

THE GENUS ISPORISA FROM CHINA (HEMIPTERA, FULGOROIDEA, TROPIDUCHIDAE) WITH DESCRIPTION OF A NEW SPECIES

WANG Rong-Rong^{1, 2}, LIANG Ai-Ping^{1*}

1. Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, China

2. Graduate School of Chinese Academy of Sciences, Beijing 100049, China

Abstract *Isporisa baibungensis* sp. nov., from Xizang, China, is described and illustrated. It represents the first record of the genus *Isporisa* Walker from China. A diagnosis of the genus and a key to species of *Isporisa* are provided.

Key words *Isporisa*, Tropicuchidae, new record, new species, China.

1 Introduction

The Oriental planthopper genus *Isporisa* was established by Walker (1857) for *I. apicalis* Walker, 1857 from Borneo and Sarawak. Species of *Isporisa* are characterized by the following combination of characters: Head relatively short, broadly produced in front of eyes. Vertex broader than long in middle line, anterior margin convex, posterior margin distinctly obtuse angled concave; disc depressed, lateral margins of depression incurving anteriorly and meeting medially to form a single complete arc; median carina distinctly ridged. Frons longer than broad, with a distinct median carina, anterior margin arched anteriorly, and frontotemporal suture nearly straight. Clypeus with median and lateral carinae. Pronotum tricarinate, longer than vertex in middle line, distinctly shorter than mesonotum in midline, posterior margin obtuse angled excavated. Mesonotum tricarinate. Fore wings relatively narrow and slender, corium without granulation, costal cell without cross veins; M not closely associated with Cu₁ and simple to nodal line; Cu₁ forking about level of junction of claval veins, which uniting basal of middle of clavus; nodal line forming a zigzag transverse line, subapical lines stepwise; with 5-6 subapical and 12-14 apical cells. Hind tibia each with 3 lateral spines. Female genitalia with gonopophyses VIII (first valvulae) sawlike, truncate at apex, with 4-6 teeth on ventral margin, 2 apical teeth blunt, and with 8 teeth on dorsal margin. Gonoplac (third valvular) with teeth at apex and 5-11 teeth on ventral margin.

Based on the length of the antennae, the consistency and venation of the tegmen and the occurrence of a cephalic process, Melichar (1914) proposed a tribal classification of Tropicuchidae and placed *Isporisa* in the tribe Tambiniini Kirkaldy, 1907. Fennah (1982) revised the higher classification of the Tropicuchidae and recognized 15 tribes in this family, *Isporisa* was correctly

moved from the tribe Tambiniini into Isporisini, together with *Sogana*, Eilithyia, and *Isporisella*.

While sorting and identifying Tropicuchidae from material in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS), we found one new species of *Isporisa* collected from Xizang, China. It is the second species of the genus and represents the first record of the genus from China.

In this paper, we describe and illustrate this new species, *Isporisa baibungensis* sp. nov., and provide a key to the known species in the genus.

2 Materials and Methods

The specimen studied in the course of this work is deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS).

Morphological terminology follows that of Liang (2003) and Wang & Liang (2007).

Key to the species of genus *Isporisa*

1. Body smaller (length from apex of vertex to tip of genitalia 6.4 mm); vertex with median carina extending beyond the anterior margin of eyes, outside the lateral margins of depression smooth; mesonotum with two black spots outside lateral carinae (Walker, 1857) *I. apicalis* Walker
- Body larger (length from apex of vertex to tip of genitalia 9.0 mm); vertex with median carina not reaching to the anterior margin of eyes, outside the lateral margins of depression with two shallowly depressions; mesonotum with four black spots near basal margins (Figs. 1-2) *I. baibungensis* sp. nov.

Isporisa baibungensis sp. nov. (Figs 1-11)

Description. ♀, length (from apex of vertex to tip of genitalia) 9.0 mm; length (from apex of vertex to tip of fore wings) 11 mm.

General color ochraceous; four spots on apex of head, a pair of spots outside the lateral margins of depression and a pairs of spots in disc depression on vertex; a pair of spots on disc of pronotum between median and lateral carinae, two pairs of patches outside

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* Corresponding author, E mail liangap@ioz.ac.cn

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Fig 1. Dorsal habitus of *Isonisa baibungensis* sp. nov.

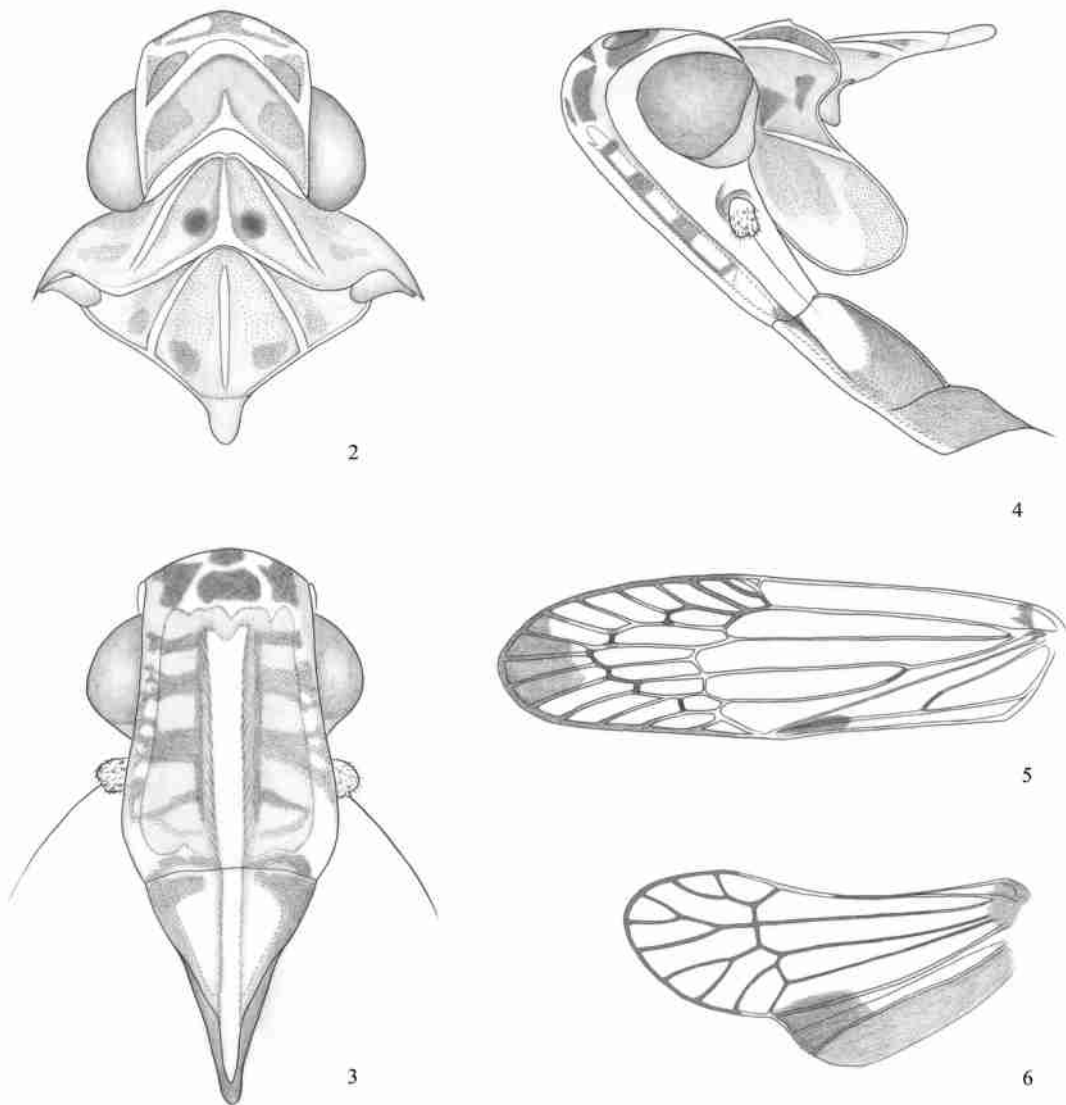
lateral carinae; carinae of vertex, frons, pronotum and mesonotum, and clypeus with median carina all suffused with yellowish brown; antennae with scape, postclypeus with basal area, clypeus with lateral margins, pronotum with anterior disc and ventral portion of lateral lobes, meso- and metapleura, and mesonotum with anterior portion all suffused with fuscous to blackish; frons with 5 dark brown transverse bands on each depression; mesonotum with four spots near basal margins; postfemora with distinct long blackish stripes, tarsi blackish; fore wings brown, with fuscous nebula apically, most of transverse veinlets, apex of clavus, base of Cu_2 and 1A, and small marks at base, suffused in blackish; hind wings tawny yellow, all veins and anal area suffused in blackish.

Head (Fig. 2) projecting before eyes for more than half (about 0.6) the length of an eye; apex broadly convex in dorsal view and in lateral view, forming a smooth surface interposed between the discal areas of the vertex and frons; vertex and frons not separated and their lateral carinae percurrent. Vertex (Fig. 2) subquadrate, slightly shorter than the breadth at anterior margin of eyes (0.7: 1.0), slightly longer than pronotum at midline (1.3: 1.0); lateral margins ridged and subparallel, converged anteriorly; posterior margin obtuse angled concave; disc distinctly depressed, lateral margins of depression incurving anteriorly; outside the lateral margins of depression with two shallowly depressions; median carina ridged, not reaching to the

anterior margin of eyes, and uniting with posterior margin. Frons (Fig. 3) longer in middle than the widest breadth (1.5: 1.0), disc slightly depressed between median and lateral carinae; lateral margins gently concave and diverging to become convex before converging to the clypeus; frontoclypeal suture nearly straight; median carina distinct ridged, broad and flat, indistinctly bifurcate under the level of anterior margin of eyes; lateral carinae approaching frontoclypeal suture. Clypeus (Figs. 3, 4) with distinct median carina, postclypeus with lateral carinae. Rostrum long, reaching between hind coxae, apical segment distinctly longer than broad. Eyes oval. Ocelli indistinct. Antennae (Figs 3-4) with scape short, ring like; pedicel cylindrical, covered with about 10 disc-like sensory plaque organs, and microsetae which extending to base of pedicel.

Pronotum (Fig. 2) wider than long medially (4.3: 1.0), distinctly shorter than mesonotum in midline (0.5: 1.0); median carina broadly ridged, lateral carinae converging anteriorly; disc arched anteriorly, deeply depressed between median and lateral carina and with an impression on each side; posterior margin obtuse angled excavated. Mesonotum (Fig. 2) tricarinate, with a distinct transverse suture separating mesoscutellum; median carina straight, reaching to transverse suture, not uniting with lateral carinae; lateral carinae curving anteriorly forming a finely rounded parabola; pronotum and mesonotum together medially 2.4 times as long as median length of vertex. Fore wings (Fig. 5) subhyaline, elongate and narrow, 3.43 times as long as maximum breadth; corium without granulation, costal cell without cross veins; $Sc+R$ and M forking at node; Cu_1 forking about level of junction of claval veins, which extending to about middle of clavus; nodal line forming a zigzag transverse line, subapical lines stepwise; with 5-6 subapical and 12-14 apical cells. Hind wings (Fig. 6) hyaline, posterior margin strongly sinuate, with 3 transverse veins before apical area. Legs elongate; hind tibiae (Fig. 7) each with 3 distinct lateral spines; spinal formula of hind leg 6-6-2.

Female genitalia with anal tube (Figs. 8-9) relatively short, apical margin truncate in dorsal view, anal styles relatively short and small. Gonopophyses VIII (first valvulae) (Fig. 8) sawlike, truncate at apex, strongly sclerotized with 8 blunt teeth on dorsal margin, ventral margin denticulate with several minute teeth, 2 apical teeth blunt, laterally at basad of middle of first valvulae with two sinuate rows of many minute teeth, and each with one relatively large teeth distad of teeth row. Gonopophyses IX (second valvular) (Fig. 10) triangular, fused together on inner-lateral margin and strongly reduced but well sclerotized, apical ends not meeting together, acute at apex, gonospiculum (Fig. 10) slightly shorter than median length of triangular part 0.8:



Figs 2-6. *Isorisa baibungensis* sp. nov. 2. Head, pronotum and mesonotum, dorsal view. 3. Head, ventral view. 4. Head, pronotum and mesonotum, lateral view. 5. Left fore wing. 6. Left hind wing.

1, flattened laterally, expanded and blunt at apex. Gonoplac (third valvular) (Figs. 8, 9) with 11-12 teeth extending along ventral margin from apex.

Holotype ♀, China, Xizang, Mêdog Xian (29.2°N, 95.3°E), Baibung, 870 m, 7 Nov. 1979, collected by JIN Yir Tao and WU Jiar Yi (IZCAS).

Etymology. This new species is named after its type locality, Baibung, Xizang, China.

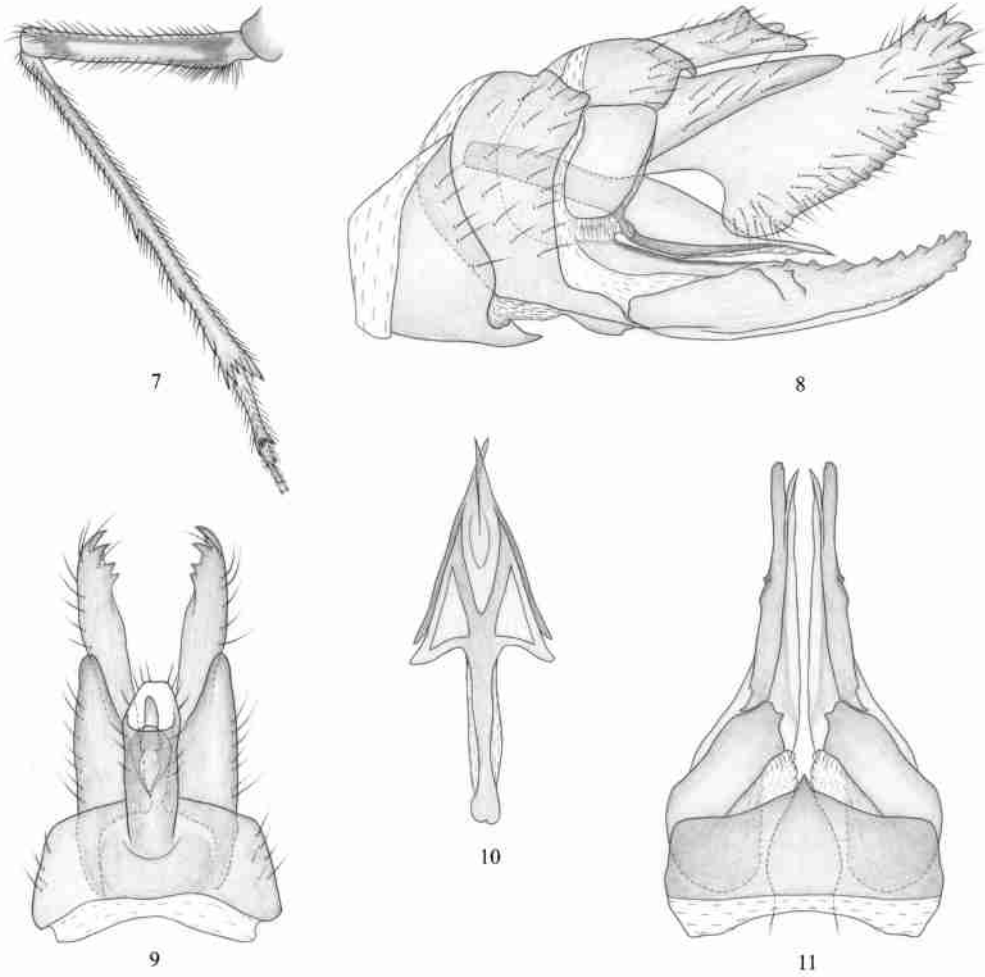
Distribution. China (Xizang).

Remarks. This species is similar to *I. apialis* Walker, 1857, from Borneo and Sarawak, but can be distinguished from the latter by the body larger (length from apex of vertex to tip of genitalia 9.0 mm), vertex with median carina not reaching to the anterior margin of eyes, outside the lateral margins of depression with two shallowly depressions and by the mesonotum with four

black spots near basal margins (Figs. 1-2).

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Figs 7-11. *Isporisa baibungensis* sp. nov. 7. Hind leg, ventral view. 8. Female genitalia, lateral view. 9. Female genitalia, dorsal view. 10. Gonopophyses IX, ventral view. 11. Female genitalia, ventral view.

中国新纪录属漪扁蜡蝉属及一新种记述 (半翅目, 蜡蝉总科, 扁蜡蝉科)

王荣荣^{1,2} 梁爱萍¹

1. 中国科学院动物研究所 北京 100101

2. 中国科学院研究生院 北京 100039

摘要 记述中国扁蜡蝉科 1 新纪录属和 1 新种: 漪扁蜡蝉属 *Isporisa* Walker, 1857, 背崩漪扁蜡蝉 *Isporisa baibungensis* sp. nov.。模式标本保存于中国科学院动物研究所, 北京。

背崩漪扁蜡蝉, 新种 *Isporisa baibungensis* sp. nov. (图 1~11)

正模 ♀, 西藏墨脱背崩, 870 m, 1979 11-07, 金银桃、

关键词 半翅目, 扁蜡蝉科, 漪扁蜡蝉属, 新种, 中国。

中图分类号 Q969.35

吴建毅采 (IZCAS)。

新种与 *I. apicalis* Walker, 1857 相似, 两者主要区别: 前者体长 9.0 mm, 后者体长 6.4 mm; 前者顶中脊未伸达到眼前缘, 头顶凹陷外侧缘具 2 浅凹坑, 后者顶中脊超过眼前缘, 头顶凹陷外侧缘无凹坑; 前者中胸背板后缘具 4 黑斑, 后者中胸背板后缘具 2 黑斑。