

Description of a new species of the *Ypthima sakra* MOORE, [1858]-group from E. Guizhou, S.W. China

(Lepidoptera, Nymphalidae, Satyrinae)

by

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Abstract: In this paper, a new species of the genus *Ypthima* HÜBNER, 1818 is described from E. Guizhou, S.W. China, and it is *Ypthima microconjuncta* spec. nov. which belongs to the *Sakra* MOORE, [1858]-group of the subgenus *Thymipa* MOORE, 1893.

The new species belongs to the *Ypthima sakra* MOORE, [1858]-group sensu SHIRÔZU & SHIMA, 1979 (ELIOT, 1967; SHIRÔZU & SHIMA, 1979; SHIMA, 1988; UÊMURA, 2020, 2023; LANG, 2022). It flies together with *Y. conjuncta* LEECH, 1891 of the same species group, and it is similar to the latter at first glance in appearance but only somewhat smaller. According to the key provided by ELIOT (1967), the position of the new species in the group is close to *Y. atra* CANTLIE & NORMAN, 1959 from S. China including Hainan Island to N. India and *Y. taiwana* LAMAS, 2010 (= *formosana* FRUHSTORFER, 1908, junior homonym) from Taiwan Island, S.E. China. Meanwhile, another Taiwanese insular species, viz. *Y. angustipennis* TAKÁHASHI, 2000, is also a closely related species.

Materials in this study are kept in Chongqing Museum of Natural History, Beibei, Chongqing, CHINA (CMNH) and SONG-YUN LANG's private collection, Beibei, Chongqing, CHINA (LSY).

Ypthima microconjuncta spec. nov. (figs. 1, 4a, 5)

Holotype ♂: CHINA, Guizhou, Shibing, Yuntai-shan, 800 m, 1.VI.2024, leg. SONG-YUN LANG (CMNH).

Paratypes (3 ♂♂): 2 ♂♂, CHINA, Guizhou, Shibing, Yuntai-shan, 800 m, 1.-2.VI.2024, legs. JIANG HOU & SONG-YUN LANG (LSY); 1 ♂, ditto, 9.VI.2023, leg. JIANG HOU (LSY).

Description: ♂ Forewing length 23-24 mm. Upperside: ground colour blackish grey, discal and submarginal fasciae blackish; forewing: subapical ocellus nearly round, its yellowish ring somewhat blur; sexual brand invisible to naked eye; hindwing: anal ocelli present in spaces 1b, 2 and 3, but always tiny in spaces 1b and 3. Underside: ground colour whitish grey, densely covered by deep greyish striae; subbasal, discal and submarginal fasciae on both wings deep brownish; forewing: subapical ocellus well developed, oval; submarginal fascia thin; discal fascia strongly thickened towards the dorsum; subbasal fascia thin; hindwing: postdiscal ocelli composed of a series of normal sized eyespots, including two subapical ocelli in spaces 5 and 6 and three anal ocelli in spaces 1b, 2 and 3; subapical ocelli in spaces 5 and 6 touched together with their yellowish rings connected; submarginal fascia thin and often ill-defined; discal fascia somewhat thick, medially protruding towards the termen; subbasal fascia somewhat obscure.

♂ androconia (figs.: 4a): Lamina water-drop shaped, very short and stout; distal stalk much longer than lamina.

♂ genitalia (figs.: 5): Tegumen flat. Uncus slender, shorter than tegumen, nearly straight. Gnathos absent. Saccus stout. Juxta narrow and slender, chevron-shaped. Valva elongated on its ventrodistal portion in lateral view, present as a finger like, round head apical process; dorsal lobe triangular, its top pointed. Aedeagus robust, strongly curved dorsally, sclerotized ventrally, with narrow perivesical area.

♀: Unknown.

Diagnosis: A) The new species flies together with *Ypthima conjuncta* LEECH in nature, and it can be distinguished from the latter by the combination of the following characters: 1) it is smaller than *Y. conjuncta* LEECH; 2) on the forewing upperside, the ♂ brand is invisible to naked eye, whereas it is well present in *Y. conjuncta* LEECH; 3) on the hindwing underside, the subapical ocelli in spaces 5 and 6 are often smaller than the corresponding ocelli in *Y. conjuncta* LEECH; 4) the lamina of the androconium (fig. 4a) is stout, whereas it is obviously long in *Y. conjuncta* LEECH (fig. 4c); 5) the upper lobe of the ♂ valva (Fig. 5) is triangular with an acute top in lateral view, whereas it is broad and rounded in *Y. conjuncta* LEECH (Fig. 7).

B) The new species can be distinguished from its mainland relative *Ypthima atra* CANTLIE & NORMAN by the combination of the following characters: 1) it is smaller than *Y. atra* CANTLIE & NORMAN; 2) on the hindwing underside, the subapical ocelli in spaces 5 and 6 are smaller than the corresponding ocelli in *Y. atra* CANTLIE & NORMAN; 3) the lamina of the androconium (Fig. 4a) is very stout, whereas it is somewhat narrower and slightly elongated in *Y. atra* CANTLIE & NORMAN (Fig. 4b); 4) the upper lobe of the ♂ valva (fig. 5) is triangular with an acute top in lateral view, whereas it is broad and rounded in *Y. atra* CANTLIE & NORMAN (fig. 6).

C) The new species can be distinguished from its Taiwanese relative *Ypthima angustipennis* TAKÁHASHI by the combination of the following characters: 1) on the forewing upperside, the subapical ocellus is oval with its yellowish ring somewhat blur, whereas it is more round with its yellowish ring clear in *Y. angustipennis* TAKÁHASHI; 2) on the hindwing underside, the subapical ocelli in spaces 5 and 6 are relatively small, whereas they are obviously enlarged in *Y. angustipennis* TAKÁHASHI; 3) on the hindwing underside, striae are thin and dense, whereas they are coarse and sparse especially outside the discal fascia in *Y. angustipennis* TAKÁHASHI; 4) the lamina of the androconium (fig. 4a) is nearly triangular, whereas it is nearly oval in *Y. angustipennis* TAKÁHASHI (TAKÁHASHI, 2000: p. 14, f. 52).

D) The new species can be distinguished from its another Taiwanese relative *Ypthima taiwana* LAMAS by the combination of the following characters: 1) on the hindwing underside, the subapical ocelli in spaces 5 and 6 are somewhat smaller than the corresponding ocelli in *Y. taiwana* LAMAS; 2) on the hindwing underside, the postdiscal area is densely covered by striae, whereas it is sparsely covered by striae in *Y. taiwana* LAMAS; 3) the lamina of the androconium (fig. 4a) is very stout, whereas it is somewhat elongated in *Y. taiwana* LAMAS (SHIRÔZU & SHIMA, 1979: pl. 52: f. 2; TAKÁHASHI, 2000: p. 14, f. 51).

Etymology: The specific name *microconjuncta* composed by the Latin prefix *micro-* and the name *conjuncta*, means “small *conjuncta*”.

Distribution: S.W. China (E. Guizhou).

Notes: A) According to some inherent characters such as the feature of androconia and the shape of σ valva, the closest relative of *Ypthima microconjuncta* **spec. nov.** should be *Y. angustipennis* TAKÁHASHI from Taiwan Island, S.E. China. Meanwhile, another Taiwanese species *Y. taiwana* LAMAS is more close to *Y. atra* CANTLIE & NORMAN, and both UÉMURA (2020) and HSU et al. (2021) treated *Y. taiwana* LAMAS as an insular subspecies of *Y. atra* CANTLIE & NORMAN. However, considering their difference of σ valva (figs. 6, 9), the species status of *Y. taiwana* LAMAS is still maintained here. In fact, σ valva of *Y. microconjuncta* **spec. nov.** can hardly be separated from those of *Y. angustipennis* TAKÁHASHI (fig. 8) and *Y. taiwana* LAMAS (fig. 9) (ELIOT, 1967; SHIRÔZU & SHIMA, 1979; TAKÁHASHI, 2000; HSU et al. 2021).

B) In LANG (2022), the present author misidentified *Ypthima atra* CANTLIE & NORMAN from S. Yunnan (Ximeng) (LANG, 2022: p. 142; pl. XV: f. 18; pl. 27: f. 333) as wsf (wet seasonal form) of *Y. persimilis* ELWES & EDWARDS, 1893, and consequently, he pointed out that different seasonal forms of *Y. persimilis* ELWES & EDWARDS have totally different androconia as his description “[Androconia:] Lamina with a rounded base, moderately long in dsf [dry seasonal form], very short in wsf; distal stalk very long in dsf, very short in wsf (LANG, 2022)”. In fact, the true wsf of *Y. persimilis* ELWES & EDWARDS (had been examined in this study) has a similar androconium with its dsf as the illustrated figure in LANG (2022: pl. 27: f. 332). Therefore, *Y. persimilis* ELWES & EDWARDS does not have an androconium with a very short lamina as in *Y. atra* CANTLIE & NORMAN and *Y. microconjuncta* **spec. nov.** For more details, a study of Chinese *Y. persimilis* ELWES & EDWARDS and *Y. atra* CANTLIE & NORMAN will be provided in the future.

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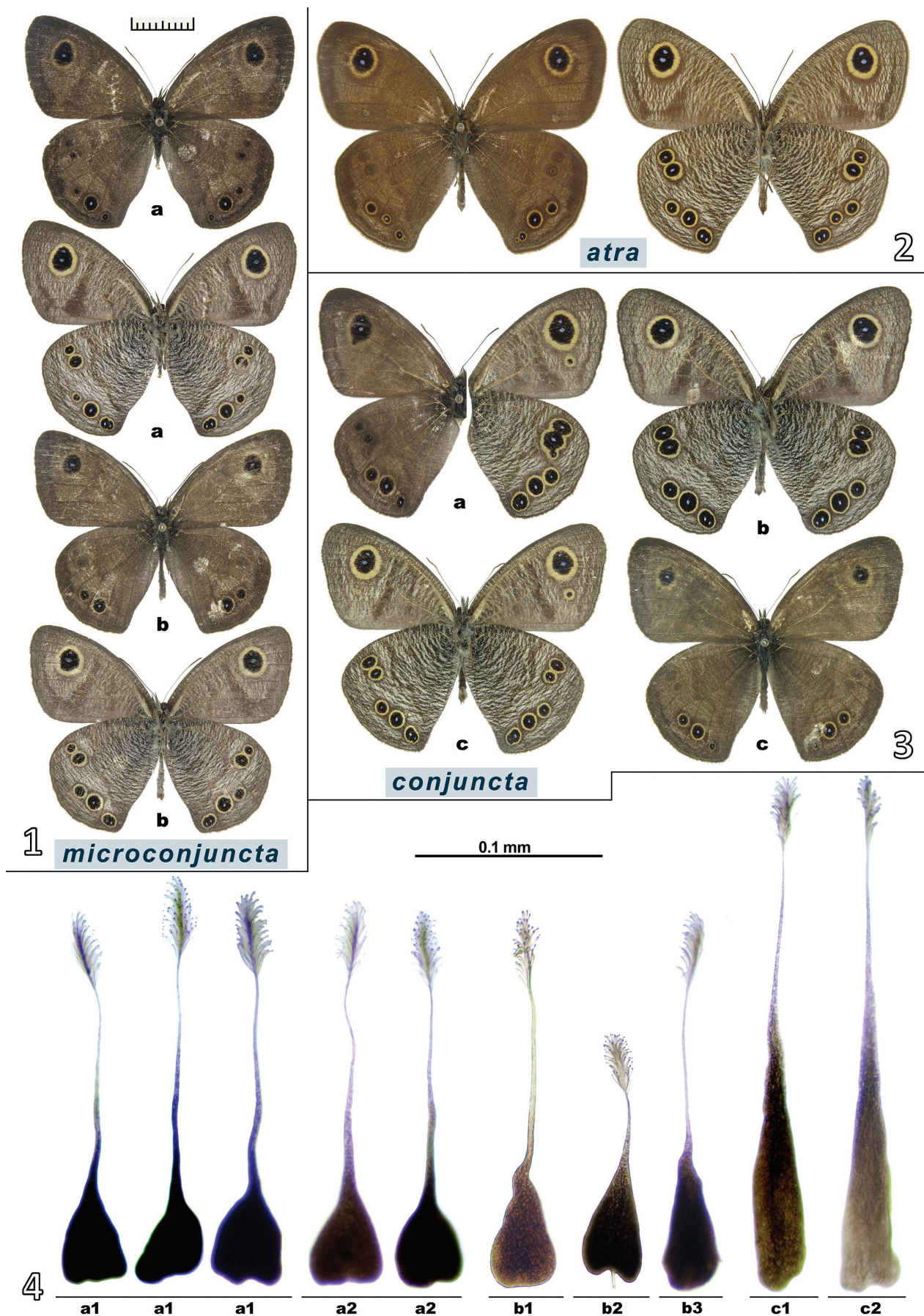


Fig. 1: *Ypthima microconjuncta* spec. nov.: (a) HT, ♂, Guizhou, Shibing, SATY(S)1308, ANDR(A)0383, CMNH; (b) PT, ♂, ditto, S1312, A0384, LSY. **Fig. 2:** *Ypthima atra* CANTLIE & NORMAN, 1959, ♂, Guangxi, Jinxiu, LSY. **Fig. 3:** *Ypthima conjuncta* LEECH, 1891: (a-c) ♂, Guizhou, Shibing, LSY; (a) S1310, A0382; (c) S1311, A0381. **Fig. 4:** Androconia. **a.** *Ypthima microconjuncta* spec. nov.: (a1) HT, Guizhou, Shibing, S1308, A0383, CMNH; (a2) PT, ditto, S1312, A0384, LSY. **b.** *Ypthima atra* CANTLIE & NORMAN, 1959: (b1) Hainan, Lingshui, S0623, A0102, LSY; (b2) Yunnan, Ximeng, S1071, A0263, LSY (LANG, 2022: f. 333); (b3) ditto, A0379, LSY. **c.** *Ypthima conjuncta* LEECH, 1891: (c1) Guizhou, Shibing, S1311, A0381, LSY; (c2) ditto, S1310, A0382, LSY.

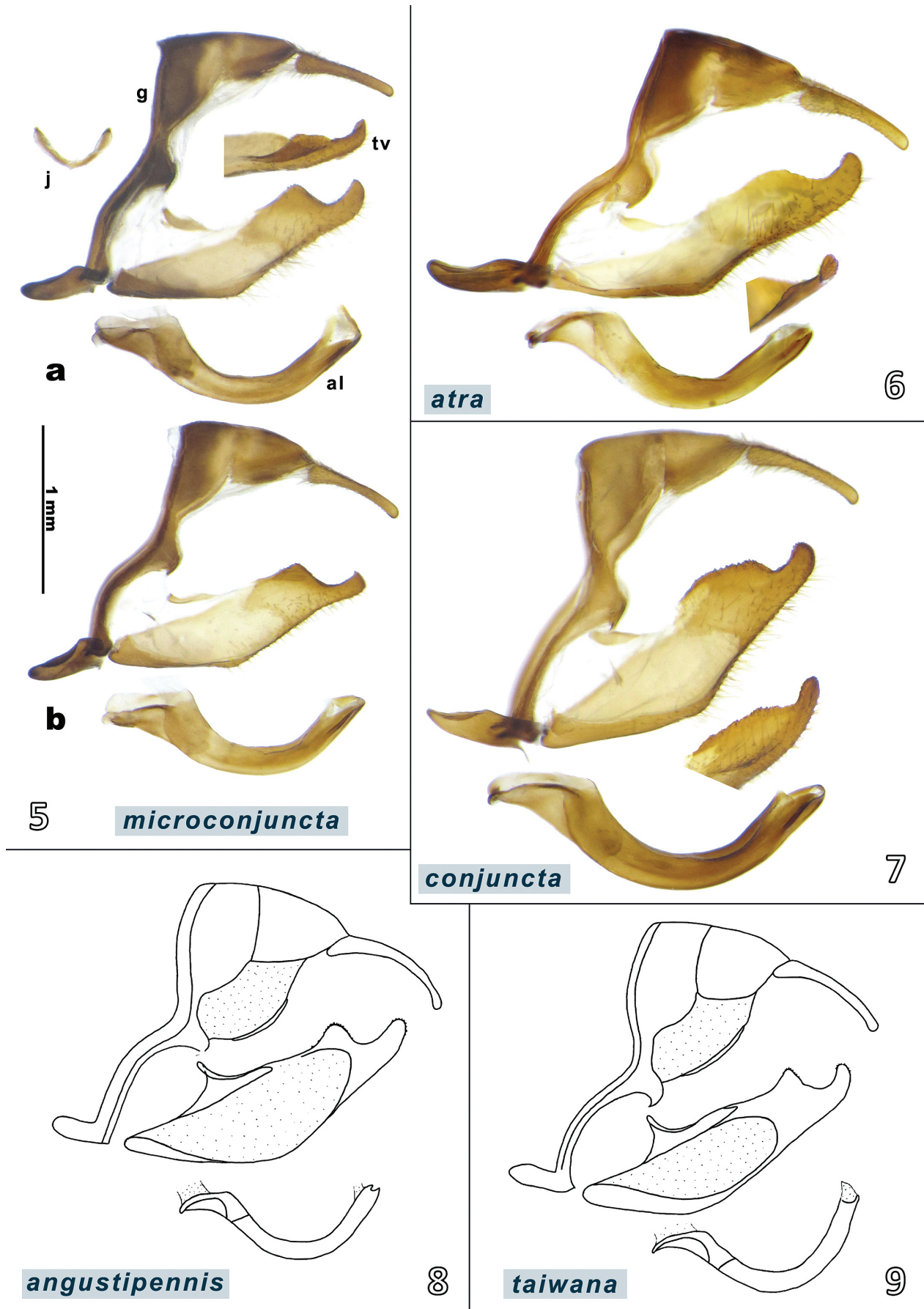


Fig. 5-9: ♂ genitalia. g: ♂ genitalia in lateral view with left valva and aedeagus removed; j: juxta; al: aedeagus in lateral view; tv: tip of valva in dorsal view. **Fig. 5:** *Ypthima microconjuncta* spec. nov.: (a) HT, Guizhou, Shibing, S1308, A0383, CMNH; (b) PT, ditto, S1312, A0384, LSY. **Fig. 6:** *Ypthima atra* CANTLIE & NORMAN, 1959, Hainan, Lingshui, S0623, A0102, LSY. **Fig. 7:** *Ypthima conjuncta* LEECH, 1891, Guizhou, Shibing, S1310, A0382, LSY. **Fig. 8:** *Ypthima angustipennis* TAKAHASHI, 2000, Taiwan, after TAKAHASHI (2000: f. 55). **Fig. 9:** *Ypthima taiwana* LAMAS, 2010, Taiwan, after TAKAHASHI (2000: f. 54).

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