THE STRANGE WAY IN WHICH THE VISHNU-MOTH
(*TRABALA VISHNU*) DEPOSITS HER EGGS IN THE
SHAPE OF LARVÆ.¹

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In the small residential town of Kuching, Borneo, an invasion of voracious caterpillars in the garden and house of one of the residents was reported to me in October 1924. Certain plants were entirely defoliated and a large number of large hairy caterpillars of the usual Lasiocampid type were seen crawling about everywhere, even entering the rooms of the house and causing much inconvenience and annoyance. Obviously a mass propagation due to favorable circumstances had taken place. Ordinarily *Trabala vishnu* is a moth of rare occurrence; even in the rich collections of the Sarawak Museum only some few specimens were to be found.

As the larva has already been described and figured, I shall not consider it in the present note.

A fertilized female was temporarily placed by me in an empty paper box and left over night. On opening the box on the following day I was very much surprised to see beside the moth, a considerable number of larvæ on the sides. I thought it very strange to begin with, but a somewhat closer examination soon revealed the fact that what I had taken for larvæ consisted of eggs laid in two parallel rows with an odd egg at the top. Furthermore, the mother had arranged it so that a darkly pigmented spot on each egg was always directed outwards with the effect that two dark longitudinal lines were formed, reminding one of the condition so often found in caterpillars. When I add that the mother had covered the egg strings with hairs from her own body, it is easy to understand that these completely conveyed the impression of being small hairy caterpillars.

On plate 1, A, a photograph of the eggs found in the box is reproduced. There are altogether 13 string, 8 laid separately and 5 more or less joined together. In nearly every string an

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odd egg is found at the top, representing a head. All are equally covered with short hairs and on every string there are two longitudinal rows of dark spots along the outer margin.

That the mother really has displayed a tendency to imitate the head of a caterpillar by placing one single egg on the top seems to be evidenced not only by the fact that in all strings there is an odd top egg but also that in strings no. 2, 5, 6, 7 and 10 (from left) there are two top eggs, one on top of the other one, whereas at the lower end of each string there seems to be no marked tendency to place an odd egg (except no. 3).

The longest egg string is no. 13 with 22 eggs. It is a strange fact that most of the other strings show two parallel rows of 7 eggs in each with 1-2 single top eggs.

In order to find out whether this peculiar way of depositing the eggs in the shape of larvæ was only a queer habit in this individual case or really a specific habit, I isolated six more fertilized females and awaited the result. In all cases the females laid their eggs in exactly the same way. Two of the females under observation were kept in very large cases, but the eggs were found to be laid in a strikingly singular way. One or two top eggs were always to be seen and the same arrangement with the dark spots forming two longitudinal lines was also observed.

We may therefore safely conclude that this peculiar way of depositing the eggs in larva-like shape is a characteristic of *Trabala vishnu*.

The advantage of this form of "mimicry," if we may use this term, is obvious. It is a well-known fact that hairy caterpillars are distasteful and discarded by most birds, the insects' greatest enemies. Only the cuckoos seem to form an exception to the rule. Undoubtedly the eggs laid in this way are better protected than if laid separately or in disorderly heaps as is the case with most Lasiocampids, and it seems to be fairly clear that the mother in this case by making the unprotected earliest state of the development so strangely similar to hairy distasteful larvæ, has solved the problem of protecting her offspring *ab ovo* in a more effective way.

MJÖBERG—OVIPOSITION OF VISHNU MOTH

A. Eggs of the Vishnu Moth (*Trabala vishnu*) laid in two parallel rows with one odd egg at the top, and covered with hairs by the mother, thus giving a complete impression of being hairy larvae. B. Cocoon of male. C. Cocoon of female.