

No. VIII. One Paddy-boring Insect Larva Predatory on Another.

Well known stem-borers of paddy in Siam are *Diatraea auricilia* and *Schoenobius incertellus*. Both are cannibalistic, and one of their means of reducing overcrowding inside a stem is to devour their companions. We once found the swollen dead body of a *S. incertellus* larva in a stem of paddy, and on noticing movements in the corpse we dissected it and discovered therein a live caterpillar of *Diatraea auricilia* in a perfectly normal condition and succeeded in rearing it into an adult moth. Evidently the *Diatraea* had eaten its way into the *Schoenobius*, but it is difficult to understand why the latter should remain passive under the operation.

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No. IX. Egg-laying Capacity of a Siamese Goat Moth.

On the 19th of September, 1931, I caught a female "goat moth" (*Xyleutes leuconotus* Walk.), a large clumsy looking insect, at the foot of a Casuarina tree in my garden on Wireless Road. I put it under a glass cover all night and in the morning by its side was a yellow waxy mass nearly as big as the insect itself. On investigation this proved to be coiled chains of tiny bead-like eggs. As a matter of interest I weighed the whole mass and found it to be 3.3358 grams. I then counted the number of eggs in several small weighed lots and calculated how many there were in the whole mass. The moth had laid 40,000 eggs in a single night.

This was a splendid opportunity of working out the life history of the insect and one not to be neglected. I knew that the caterpillar was a borer in trees and so made arrangements accordingly. Eggs were plastered on all the Casuarina trees we could find, big and small, and covered up in various ways, with glass top boxes, wooden boxes, and clay domes. Eggs were put on the surface of the bark, in crevices of the bark, and in cuts made artificially. In addition we fitted up breeding cages with stems from the Casuarina and infested them with the eggs. In every case elaborate precautions were taken to protect the eggs from the depredations of ants. On September 30th they started to hatch, each producing a tiny white caterpillar with well-developed thoracic legs and a stout black head. As soon as they hatched they spun a kind of silky sheet, under the shelter of which they started to eat the empty egg shells from which they had just emerged. After this they became very restless, running all over the place in the daytime and going back to their silken nest at night. They ate galleries in the bark first of all and then commenced to bore into the wood. By October 18 nearly all of the army of 40,000 were dead in spite of all our care and precautions, meeting their fate in various ways: