

NOTE V.

PROTECTIVE RESEMBLANCE
 BETWEEN THE SPECIES OF NOTHOPEUS PASC.¹⁾
 AND FOSSORIAL WASPS

BY

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The Leyden Museum received some weeks ago from Mr. Kleiweg de Zwaan a lot of Insects collected by him in the island of Nias. In this collection I found a male and a female of an interesting Longicorn, viz. *Nothopeus hemipterus* Oliv. (also known from Java, Burma and Northern India) captured on Mount Sitoli, together with both sexes of a fossorial Hymenopteron belonging to the family Pompilidae, viz. *Macromeris splendida* Lep. (*Pompilus coriarius* Taschb.) which wasp perfectly resembles the beetle, both insects being black with a strong metallic blue hue especially on the wings. Undoubtedly this is a not yet recorded case of protective resemblance between Longicorns and Fossorial Hymenoptera.

As yet the following eight species are known in the genus *Nothopeus* and, certainly, they all will have their model.

A. Species with short elytra.

<i>hemipterus</i> Oliv. 1795 (<i>Cerambyx</i>).	Java.
<i>sericeus</i> Saund. 1853 (<i>Colobus</i>).	N. China.
<i>cingalensis</i> White, 1855 (<i>Colobus</i>).	Ceylon.
<i>fulvus</i> Bates, 1879 (<i>Colobus</i>). (? = <i>C. velutinus</i> Saund. i. l. Mun. Cat.).	Sylhet.

1) = *Colobus* Serv. = *Coloborhombus* Thoms. (Coleoptera: Cerambycidae).

<i>fasciatipennis</i> Waterh. 1885 (<i>Coloborhombus</i>).	N. Borneo.
<i>auricomus</i> Rits. 1890 (<i>Coloborhombus</i>).	Java.
B. Species with elongate narrow elytra.	
<i>tibialis</i> Rits. 1895 (<i>Aphrodisium</i>).	Assam.
<i>intermedius</i> Gahan, 1902 (<i>Nothopeus</i>).	Borneo.

Of two of these species, and moreover of an unnamed one from Borneo, the mimetic properties have been observed in the field by insect collectors (Messrs. Pryer and Shelford).

In a paper, entitled "Observations on some Mimetic Insects and Spiders from Borneo and Singapore" and published in the Proc. Zool. Soc. London, 1902 II, pp. 230—284, plates XIX—XXIII, the author, Mr. R. Shelford, says (pp. 240 and 241) concerning *Nothopeus*-species mimicking Hymenoptera:

»*Nothopeus fasciatipennis* (C. O. Waterh.) has already been figured and described¹). *Nothopeus* sp. near *hemipterus* (Fabr.) is a large black species with entirely fuscous wings and is an admirable mimic of a formidable wasp, *Mygnumia anthracinus* (Sm.), which occurs commonly on Mt. Matang. The buzzing flight and other movements of these two *Nothopei* are remarkable wasp-like and so completely deceived the Museum collectors that they employed the greatest precautions in transferring the specimens from the net to the killing-bottle."

»A magnificent new species, described and figured by Mr. Gahan loc. cit. as *Nothopeus intermedius*, was captured near the summit of Mt. Penrissen together with several of its models, *Salix aurosericeus* (Guér.). When seized, this beetle curved down its abdomen in the most characteristic wasp-like manner, and it was only with the great-

1) Trans. Ent. Soc. London, 1885, p. 369, pl. X, fig. 12. — On p. 372 Mr. Pryer says: »The wasp (*Mygnumia aviculus* Sauss.) or beetle (*Coloborhombus fasciatipennis* Waterh.) is abundant, but difficult to capture; when flying or on the ground at a distance of six feet it is quite impossible to distinguish the wasp from the beetle, and I cannot therefore say which is most common, as I only succeeded in securing a single specimen of each."

est reluctant and most careful precautions that my Dyak collectors, to whom, I pointed out the insect, captured it."

A quite similar observation has been made in western Africa, at Koulikoro: Upper-Senegal-Niger, by Mr. J. Vuillet, about a Longicorn of a new genus allied to *Nothopeus* and described by Mr. René Oberthür¹⁾ under the name of *Guiltea Vuilleti*. As to this capture the following is written by Mr. Vuillet to Mr. Oberthür:

»Ce Coléoptère, le premier de l'espèce que je vois, mime à s'y méprendre un grand hyménoptère du pays à l'aspect redoutable. Lorsque je l'ai aperçu dans le *Ximenia americana* L. sur lequel il se tenait, mon premier mouvement a été de le laisser, pour plusieurs raisons: je ne capture habituellement que les coléoptères, je n'avais pas de filet, enfin, et surtout, je craignais fort une piqûre. Ce n'est qu'après avoir enveloppé de mon mouchoir le bouchon de mon flacon de chasse et en avançant la main avec mille précautions que j'en ai tenté la capture avec du reste un bien faible espoir de réussite. Ce n'est pas sans étonnement que, la bête étant prise et examinée à l'aise, j'ai reconnu un beau longicorne. La couleur fauve de son corps et de ses pattes et la couleur bleu foncé de ses ailes que les élytres recouvrent seulement sur une faible longueur, sont, avec ses dimensions, les caractères qui font ressembler cet insecte à un hyménoptère dont j'espère pouvoir capturer un exemplaire un de ces jours."

This hymenopteron (a fossorial wasp of the family Pompilidae) was sent over in the following lot and has been figured as fig. 2, *loc. cit.*

Leyden Museum, October 1911.

1) *Insecta*, Revue illustrée d'Entomologie, Ann. I (1911), p. 183, fig. 1 et 2.