## A New Species of the Genus *Soronia* ERICHSON, (Nitidulidae: Coleoptera) from Taiwan

Sadatomo HISAMATSU

Entomological Laboratory, Faculty of Agriculture, Ehime University 5–7, Tarumi 3–chôme, Matsuyama, 790–8566 Japan E-mail: insect@agr.ehime-u.ac.jp

and

Sadanari HISAMATSU<sup>†</sup>

9-12, Hatadera 1-chôme, Matsuyama, 790-0913 Japan

**Abstract** *Soronia shibatai* sp. nov. is described and illustrated as a second representative of the genus from Taiwan. This new species is similar to *S. grisea* (LINNAEUS), but differs from the latter by the conformation of male protibia and widely explanate lateral margin of pronotum.

The genus *Soronia* ERICHSON, 1843 belonging to the subfamily Nitidulinae is widely distributed in the Holarctic, Afrotropical, Oriental, Australian, and Neotropical regions. *Soronia* was established on the basis of *Nitidula punctatissima* ILLIGER, and many species were added thereafter from above regions.

Recently, revisional studies on this genus were published one after another by KIREJTSHUK, and he erected some new genera based on the species of *Soronia: viz., Omosiphila* KIREJTSHUK, 1990 (type species: *Soronia peltoidea* KIREJTSHUK, 1990); *Annachramus* KIREJTSHUK, 1995 (type species: *S. distincta* GROUVELLE, 1899), *Macleayania* KIREJTSHUK, 2004 (type species: *S. amphotiformis* REITTER, 1880);

*Hisparonia* KIREJTSHUK, 2004 (type species: *S. hystrix* SHARP, 1876), with descriptions of several new species of *Soronia*. So far as we know, 32 species were described from the world, and only one of them, *S. merkli* KIREJTSHUK, 2005, is the Taiwanese representative. We found a new species of the genus *Soronia* in the coleopterous collections of Ehime University, and the first author was able to collect additional specimens of the new species through some collecting trips to Taiwan. We describe this new species in the present paper under the name of *Soronia shibatai* as a second representative from Taiwan.

Members of *Soronia* are known as a species gathering tree sap, and also can be collected using baited traps of decayed fruits or light trap. The first author also collected this new species by light trap, and baited trap of pineapple set on trees.

Before going further, we wish to express our sincere gratitude to Dr. Nobuo OHBAYASHI and Dr. Masahiro SAKAI of Ehime University, for their constant guidance and critically reading the manuscript. We would also like to acknowledge the donation of materials used for the present study of the late Mr. T. SHIBATA. Our hearty thanks are also due to the late Dr. M. SATÔ, Mrs. S. OIWA, Dr. Chi-feng LEE, Dr. Chun-Lin LI, Dr. Hui-Yung LEE, Dr. Ming-Luen JENG, Dr. Chih-Chien LU, Mr. Li-Wei WU, and Mr. Chen-Tsung CHIU for their kind help through the first author's collecting trip in Taiwan.

## Soronia shibatai S-T. HISAMATSU et S. HISAMATSU, sp. nov. (Figs. 1–6)

Length 5.4–6.5 mm (6 mm in the holotype), height 1.1–1.2 mm.

Male. Body (Fig. 1) oval, moderately convex dorsally, subflattened ventrally, dully shiny; color pattern similar to that of *S. grisea* (LINNAEUS); general color reddish brown; head, legs and ventral side dark reddish brown; antennal club brown except for diluted 11th; spots on head, pronotum and elytra infuscate; explanate sides of pronotum with indistinct blackish spots; elytral explanate sides also with blackish spots on apical half, which are connected to epipleural spots; base to basal two-thirds of elytra lightened in color.

Head densely punctured; each puncture larger than an eye-facet; interspace between punctures less than their diameter, smooth, covered with dense and recumbent yellowish hairs mingling with several arcuate scaly hairs. Clypeus slightly emarginate at middle. Eyes moderate in size and prominence, with short interfacetal setae. Antennal grooves narrowing toward base. Antennae (Fig. 6) about as long as the width of head; 1st segment strongly swollen, and broadest at the middle, 3rd longer than 2nd, and slightly shorter than following two combined, 6th longer than 7th, 7th longer than 8th, 9th about as wide as 10th, 10th shorter than 9th, 11th narrower than 10th, with the tip subappendiculate.

Pronotum transverse, about twice as wide as long, widest before the obliquely truncated posterior angles, sometimes wider than elytral width at the widest part; sides slightly sinuate, extensively and widely explanate; anterior margin deeply emarginate; posterior margin broadly sinuate at sides, and narrowly emarginate at middle, fore angles strongly

306



Fig. 1. Habitus of Soronia shibatai sp. nov. (holotype, male).

projected anteriad, with apices rounded; punctures on disc smaller than those of head, separated by less than their diameter; interspace between punctures smooth, covered with dense and recumbent yellowish hairs, mingling with several arcuate scaly hairs; disc with four latitudinal vague foveae and a longitudinal vague, oblong impression at middle.

Elytra conjointly 1.17 times as long as broad on an average, 2.25–2.50 times as long as pronotum; sides subparallel, but slightly constricted behind humeri; punctures on disc shallower and sparser than those of head, separated by a distance equal to or less than their own diameter; interspace between punctures smooth; disc with longitudinal rows of arcuate scaly hairs, interstices between these hairs covered with dense, recumbent, yellowish hairs; explanation of sides wider than antennal club, but narrower than that of pronotum.

Prosternum with punctures distinctly smaller and sparser than those of head, separated by own diameter; interspace between punctures slightly reticulate; prosternal process strongly dilated apicad between coxae. Metasternum densely covered with yellowish hairs; punctures on disc slightly larger than those of prosternum, separated by a distance equal to or less than their diameter, interspace between punctures reticulate. Abdominal sternites also densely covered with yellowish hairs; with punctures about as large as those of



Figs. 2–6. *Soronia shibatai* sp. nov. – 2, Ovipositor; 3, median lobe (ventral view); 4, tegmen (ventral view); 5, right protibia of male; 6, right antenna. Scale: a = 1 mm for 5–6; b = 0.5 mm for 2–4.

metasternum, and separated by less than their diameter; interspace between punctures reticulate.

Legs slender, rather arcuate inward; anterior tibiae (Fig. 5) angularly dilated apically; pro-, meso- and metatrochanters with a long hair, respectively.

Male genitalia with tegmen (Fig. 4) oblong; median lobe (Fig. 3) pointed at apex, slightly sinuate at sides.

Female. Pronotum narrower than elytra; tibiae simple. Ovipositor (Fig. 2) rather slender, with distinct styli.

*Type series*. Holotype: ♂, Musha (= Wushe), Formosa, 7. VIII. 1969, Т. КОВАҮАSHI leg. Allotype: ♀, same data as the holotype. Paratypes: 2♀♀, Lidongshan (李棟山), alt. ca. 1,500 m–1,913 m, Jianshih Township (尖石郷), Hsinchu Co., 26. IV. 2007, S-T. HISA-MATSU leg.; 1♂, Mt. Anmashan (鞍馬山), alt. ca. 2,275 m, Taichung Co., 5. VII. 2005, S-T. HISAMATSU leg.; 1♂, Shitou (渓頭), Nantou Co., 12. V. 2005, C.-F. LEE leg.; 2♂♂, 1♀, Sungkang, (松崗), Renai Township (仁愛郷), Nantou Co., 28. VI. 2006, S-T. HISAMATSU leg. (pineapple trap); 1♂, same locality, 30. VI. 2006, S-T. HISAMATSU leg. (pineapple trap); 1♀, same locality, 2. V. 2007, S-T. HISAMATSU leg. (pineapple trap); 1♂, 2♀♀, same locality, 3. V. 2007, S-T. HISAMATSU leg. (pineapple trap); 1♂, 2♀♀, same locality, 3. V. 2007, S-T. HISAMATSU leg. (pineapple trap); 1♂, 2♀♀,

*Type depository*. The holotype, allotype and  $5\sigma^2 \sigma^3$ ,  $4\varphi^2 \varphi$  paratypes are deposited in the Entomological Laboratory, Faculty of Agriculture, Ehime University, Matsuyama, Japan,  $1\sigma^2$  and  $1\varphi^2$  paratypes in the National Museum of Natural Science, Taichung, Taiwan, and  $1\sigma^3$  and  $1\varphi^2$  paratypes in the Taiwan Agricultural Research Institute, Wufeng, Taichung, Taiwan.

Distribution. Taiwan.

*Etymology*. The specific name is dedicated to the late Mr. Taichi SHIBATA who submitted us many Taiwanese Nitidulidae including the holotype and allotype of the new species in his collection.

*Remarks*. A few sexual dimorphism appears in not only the structure of anterior tibiae but also the pronotal shape; the male pronotum is sometimes enlarged, and broader than maximal width of elytra.

The present new species is similar to *S. grisea* (LINNAEUS) known from Europe, Russia, Japan, Mongolia, Korea and North America, in the moderate body size, having similar color pattern and similar shape of male genitalia, but differs from the latter in the following features: pronotum with widely explanate lateral margin, which is sometimes wider than elytral one at the widest part; anterior tibiae angularly dilated apicad.

## 要 約

久松 定智・久松 定成:台湾産キマダラケシキスイ属(甲虫目,ケシキスイ科)の1新 種. — 台湾より Soronia (キマダラケシキスイ)属の1新種を,S. shibatai の名で記載 した.本種は S. grisea (LINNAEUS) に似ているが、1)前胸背板側縁の扁平な部分がきわめ て幅広く、2) 雄の前脛節内縁が角張る,などの特徴から区別することができる.台湾から は従来,S. merkli KIREJTSHUK 1種のみの記録があったが、本種は2種目の記録となる.なお 種小名は、本新種をはじめ、筆者らに長年にわたり台湾産ケシキスイ科甲虫の標本をご提 供いただいた、故芝田太一氏に献名した.

## References

- KIREJTSHUK, A. G., 1990. New species and notes on taxonomy of nitidulid-beetles (Coleoptera, Nitidulidae) of Indochina and adjacent territories. Part 1. USSR Academy of Sciences, Proceedings of the Zoological Institute, Leningrad, 209: 61–98. (In Russian with English title.)
- 1995. New taxa of the Nitidulidae (Coleoptera) of the Eastern Hemisphere. Part 5. *Russian Academy of Sciences, Proceedings of the Zoological Institute, St. Petersburg,* **258**: 3–50. (In Russian with English title.)
- 2004. Four new genera of the *Soronia* complex (Coleoptera: Nitidulidae) from Australia, New Zealand, Fiji and tropical America with notes on composition of the complex and description of new species from Southern Hemisphere. *Russian Entomological Journal, Moscow*, **12**: 239–256.
  - 2005. On the fauna of Nitidulidae (Insecta, Coleoptera) from Taiwan with some taxonomic notes. Annales Historico-Naturales Musei Nationalis Hungarici, 97: 51–113.