

## A New Species of the Genus *Hesperus* (Coleoptera, Staphylinidae) from Taiwan

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**Abstract** A new staphylinid beetle belonging to the subgenus *Hesperotropis* of the genus *Hesperus* is described and illustrated from Taiwan under the name of *H. (H.) babai*. It is closely related to *H. (H.) perfoliatus* GRIDELLI from Sumatra, but is distinguished by its larger size, different coloration of the body and differently shaped style of male genitalia.

Through the courtesy of Dr. Kintaro BABA, I had an opportunity to examine a number of valuable specimens of staphylinid beetles obtained during his collecting trip to Taiwan in 1986. Among them, I found a very interesting species characterized by having almost straight, sharply edged lateral sides of elytra. It looks like a member of the subgenus *Hesperotropis* of the genus *Hesperus* FAUVEL. The subgenus *Hesperotropis* was described by GRIDELLI (1924) only for his new species, *Hesperus (Hesperotropis) perfoliatus*, from Sumatra. After a careful examination, it has become clear that the specimen does not agree with the known species in the coloration of the body and in the structure of male genital organ. It seems to be a new species, and will be described in the present paper.

Before going further, I wish to express my cordial thanks to Professor Yasuaki WATANABE of Tokyo University of Agriculture, for his continuous guidance and encouragement, and to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his kindness extended to me in various ways. Hearty thanks are also due to Dr. Kintaro BABA for his help in supplying with material, and to Mr. Akinori YOSHITANI for his assistance in preparing the illustration of the whole insect inserted in the present paper.

### *Hesperus (Hesperotropis) babai* sp. nov.

(Figs. 1–4)

Body elongate and nearly parallel-sided. Colour pitchy black to black, moderately shining, with last four antennal segments white, mouth-parts and legs reddish brown, last two abdominal segments reddish yellow; head and pronotum with slight silky reflection, abdomen strongly iridescent.

Length: 12.5–13.5 mm.

*Male.* Head rather large, transverse (greatest width of head/greatest length of head=1.63), suborbicular and moderately wider than pronotum (greatest width of

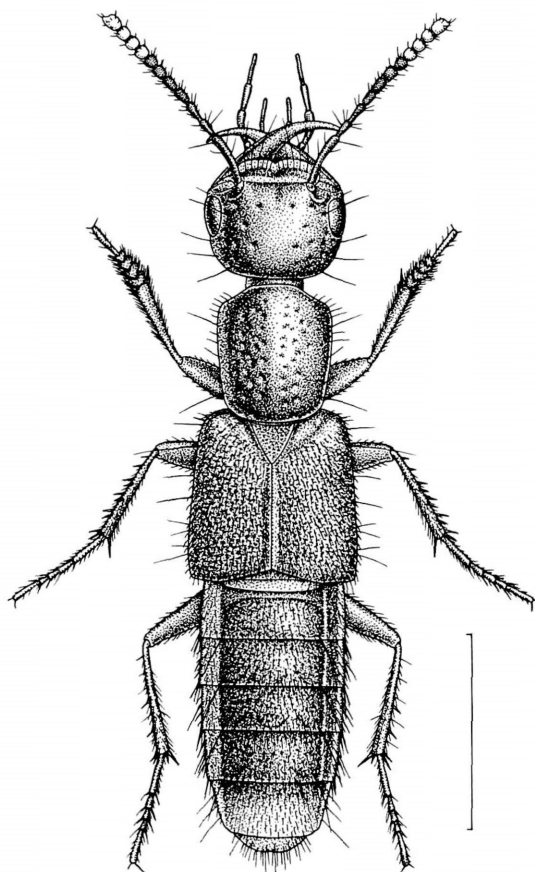
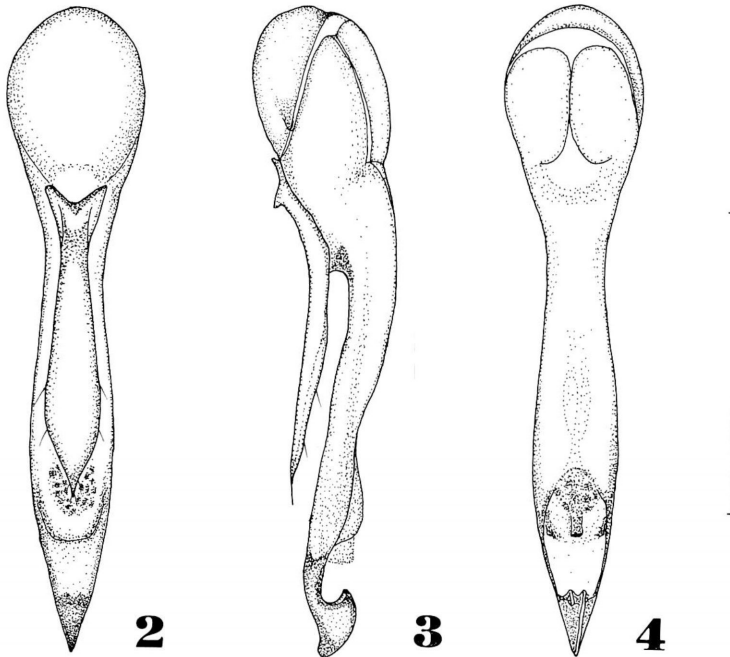


Fig. 1. *Hesperus (Hesperotropis) babai* sp. nov., ♂, from Sungkang in Taiwan. (Scale: 3.0 mm.)

head/greatest width of pronotum=1.27); eyes large but not very protruding from lateral outlines of head, their longitudinal diameter nearly as long as the posterior areas (longitudinal diameter of eye/length of postocular area=1.02), which are roundly contracted at neck; frons slightly impressed in the middle, almost impunctate; a small anterior frontal puncture situated at the posterior margin of each antennal tubercle, and two large additional setiferous punctures between anterior frontal punctures, forming a transverse row of four punctures as a whole; disc impunctate, provided with several setiferous punctures on posterior half of each side; latero-posterior parts and the area before base closely covered with larger and smaller coarse punctures.

Antennae relatively long, hardly reaching the posterior margin of pronotum, and moderately thickened apicad; three proximal segments polished, the remainings opaque; 1st segment long, thickened towards apex and more than 2.5 times as long as 2nd, 3rd elongate, distinctly longer than broad (length/width=2.20) and a little longer than 2nd (3rd/2nd=1.22), 4th to 10th almost equal in length to one another, 4th to 6th a little longer than broad (length/width=1.27), 7th to 10th transverse (width/length=1.42)



Figs. 2-4. Male genitalia of *Hesperus (Hesperotropis) babai* sp. nov.; ventral view (2); lateral view (3); dorsal view (4). (Scale: 0.5 mm.)

and each segments dilated apically, apicalmost longer than broad (length/width=1.43), obviously longer than 10th (11th/10th=1.43), subacuminate towards the tip.

Pronotum convex above, slightly longer than wide (length of pronotum, measured along the midline/greatest width of pronotum=1.09), and much narrower than elytra (greatest width of pronotum/greatest width of elytra=0.69), widest just behind the humeral angles, and slightly narrowed posteriad, with lateral sides almost straight, anterior margin broadly and gently rounded though subtruncated at middle; anterior angles rounded off and not visible from above, posterior angles broadly rounded; surface covered with microsculpture as on head and with rather sparing and coarse setiferous punctures except for a comparatively broad smooth area along the median line throughout its length. Scutellum large, triangular, densely and coarsely punctured and pubescent, surface with very fine transverse microsculpture.

Elytra subquadrate and flat above, about as broad as long (greatest width of elytra/greatest length of elytra=1.00), though strongly wider than long when measured along suture (greatest width of elytra/length of elytra from the apex of scutellum to the posterior margin=1.78), slightly widened behind; lateral sides strongly bent down from behind humeral angles to before hind angles, with each lateral edge forming almost straight sharp carina; surface moderately coarsely and moderately closely punctured, covered with dark brownish pubescence; no microsculpture.

Abdomen elongate and nearly parallel-sided; first three visible tergites each rather deeply and transversely depressed along the basal part; surface of each tergite moderately coarsely punctured and rather closely pubescent, though the punctures on the last three tergites become smaller and denser than on the basal three; 6th visible sternite rather deeply and subtriangularly excised at the middle of posterior margin. Legs relatively long; protarsi widely dilated.

Male genital organ moderately sclerotized and very elongate, with basal part relatively small and somewhat globular. Viewed ventrally, median lobe gently constricted at basal two-fifths, slightly dilated and then narrowed towards subacute apex; in lateral view, gradually tapered towards hatchet-like apical hook whose dorsal lobe is longer than the ventral. Style elongate, much shorter and narrower than median lobe, markedly constricted at basal fifth, then gently expanded laterad, and then suddenly convergent towards apex in apical fifth; ventral surface fringed with eight very fine short setae, four at apex and two on each lateral margin far distant from apex.

*Female.* Similar in facies and coloration to male, though the head is about as wide as pronotum (greatest width of head/greatest width of pronotum=1.04); lateral sides of elytra without sharp edge; last abdominal sternite simple; protarsi slightly dilated.

*Type series.* Holotype: ♂, Sungkang, about 2,200 m alt., Nantou Hsien, 6-IX-1986, K. BABA leg. Allotype: ♀, same data as for the holotype. Paratypes: 5 ♂♂, 3 ♀♀, same data as for the holotype.

The holo- and allotypes are deposited in the collection of the Laboratory of Entomology, Tokyo University of Agriculture, and the paratypes are preserved in the author's private collection.

*Distribution.* Taiwan.

*Notes.* This distinctive new species can be recognized from the known members of *Hesperus* on its coloration and the presence of a sharp edge at each lateral side of the elytra. In general appearance it somewhat resembles *H. (Hesperotropis) perfoliatus* GRIDELLI from Sumatra, but differs from that species in the following points: larger in body size, last two abdominal segments reddish yellow, last four segments of antennae white, and style of male genital organ acutely pointed at apex.

According to Dr. BABA, all the type specimens were captured by beating leaves of broadleaved trees.

The specific name is given after Dr. Kintaro BABA, who kindly offered his interesting material to the author for study.

***Hesperus (Hesperus) taiwanensis* SHIBATA, 1973**

*Hesperus taiwanensis* SHIBATA, 1973, Ent. Rev. Japan, **25**: 21; 1986, Annual Bull. Nichidai Sanko, (24): 123.

*Specimens examined.* Ilan Hsien: 2 ♀♀, Near Chituan, about 1,080 m alt., 23-

VII-1978, Y. SHIBATA leg. Hualien Hsien: 1 ♂, Near Juisui Spa, 3-IV-1982, Y. SHIBATA leg. Nantou Hsien: 22 ♂♂, 9 ♀♀, Koantauchi, about 650 m alt., 15-16-VIII-1970 (holo-, allo- and paratypes); 11 ♂♂, 12 ♀♀, 26-VII-1973, Y. SHIBATA leg.; 10 ♂♂, 6 ♀♀, Nanshanchi, 24-VIII-1973, 2 ♂♂, 3 ♀♀, 30-VII-1977, Y. SHIBATA leg.; 2 ♂♂, 4 ♀♀, Near Lushan Spa, about 1,200 m alt., 27-VII-1977, Y. SHIBATA leg.; 1 ♂, Sungkang, about 2,040 m alt., 30-VII-1983, Y. SHIBATA leg. Chiai Hsien: 1 ♀, Fenchihu, about 1,400 m alt., 10-VIII-1970, 2 ♂♂, 9-VIII-1971 (paratypes), 5 ♂♂, 2 ♀♀, 3-VIII-1973, 2 ♂♂, 1 ♀, 9-VIII-1974, 3 ♀♀, 6-VIII-1976, 1 ♂, 6-VIII-1977, Y. SHIBATA leg.; 3 ♂♂, 2 ♀♀, Tadongshan, about 1,800 m alt., 11-VIII-1981, Y. SHIBATA leg.

*Distribution.* Taiwan.

*Notes.* Known from mountain districts of central to northeastern areas. The species is found in rotten bamboo shoots, fungi and under dead leaves. It can be easily distinguished from the preceding new species by the following key.

#### Key to the Taiwanese Species of *Hesperus*

1. Body smaller (8.5-10.5 mm); last two segments of antennae white; basal three abdominal segments red; lateral sides of elytra simple in both sexes.....  
..... *H. taiwanensis* SHIBATA.
- Body larger (12.5-13.5 mm); last four segments of antennae white; abdomen black except for last two segments reddish yellow; in male, each lateral side of elytra forming a sharp edge..... *H. babai* sp. nov.

#### 要 約

柴田泰利：台湾産 *Hesperus* 属の 1 新種。——馬場金太郎博士が 1986 年に台湾で採集された多数のハネカクシ科標本の研究を筆者に託されたが、そのなかに顕著な特徴をもつ *Hesperus* 属の 1 新種を見出すことができたので、*Hesperus* (*Hesperotropis*) *babai* と命名記載した。

この種は、南投県松崗、標高 2,200 m で、1986 年 9 月 6 日に広葉樹林でのピーティングで得られたもので、雄の個体は上翅側縁に肩部直後から後縁直前まで続くやや鋭い縦隆起をもつきわめて顕著な種である。この属には現在までに 2 亜属約 130 種が記録され、そのうち約 50 種が東南アジアに分布し、台湾からは従来 1 種が知られていた。1924 年に GRIDELLI は、上翅側縁に縦隆起をもつスマトラ産の *H. perfoliatus* GRIDELLI を基準種として *Hesperotropis* 亜属を創設しているが、その後この亜属からの記録はない。したがって、台湾からの *H. babai* はこの亜属のものとしては 2 番目のものといえる。

*H. babai* と *H. perfoliatus* とは、前者がより大型、体は黒色で腹部末端 2 節が赤黄色、触角末端 4 節は白色、雄交尾器側片先端は末端に向かって急激に狭まり、先端が鋭く尖るなどの特徴で識別は容易である。なお、台湾からの既知種 *H. (Hesperus) taiwanensis* SHIBATA とは、縦隆起のあること、体長、体色などにより区別される。

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## Records of Some Staphylinid Beetles from Kitadaitô-jima Island, the Ryukyus

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In the present report, are recorded some staphylinid beetles collected by Mr. Yukihiro IZUMI on July 9th, 1971, on Kitadaitô-jima Is., the Ryukyus. The collection consists of the following eight species, all of which are new to the fauna of Kitadaitô-jima Island.

1. *Carpelimus vagus* SHARP, 1 ♀.
2. *Paederus fuscipes* CURTIS, 1 ♂, 2 ♀♀.
3. *Rugilus ceylanensis* (KRAATZ), 1 ♂.
4. *Lithocharis nigriceps* KRAATZ, 1 ♀.
5. *Philonthus aeneipennis* BOHEMAN, 2 ♂♂, 3 ♀♀.
6. *Philonthus rectangulus* SHARP, 2 ♂♂, 1 ♀.
7. *Philonthus variipennis* KRAATZ, 2 ♂♂, 2 ♀♀.
8. *Aleochara puberula* KLUG, 3 ♂♂, 3 ♀♀.