Thysanuran Predatory on Eggs and Immature Forms of Termites in Borneo

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During examinations of termite-mounds and termite-galleries in logs near Sandakan, British North Borneo, in January, 1927, a small Thysanuran resembling Lepisma was frequently encountered in close association with the termites. Some of these were removed to glass tubes containing decaying wood with eggs, nymphs, workers and soldiers of termites (Termes and Capritermes sp.). During three weeks of observation it was found necessary to add more living termite material several times. The Thysanurans remained active and appeared to increase somewhat in size. Each time, after inserting fresh eggs and termites to the tubes, the Thysanurans could be observed, beneath a hand lens, feeding on the eggs and soft, immature, helpless termite-nymphs. To pierce an egg or penetrate the integument of a nymph required considerable active gnawing. As soon as the mandibles broke through the egg-membranes the juices were quickly consumed, leaving nothing but the collapsed shell. Nymphs were similarly drained of their body fluids. Disturbed Thysanurans, while feeding, would actively dart about the tubes carrying their prey with them, sometimes dropping this to return again and continue feeding.

The extreme rapidity of movement in these insects enables them to live amidst active termites without danger of injury by the workers or soldiers.

This Thysanuran was observed especially within the channels in dead wood made by species of Termes. It was brought alive to Honolulu but only one individual survived the journey. The termites in the containers were all dead at least a week before arriving. In Borneo it did not appear to be sufficiently abundant to operate, in itself, as an effective element in termite control. It may perhaps be suppressed there by obscure factors which were not observed.