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A NEW ORIENTAL SPECIES OF THE GENUS SEPSIS FROM TAIWAN AND INDONESIA (DIPTERA: SEPSIDAE)

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Abstract. A new species of the genus Sepsis, S. zuskai, from Taiwan and Indonesia, is described and illustrated.

The genus *Sepsis* Fallén contains an estimated 70 species, exclusive of the Neotropical Region (Hennig 1949; Zuska 1970, 1977, 1980). The Oriental species of *Sepsis* have been treated by many authors. The most important revisionary works are those of Duda (1926), Hennig (1941, 1949) and Steyskal (1949). Recently, Zuska (1977) catalogued the Oriental *Sepsis* and reported 11 species. However, no new *Sepsis* has been reported from the Oriental Region for more than 30 years, i.e., since Hennig (1949).

In my latest survey on dipterous flies in Taiwan, I obtained examples of a new species of *Sepsis* from cattle droppings in pastures in the southern part of Taiwan. Furthermore, as a result of examining the sepsid collections made during a survey of dipterous insects in the Pacific area by the Tokyo Medical and Dental University Overseas Scientific Research Project (1973), a single specimen of the same species from Indonesia was discovered. The purpose of this paper is to describe and illustrate this new species, which differs from all other described species.

Sepsis zuskai Iwasa, new species

Fig. 1-5

3. Head: globular; eyes reddish brown; anterior ½ of frons light brown and posterior ½ dark brown to black, thinly pruinose; face brownish yellow, thinly pruinose; facial ridges brown; facial orbits brownish yellow; genae and occiput blackish brown to black, thinly pruinose; antennae yellowish brown, 3rd segment about 1.5× as long as wide; arista black and bare; vibrissal angle with 3 moderately developed peristomal setae; 6–8 genal setae present; frons with 1 orbital; vertex with 1 inner vertical, 1 outer vertical and 1 postvertical. Thorax: mesonotum black, thinly pruinose, with small setae arranged in dorsocentral and acrostichal rows; humeral callus thinly pruinose; scutellum broad and short, pruinose; postscutellum and metanotum partly shining; propleuron thinly pruinose; anteroventral part of mesopleuron largely shining, posterodorsal part marginally thinly pruinose (Fig. 2); sternopleuron wholly densely pruinose (Fig. 2); pteropleuron, metapleuron and hypopleuron pruinose; with following paired bristles: 1 humeral, 2 dorsocentral, 2 notopleural (anterior one as long as posterior one), 1 supra-alar, 1 postalar (very small), 1 mesopleural, 1 apical scutellar (about 3× as long as scutellum). Wings (Fig. 3): hyaline, slightly infuscated basally; veins brown; a dark spot at the end of vein R₂₊₈ absent; wing tip whitish; alula without distinct posterodistal lobe and with

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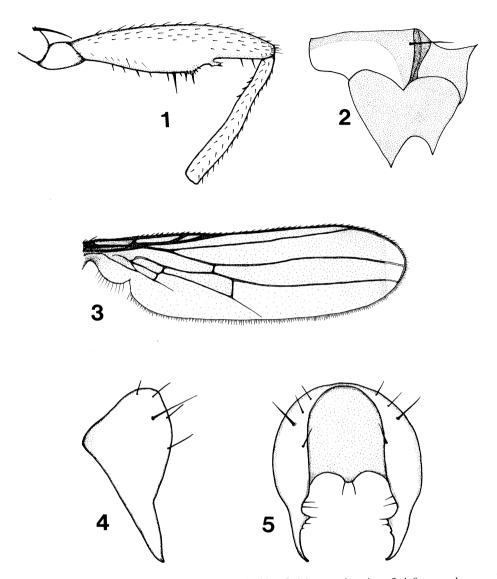


Fig. 1–5. Sepsis zuskai: 1, left fore femur and tibia of δ in anterior view; 2, left mesopleuron, sternopleuron and pteropleuron (stippled = pruinose); 3, right wing; 4, δ , epandrium in left lateral view; 5, δ , epandrium and cerci in posterior view.

microtrichia marginally; halters white, darkened basally; distal part of R_{4+5} and M_{1+2} veins almost parallel. *Legs:* fore coxa yellow, middle and hind coxae yellow to dark brown; all trochanters yellow; fore femur yellow and ventrally with a small process at distal $\frac{1}{3}$, preceded by 3 ventral spines (Fig. 1); fore tibia and basal part of all tarsi brownish yellow; distal part of all tarsi brown to black; middle femur mostly blackish brown, yellow at base, with an anteroventral seta at middle; middle tibia yellow to blackish brown, with an anteroventral seta at distal $\frac{1}{3}$ and 2 posterior setae at distal $\frac{1}{5}$ and $\frac{2}{5}$; middle tarsi brownish yellow, darkened distally; hind

femur yellow to blackish brown; hind tibia blackish brown, with anteroventral and anterodorsal setae at distal ½; hind tarsi brown, darkened distally. *Abdomen:* tergites wholly black and shining, sparsely setulose; 4th and 5th tergites each with a pair of macrochaetae; epandrium (Fig. 4, 5) without distinct setae on lateral surfaces, several setae present on posterior surfaces; epandrial processes symmetrical, slender and pointed apically.

 \circ . Fore femur without processes or spines; anteroventral seta of middle femur sometimes indistinct; middle tibia with an anteroventral seta at distal $\frac{1}{3}$, and a posterior seta at distal $\frac{1}{3}$; hind tibia with an anteroventral seta at distal $\frac{1}{3}$; abdominal tergites sparsely setulose, but without macrochaetae; other characters as in \circ .

Body length: δ \circ , 2.0–2.6 mm.

Distribution. Taiwan and Indonesia (Java).

Holotype &, TAIWAN: Ping Tung, Kenting, 22.III.1981 (M. Iwasa). Paratypes: 27 & 3.17 \$, same data as holotype; 1 & 3.1999, INDONESIA: Java; Cirebon, Mt Jiemere, 19.XI.1973 (S. Shinonaga). Holotype and several paratypes are preserved in the National Science Museum (Nat. Hist.), Tokyo. Other paratypes are in the British Museum (Nat. Hist.), London and the Bishop Museum, Honolulu.

Remarks. This species is related to *Sepsis albopunctata* Lamb, but distinctly differs from it by not having a dark spot at the end of vein R_{2+3} , and by having a wholly pruinose sternopleuron.

Bionomics. The adult flies were collected on cattle droppings in pastures. The way in which the adult fly waves its wings resembles that of *Sepsis albopunctata* Lamb. The immature stages are unknown.

This new species is named in honor of Dr Jan Zuska of the Department of Entomology, Institute of Food Industry, Czechoslovakia.

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