Kalotermes (Neotermes) gardneri, Snyder. From Dehra Dun. 'ex. rotten Mangifera indica.'

Fam. Rhinotermitidae: Heterotermes malabaricus, Snyder. From 'South Mangalore, 400 ft. Malabar Coast.'

Fam. Termitidae: Termes (Termes) dehtraduni, Snyder. Also from Dehra Dun.
Termes (Termes) malabaricus, Holmgren. Also from Dehra Dun.
Termes (Cylcotermes) almorensis, Snyder. 'West Almora Forest Division, United Provinces, India. Altitude 5,000 ft.'
Microtermes pubescens, Snyder. From 'Dehra Dun, United Provinces, attacking aerial roots of Ficus bengalensis.'

Nasutitermes (Nasutitermes) fletcheri, Holmgren. Recorded from 'Anamalai Hills, 2,400 ft., Madras.'

Nasutitermes (Rotunditermes) anamalaensis, Snyder. 'Anamalai Hills, 2,400 ft., Madras.'

Nasutitermes (Subulitermes) gardneri, Snyder. 'Rangirum, Darjeeling, Bengal, India, in rotted wood at an elevation of 6,000 ft.'

Microtermes beesoni, Snyder. 'Chakata Range, Haldwani, United Provinces, India.'
Microtermes championi, Snyder. 'Haldwani District, Kumaon, United Provinces, India.'

All the above ones, except Nasutitermes (Nasutitermes) fletcheri, Holmgren and Termes (Termes) malabaricus, Holmgren, are new species described by Snyder.

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XL.—A NOTE ON THE DISTRIBUTION, OVIPOSITION AND PARENTAL CARE OF SCUTIGERELLA UNGUICULATA HANSEN VAR. INDICA GRAVELY.
(With two text-figures).

Soon after the first few monsoon rains in 1932 I collected from Kovalam¹ a number of specimens of Scutigerella unguiculata Hansen var. indica, which Gravely recorded from Calcutta (4)².

¹ Seven miles to the south of Trivandrum near the coast.
² The number in brackets denotes the literature referred to.
Later on when collecting cryptozoic forms from various places near Trivandrum and also from Ponmudi hills (3,500 ft. above sea-level in the Western Ghats), I found that it occurred fairly abundantly in all wet situations under stones, and under rotting leaves and timber.

As this variety recorded from Calcutta occurs in the southern extremity of India it is probable that it may be distributed in the intermediate regions also. Gravely in a footnote (4) says that he had found this form in Kandy and Pattipola in Ceylon and adds that Green had told him about a similar looking centipede that he had seen at the top of Namunukuli hill and says that it is probable that it is widely distributed throughout the Island.

Last March I myself collected this variety from Kandy and from various parts of the Uva Province including Passara (3,000 ft.) at the foot of the Namunukuli hill, and am in a position to confirm the opinion of Gravely regarding its wide distribution in the Island of Ceylon.

The species subunguiculata Imms is recorded from Danaulti in Tehri Garhwal. It is the only species of Scutigerella recorded from India (3). Scutigerella unguiculata Hansen is from La Moka, Venezuela (2).

Habits.—These active little creatures avoid light. The specimens are not found during summer but suddenly make their appearance in large numbers as the rainy season commences. A specimen that I kept in a small tube three months ago with a small quantity of moist earth is still living. The only food it had since then is the blue green alga formed inside the tube. I have reared a number of specimens and have never found them to be predaceous.

Oviposition.—The animal lays five to nine eggs at a time. I have seen the captive animal laying the eggs in groups of two or three in a careless manner whereas in natural conditions they are laid in a single cluster. The eggs are held together though not very firmly.

Each egg is imperfectly oval with a number of projections resembling a morous fruit (fig. 1). These projections are formed by the silken network that the animal spins on the surface with the aid of its cerci. Wherever the silken threads reticulate a projection is found. Figure 2 shows the photomicrograph of an egg-mass mounted in balsam. The silken network has dissolved and the eggs have moved apart. It is probable that the secretion from the cerci is of a fatty nature.

Parental care.—It is particularly interesting to note that this

1 The animal died a month after this note had been sent.
minute creature exhibits a sort of parental care that I have observed only among the Chilopods in Myriapoda. The Diplopods always leave the eggs after safely depositing them. The way in which Scutigerella incubates the eggs is slightly different from that of the common centipedes Scolopendra and Geophilus. The Scutigerella simply remains over the eggs that are arranged in the manner of a disc probably till hatching time (which I have not seen). In the case of Scolopendra the mother bends once round the eggs and embryos and holds them together by the aid of its legs; and in the case of Geophilus the mother coils its long body round the eggs a number of times with the anterior end alone free.

Recently when a stone was turned over I saw a specimen of Scutigerella incubating its eggs. The creature instead of running away calmly remained near the eggs and began to eat them. This work took about five minutes, after which it began to move about actively. On examination I found that the contents of four eggs had been completely sucked, the shells alone of which remained, while the fifth one remained untouched. Scolopendra also behaves in a similar way but only in captivity.

REFERENCES


DEPARTMENT OF ZOOLOGY,
College of Science, S. JONES, B.A.
Trivandrum.
September 20, 1934.

XLI.—OBSERVATIONS ON THE OVIPOSITION AND DEVELOPMENTAL STAGES OF A SPECIES OF POLYXENUS.

(With 2 plates).

Since July 1933 I have been engaged in working out the anatomy and development of this Diplopod which occurs fairly abundantly in Kovalam, 7 miles to the south of Trivandrum. A

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