Treubia 2004 33 (2) 199-201

Short Comunication

RECORD OF *Smicromorpha*, (HYMENOPTERA: CHALCIDIDAE: SMICROMORPHINAE) POSSIBLE PARASITOIDS OF WEAVER ANTS, FROM HALMAHERA, THE NORTH MOLUCCAS

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The parasitoid wasp genus *Smicromorpha* Girault, 1913, consisting of six described species, is the only genus in the subfamily Smicromorphinae of the family Chalcididae (Naumann, 1986). Of the six species, three (*S. doddi* Girault, 1913, *S. minera* Girault, 1926, and *S. lagynos* Naumann, 1986) are distributed throughout northern Australia, *S. eudela* Naumann, 1986, is known only from the northern part of the Northern Territory of Australia, and *S. banksi* Naumann, 1986, was described from northeastern Australia and New Guinea. The only species described from outside Australia and New Guinea is *S. keralensis* Narendran, 1979, which is known only from southern India. Bouček (1988) referred to, without mentioning any details, an undescribed species from central Africa, and Narendran (1989) suggested an occurrence of a species in Nigeria. In addition to these localities, Naumann (1986) listed the Philippines, as a personal communication with Dr. S.F. Riek, to harbor a smicromorphine parasitoid. A highly unusual species is known from a single specimen from Singapore (Naumann, personal communication).

During our field research on hymenopterous insects in the northern part of Halmahera Island conducted in September 2003, we successfully collected *S. lagynos* as follows.

One female and one male *S. lagynos* were collected around the nest of the weaver ant *O. smaragdina* (Fabricius) on an *Anona muricata* tree at around 1100 on 5 September 2003 (Galela, Tobello, 01°46'N 127°57'E). On 7 September 2003, two females were collected at around 09.30 hours while they were flying around a nest of *O. smaragdina* at a *Citrus* sp. tree (Gomohoku, Tobello, 01°48'N 128°00'E). The next day, the other two females also flying around a nest of the weaver ant on a *Citrus* tree were collected at around 11.00 hours at Akesahu, Jailolo (01°00'N 127°30'E), and a male was captured also around the nest of the weaver ant at about 13.30 hours at Hoku-hoku Kie, Jailolo (01°06'N 127°28'E). The specimens are now deposited in the Museum Zoologicum Bogoriense, Bogor (4 females, 1 male) and in the Natural History Collection at Ibaraki University, Mito (1 female, 1 male).

Without specifying the species, Naumann (1986: 172) mentions "At least four species of Smicromorphinae are known to be attracted to light and are therefore probably nocturnal; certainly one of these species is crepuscular." The fact that we collected the specimens while they were flying around weaver ant nests during daytime shows that *S. lagynos* is neither nocturnal nor crepuscular. Actually the species has relatively small ocelli in the genus (Naumann, 1986). Large ocelli are often a feature of nocturnal or crepuscular Hymenoptera.

Girault (1915) and Dahms (1984) mentioned that the host of *S. doddi* is the weaver ant *O. smaragdina* [Naumann (1986) referred to Girault (1913) for the host, which, however, mentions nothing about hosts]. Naumann (1986: 172) stated "Specimens of Smicromorphinae have been collected near nests of *O. smaragdina* on several occasions", and the Indian species, *S. keralensis*, is known flying around the nest of *Oecophylla* (Narendran, 1989). We also collected the parasitoids flying around weaver ant nests. All these observations, though any direct evidences have not yet been available, strongly suggest that the hosts of *Smicromorpha* parasitoids are *Oecophylla* ants. The slender, highly mobile and telescopic metasoma of *Smicromorpha* could be an adaptation to oviposition on *Oecophylla* larvae in nest construction, during which the ant workers hold larvae in their mandibles to bind leaves together by the larval silk.

As Naumann (1986) pointed out, the distribution of *Smicromorpha* generally parallels that of the two extant *Oecophylla* species: *O. smaragdina* occurs from India to the Solomon Islands and in northern Australia, and *O. longinoda* (Latreille) in tropical Africa. Aside from the possible occurrence in the Philippines, the disjunct distribution of *Smicromorpha*, in Papua-Australian region (including Halmahera), southern India, and central Africa, implies its Gondwana origin and low dispersal ability rather than dispersal events simply in association with the hosts.

Acknowledgements

We thank John LaSalle of ANIC, CSIRO, Canberra for his confirming of the *Smicromorpha* species identification. We also thanks to Dr. Ian Naumann of Australian Department of Agriculture, Fisheries and Forestry and Dr. Alex Gumovsky of Schmalhausen Institute of Zoology, Ukraine for his critical reading of the manuscript. The present study partly supported by the RONPAKU (Dissertation PhD) program from the Japan Society for the Promotion of Science.

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