

BIOSYSTEMATIC STUDIES OF CEYLONESE WASPS

by

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Notes on the Sclerogibbidae with Description of Two New Species

(Hymenoptera: Chrysidoidea).

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Abstract

Sclerogibba embiidarum (Kieffer), 1925, from Sri Lanka is redescrbed, as well as two new species, S. taprobanana from Sri Lanka and S. aridicola from Sri Lanka and South India.

<sup>1/</sup> The preceding number in this series is "A Monograph of the Ampulicidae (Hymenoptera: Sphecoidea)," IN PRESS, Smithson. Contrib. Zool. 298.

Members of the Sclerogibbidae are unique among Chrysidoidea (olim ethyloidea) in having many more antennal segments than the normal 12 or 13 and in having nymphs of Embioptera as their hosts. Females (figs. 1-3) cannot be confused with those of any other family of aculeate wasps. The many-segmented antennae and enormously expanded fore femora are unique. The winged males are also readily recognized, for they have many-segmented antennae and the fore femora are enlarged though not so greatly as in females.

The only sclerogibbid described from Ceylon is Mystrocnemis embiidarum Kieffer, 1925. During my field work in Sri Lanka we collected both sexes of the new species and females of a second new species.

Richards (1939) placed five genera in the synonymy of Sclerogibba. Probably some of these will have to be resurrected as valid genera when generic reclassification is based on the numerous and as yet unstudied Sclerogibbids reared by E.S. Ross.

Two genera are represented among the Ceylonese species, but I am describing all in Sclerogibba because of the uncertain status of Mystrocnemis Kieffer. Two species known only from females, S. embiidarum and S. taprobanana, belong to typical Sclerogibba Rigg. and Stef.-Perez; both have simple (i.e., unidentate) tarsal claws and bidentate mandibles, and lack a pair of anterolateral pits on the scutum. S. aridicola may belong to Mystrocnemis, a genus placed in synonymy by Richards, but until the unique holotype can be relocated and topotypic material made available, certain ambiguities in Kieffer's original description cannot be clarified. Both sexes of S. aridicola have a subapical tooth on all tarsal claws, females have tridentate mandibles and a pair of anterolateral scutal pits, and males have a small discoidal cell, making a total of six closed cells in the forewing. The male of S. crassifemorata Rigg. and Stef.-Perez, the type-species of Sclerogibba, has

simple tarsal claws and five closed cells in the forewing, the discoidal cell lacking.

The holotype of S. embiidarum was reared from a specimen of Oligotoma greeniana Enderlein from Colombo, a locality where the annual rainfall is 100-150 inches. My two species were collected in several localities in the Dry Zone where the annual rainfall ranges from 50 to 75 inches. The two males of S. aridicola were collected in a Malaise trap, and the females of S. taprobanana and S. aridicola were found crawling on the ground among leaf litter. Three species of Embioptera were collected in a yellow pan trap placed among leaf litter at Palatupana, where both female species were collected. The former were Oligotoma humbertiana (Saussure), O. saundersii (Westwood) and Apothonia ceylonica (Enderlein); all of these are potential hosts of the two sclerogibbids.

Considering the cryptic habitats preferred by sclerogibbids, I believe that other species still remain to be collected in Sri Lanka, particularly in the Wet Zone areas of much higher rainfall.