the head of a reptile known to possess an appetite for birds. In the case under notice it may fairly be claimed that such an example exists in nature.

After consulting my colleagues, by submitting to them photographs of actual specimens in their natural positions—and I am especially indebted to Mr. Edgar R. Waite, whose opinion, from his
special knowledge, is particularly valuable—it was agreed that the moth represented sitting on a tree-trunk forcibly reminded one of the head of the tree lizards, members of the genus *Varanus*. An example is depicted on the plate. It is the “eye” on the wing of the moth that strikes the key-note of the situation; but in addition the shape of the wing, when the moth is resting, looks very suggestive. The moth is one which passes its larval state in the butts of Eucalyptus trees for the period of five or six years, but on emergence the perfect insect is not prone to fly, and would therefore be very liable to be attacked by birds. Hence the probability that my surmise of the striking resemblance to the head of the lizard being an instance of genuine protective imitation is correct.

The reptile photographed was not very specially selected, and others might perhaps have been used wherein certain features were more strongly marked. For instance, many members of the genus *Varanus* have a dark line passing from the eye backwards.

In conclusion, it might be well to point out that the marks on the outer margin of the visible wing of the moth are very suggestive of labials, while the various lines in front savor of the regularity of scales. Some of these tree-lizards and the moth are natives of New South Wales.

The log from which the moth figured emerged was collected near Newcastle, by Mr. W. Kershaw, late of the Melbourne Museum, and kindly presented to this Museum, thus affording us an opportunity of observing the living moth in its natural position and development.

---

**Some Suggestions Regarding the Formation of “Enhydrs” or Water-Stones.**

By T. Cooksey, Ph.D., B.Sc.

(Mineralogist to the Australian Museum.)

The mode of formation of these interesting bodies is still in considerable doubt, and therefore it seems to the writer that these notes attempting to explain their occurrence will not be without interest.

Mr. E. J. Dunn has given a description of the characters of those specimens which he obtained from Spring Creek, Beechworth,
EXPLANATION OF PLATE XXII.

Fig. 1. Head of lizard of the genus Varanus on tree trunk.


Both natural size.