A New Species of Sympherta FOERSTER from Formosa (Hymenoptera: Ichneumonidae)

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Abstract

Sympherta FOERSTER, 1968, is a relatively large genus confined to the Holarctic region. One new species of Sympherta, viz., S. orientalis is described, representing the first species of the genus from the Oriental region.

Key words: Hymenoptera, Parasitica, Ichneumonidae, Sympherta.

Introduction

The genus *Sympherta* FOERSTER is belonging to the tribe Pionini in the subfamily Scolobatinae has hitherto been represented by 13 species in the world: eight from the Palearctic region and five from the Nearctic region. *Sympherta* is reported here for the first time from Formosa. So far as their habits are known, the species of *Sympherta* are solitary internal parasites of the larvae of sawflies. No host records is, however, given in the Formosan species. The holotype will be preserved in the collection of the Entomological Institute, Hokkaido University, Sapporo.

Genus Sympherta FOERSTER

The chief distinguishing features of this genus are as follows:—

Body moderately stout. Inner margins of eye parallel or convergent ventrad; outer face of mandible with a rather strong subbasal swelling, at the extreme base with a basal transverse impression; lower edge of mandible absent on about basal 1/3; lower tooth of mandible much longer than upper tooth; clypeal foveae open, very strongly impressed. Upper end of prepectal carina reaching near front edge of mesopleurum. Basal end

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of lateral longitudinal carina of propodeum separated from metanotum by a deep, U-shaped notch. Areolet absent or present. Tarsal claws simple. First tergite slender, its dorsolateral carina complete, and its median dorsal carinae more or less distinct and long; glymma absent; ovipositor much shorter than abdomen, its apical part very slender and without a subapical dorsal notch; ovipositor sheath strongly upcurved, 0.8–1.0 times as long as apical depth of abdomen.

Sympherta orientalis sp. nov. Figs. 1-5

♀. Face wide, about 1.5 times as wide as high at level of lower margin of antennal socket, weakly mat, with moderately strong punctures, the punctures very weak on lateral side; inner margins of eyes parallel sided; clypeus rather small, polished, slightly convex, with sparse punctures, separated from face by a shallow groove, its apical margin rather blunt, and truncate; malar space short, about 1/3 as long as basal width of mandible; mandible (Fig. 3) large, bare on basal and apical portions, with sparse long hairs on median portion; lower tooth of mandible 1.8 times as long as the lower one; temple weakly swollen, sparsely haired, with a virtually bare large area on lower portion (Fig. 1); frons weakly convex medially, and weakly granulose; vertex finely mat with small punctures. Flagellum slender, faintly enlarged apically, with 34 segments; 1st flagellar segment 1.8 times as long as the 2nd one; 2nd segment about 1.2 times as long as the 3rd one. Pronotum indistinctly rugulose medially and finely punctate dorsally; mesoscutum rather densely and weakly punctate; notaulus represented by a broad faint impression; mesopleurum with rather sparse and long hairs, with a bare area in front of specullum; specullum bare and impunctate; metapleurum densely haired. Propodeum (Fig. 2) weakly areolated, rather sparsely haired; areola confluent with basal area, also

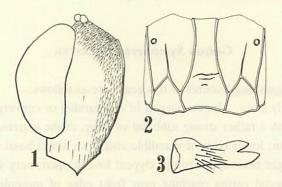


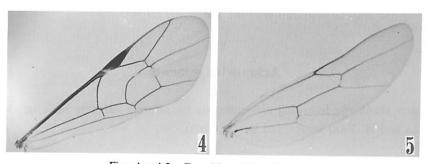
Fig. 1. Hair arrangement of temple in lateral view.

Fig. 2. Areolation of propodeum in dorsal view.

Fig. 3. Mandible.

sometimes incompletely confluent with petiolar area, and virtually bare; costula absent; lateral longitudinal carina weak, lacking on about basal 1/3; petiolar area with a distinct median longitudinal carina; propodeal spiracle small and circular. Legs slender; hind femur slender, 5.2 times as long as wide in lateral view; longer spur of hind tibia 1.3 times as long as the shorter one; basitarsus of hind leg 2.1 times as long as the 2nd; tarsal claws rather small, not pectinate. Venation of fore and hind wings as Figs. 4 and 5; nervulus subvertical, postfurcal by about 1/3 of its own length; portion of cubitus between intercubitus and 2nd recurrent vein 4/9 as long as intercubitus; intercubitus basad of 2nd recurrent vein; nervellus vertical, intercepted at lower 3/8. Abdomen with 1st tergite slender, 2.8 times as long as wide at apex, with sparse long hairs, the hairs becoming shorter apically and with a virtually bare area on posterior portion; median and subdorsal longitudinal carinae more or less distinct; postpetiole 1.6 times as long as wide at apex; 2nd tergite 1.4 times as long as wide at apex and as long as the 3rd one. polished, rather sparsely haired, the hairs sparser apically; 3rd tergite polished, sparsely haired, virtually bare on posterior half; subgenital plate moderate-sized, with short and dense hairs; ovipositor about 1/2 as long as hind tibia, strongly upcurved; ovipositor sheath about as long as apical depth of abdomen.

Black, with dark reddish brown abdomen except for 1st tergite. Face and clypeus slightly tinged with dark brown; frontal orbit with a small yellowish spot opposite antennal socket; mandible yellow to yellowish brown, darker apically, its apical teeth dark ferrugineous; palpi light yellowish brown. Scape and pedicel infuscate, fuscous ventrally; flagellum fuscous ventrally, dark reddish brown dorsally. Posterodorsal corner of pronotum and tegula light yellowish brown. Front and middle legs with coxae black except at apex; 1st trochanters and middle 2nd trochanter dark brown; apices of coxae and 1st trochanters and front 2nd trochanter yellowish brown; femora dark reddish brown, a little darker basally; tibiae, tarsi and tibial spurs yellowish brown. Hind leg with coxa, trochanter, femur and tibia infuscate to black, the extreme apices of coxa, 1st trochanter, and extreme base of femur light yellowish brown; tibial spurs yellowish brown; tarsus yellowish brown to infuscate, darker basally. Abdomen with 1st tergite black; 2nd



Figs. 4 and 5. Fore (4) and hind (5) wings.

tergite dark brown to blackish, paler laterally and apically; 3rd and following tergites dark reddish brown, the 5th one infuscate on about basal 1/2; subgenital plate yellowish brown to dark reddish brown; cercus yellowish brown; ovipositor sheath fuscous. Wings subhyaline; stigma dark brown.

Length: Body 8.3 mm., forewing 6.9 mm.

♦ Agrees with above-mentioned descriptions of the female except for the following aspects:—

Face about 1.3 times as wide as high at level of antennal socket; flagellum with 33 segments; 1st flagellar segment 1.6 times as long as the 2nd; hind femur 5.4–5.5 times as long as wide in lateral view; nervulus interstitial or postfurcal by 2/7 of its own length. Propodeum with basal 1/3 of sublateral, lateral, and sometimes median longitudinal carinae lacking. Abdomen with 1st tergite 3.0–3.2 times as long as wide at apex; postpetiole 1.6 times as long as wide at apex; 2nd tergite as long as wide at apex and 1.1 times as long as the 3rd.

Face, clypeus, malar space, and lower corner of frons yellow; face with a infuscate stripe on median dorsal portion; lower corner of frons yellow; scape and pedicel yellow, infuscate dorsally; flagellum fuscous to infuscate, a little paler basoventrally. Front and middle legs yellowish brown, the extreme base of coxae infuscate. Hind leg similar to the female; yellowish area of coxae more expanded than that in female; trochanter pale yellowish brown. Abdomen with 5th, and sometimes 7th tergites dark brown.

Length: Body 7.5–7.7 mm, forewing 6.5–7.7 mm.

Holotype: ♀, Formosa: Meifeng-Tsuifeng, 2200-2300 m, Nantou Hsien, 25-iv-1981, H. TAKEMOTO leg. Paratypes. Formosa: 1♦, 16-17-iv-1984, Meifeng-Tsuifeng, 2200-2300 m, Nantou Hsien, K. ÔHARA leg.; 1♦, 16-17-iv-1984, Meifeng-Tsuifeng, 2200-2300 m, Nantou Hsien, T. Gotô leg.

Distribution: Formosa.

Host: Unknown.

This species is similar to the Japanese S. nipponica (UCHIDA, 1930), but it is immediately distinguished from the latter by the interstitial or postfurcal nervulus, the hyaline wings, the polished and finely punctate 1st and 2nd tergites, the mesopleurum without rugulae and the colouration of the abdominal tergite.

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