Descriptions of two new species and a new subspecies of the genus *Ypthima* HÜBNER, 1818 from W. Guizhou, S. W. China

(Lepidoptera, Nymphalidae, Satyrinae)

by Song-Yun Lang received 15.IV.2024

Abstract: In this paper, two new species and a new subspecies of the genus *Ypthima* HÜBNER, 1818 are described from Mts. Wumeng region, W. Guizhou, S. W. China. Among them, *Ypthima medusoides* spec. nov. and *Y. conjuncta yelanga* subspec. nov. belong to the *Sakra* MOORE, [1858]-group of the subgenus *Thymipa* MOORE, 1893, and *Ypthima pseudophania* spec. nov. belongs to the *Motschulskyi* BREMER & GREY, 1853-group of the subgenus *Ypthima* HBN.

In S. W. China, the fauna of Mts. Wumeng region, including N.E. Yunnan and W. Guizhou, often has a high similarity with both the C. Sichuan-fauna on its northwest and the N. Yunnan-fauna on its west, but its differences with them can also be found (LANG, 2022b). Until now, in the satyrid fauna of this region, an endemic species, viz. *Melanargia caoi* LANG, 2018, and a subspecies, viz. *Lethe armandina wumenga* LANG, 2022, had already been described (LANG, 2022b), and in this paper, further two new species and a new subspecies of the genus *Ypthima* HÜBNER, 1818 are described below.

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 medusoides LANG spec. nov. (figs. 2, 5, 7b)

Holotype (HT) °, CHINA, Guizhou, Hezhang, Zhushi, 2500 m, 23.VII.2022, leg. Song-Yun Lang (CMNH). Paratypes: 4 °°, CHINA, Guizhou, Hezhang, Zhushi, 2500 m, 23.VII.2022, legs. JIANG HOU & SONG-YUN LANG (LSY); 11 °°, CHINA, Guizhou, Liupanshui, Jiucai-ping, 2700 m, 21.VII.2022, legs. JIANG HOU & SONG-YUN LANG (LSY); 1 °, CHINA, Guizhou, Weining, Baicao-ping, 2600 m, 22.VII.2022, leg. JIANG HOU (LSY).

The new species belongs to the *Ypthima sakra* MOORE, [1858]-group sensu SHIRÔZU & SHIMA, 1979 (SHIMA, 1988; UÉMURA, 2020b), and it is closely related to *Y. methorina* OBERTHÜR, 1891 (figs. 3, 6, 7c) and *Y. medusa* LEECH, 1892 (figs. 1, 4, 7a) in the same group from nearby regions. *Ypthima methorina* OBTH. is exactly known from W. Sichuan (ELIOT, 1967; LANG, 2022a) and *Y. methorina completa* OBTH., 1911, which was described basing upon an aberration, is a nomen nudum (UÉMURA, 2020b). *Ypthima medusa* LEECH, 1892 which was first described as a variation of *Y. methorina* OBTH. has a somewhat wide range comparing with the latter and it is known from W. Sichuan and N. Yunnan (LANG, 2022a; UÉMURA, 2020b).

Diagnosis: A) The new species is more closely related to *Ypthima methorina* OBTH. than others, and it can be distinguished from the latter by the combination of the following characters: 1) on the forewing upperside, the σ brand is very developed and its upper border is more extended than that of *Y. methorina* OBTH. in which the brand is also well present; 2) on the underside, the striation is finer and more dense, whereas it is coarser and more sparse in *Y. methorina* OBTH.; 3) on the hindwing underside, the postdiscal ocelli are often smaller than the corresponding ocelli in *Y. methorina* OBTH.; 4) on the hindwing underside, the postdiscal ocelli in spaces 2 and 3 are well separated from each other, whereas they are connected with their yellowish rings fused in *Y. methorina* OBTH.; 5) the androconia (Fig. 7b) are somewhat longer than those of *Y. methorina* OBTH. (Fig. 7c); 6) the upper lobe of the σ valva (Fig. 5) is more acute apically in lateral view, whereas its top is more smooth and blunt in *Y. methorina* OBTH. (Fig. 6); 7) the apex of the σ valva (Fig. 5) is hooked, whereas it is nearly straight in *Y. methorina* OBTH. (Fig. 6).

B) The new species is superficially similar to *Ypthima medusa* LEECH, and it can be distinguished from the latter by the combination of the following characters: 1) on the forewing upperside, the σ brand is very prominent, whereas it is weak and nearly invisible in *Y. medusa* LEECH; 2) on the hindwing underside, the whitish postdiscal fascia is somewhat wider than that of *Y. medusa* LEECH; 3) on the hindwing underside, a short whitish bar is present alongside the inner edges of the postdiscal ocelli in spaces 5 and 6, whereas it is absent in *Y. medusa* LEECH; 4) the androconia (Fig. 7b) are obviously longer than those of *Y. medusa* LEECH (Fig. 7a); 5) the base of the lamina of the androconium (Fig. 7b) is nearly rounded, whereas it is nearly triangular in *Y. medusa* LEECH (Fig. 7a). **Etymology**: The specific name *medusaides* composed by the name *medusa* and the Latin suffix -oides, means that it is a *medusa*-like species. **Distribution**: S. W. China (W. Guizhou).

Ypthima conjuncta y e l a n g a subspec. nov. (figs. 9c, 10, 11)

Holotype: J, CHINA, Guizhou, Hezhang, Zhushi, 2500 m, 2.VII.2023, leg. JIANG HOU (CMNH).

Ypthima conjuncta LEECH, 1891 is widely distributed from S.E. to S. W. China, with subspec. *monticola* UÉMURA & KOIWAYA, 2000 from N. Yunnan and subspec. *yamanakai* SONAN, 1938 from Taiwan (LANG, 2022a). However, subspec. *yamanakai* SONAN has also been treated as a distinct insular species by some scholars (UÉMURA, 2020b). The new subspecies is an intermediate link between the nominate subspec. *conjuncta* LEECH (figs. 9a-b) and subspec. *monticola* UÉMURA & KOIWAYA (Fig. 9d).

Diagnosis: The new subspecies can be distinguished from the related subspecies, viz. the nominate subspec. *conjuncta* LEECH and subspec. *monticola* UÉMURA & KOIWAYA, by the combination of the following characters: 1) on the underside, the striation is more earth yellow as in subspec. *monticola* UÉMURA & KOIWAYA, whereas it is more deep brownish in the nominate subspecies; 2) on the hindwing underside, the postdiscal ocelli in spaces 5 and 6 are remarkably enlarged, whereas they are normal in size in other subspecies; 3) on the hindwing underside, the postdiscal ocellus in space 5 is obviously larger than the postdiscal ocellus in space 2, whereas it is smaller than or equally sized with the postdiscal ocellus in space 2 in other subspecies.

Etymology: The subspecific name *yelanga* is named after Yelang, which was an ancient emirate in nowadays Guizhou about two thousand years ago.

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

Ypthima p s e u d o p h a n i a spec. nov. (figs. 14, 17, 19b, 20b)

Holotype: &, CHINA, Guizhou, Liupanshui, Jiucai-ping, 2700 m, 21.VII.2022, leg. Song-Yun Lang (CMNH). Paratypes: 68°, CHINA, Guizhou, Liupanshui, Jiucai-ping, 2700 m, 21.VII.2022, legs. JIANG HOU & Song-Yun Lang (LSY); 68°, 19, CHINA, Guizhou, Weining, Baicao-ping, 2600 m, 22.VII.2022, legs. JIANG HOU & Song-Yun Lang (LSY); 18, CHINA, Guizhou, Hezhang, Zhushi, 2500 m, 23.VII.2022, leg. Song-Yun Lang (LSY); 68°, ditto, 2.VII.2023, legs. JIANG HOU & Song-Yun Lang (LSY).

The new species belongs to the *Ypthima motschulskyi* (BREMER & GREY, 1853)-group sensu SHIRÔZU & SHIMA, 1979 (SHIMA, 1988; UÉMURA, 2020a, 2021), and it is closely related to *Y. kitawakii* UÉMURA & KOIWAYA, 2001 (figs. 15, 18, 19c, 20c) and *Y. phania* (OBTH., 1891) (figs. 13, 16, 19a, 20a) in the same group. *Ypthima kitawakii* UÉMURA & KOIWAYA is known from N. Yunnan, S. W. Sichuan and W. Guizhou, and with its subspec. *menghuoi* LANG, 2022 (figs. 15h, 19c6) from south part of C. Sichuan (UÉMURA, 2021; LANG, 2022a). *Ypthima phania* (OBTH.) is known from N. Yunnan, S. W. Sichuan and N.E. Myanmar (UÉMURA, 2020a; LANG, 2022a).

Diagnosis: A) The new species is superficially similar to and sympatric with the nominate *Ypthima kitawakii* UÉMURA & KOIWAYA in W. Guizhou, and it can be distinguished from the latter by the combination of the following characters: 1) on the forewing underside, all fasciae, including the inner and outer discal and the submarginal fasciae, are invisible, whereas the outer discal and the submarginal fasciae are visible in *Y. kitawakii* UÉMURA & KOIWAYA; 2) the σ uncus (Fig. 17) in lateral view is more thickened than that of *Y. kitawakii* UÉMURA & KOIWAYA (Fig. 18); 3) the σ valva (figs. 17, 19b) in lateral view is more elongated and weakly bent downwards near its apex, whereas it is less elongated and strongly bent upwards at its distal one third in *Y. kitawakii* UÉMURA & KOIWAYA (figs. 18, 19c); 4) the lamina of the androconium (Fig. 20b) is nearly twice as wide as that of *kitawakii* UÉMURA & KOIWAYA (figs. 20c).

B) The new species has very similar features of σ valva and androconia with *Ypthima phania* (OBTH.), and it can be distinguished from the latter by the combination of the following characters: 1) on the hindwing underside, the postdiscal ocelli in spaces 2 and 6 are often obviously larger than those in *Y. phania* (OBTH.); 2) on the hindwing underside, the postdiscal ocellus in space 6 is in a normal position as in other taxa in the same species group, whereas it is shifted inwards and obviously far away from the termen in *Y. phania* (OBTH.); 3) on the hindwing underside, the whitish postdiscal fascia around and alongside the ocelli is weakly present, whereas it is totally absent in *Y. phania* (OBTH.); 4) the σ uncus (Fig. 17) is nearly as long as the tegumen, whereas it is obviously shorter than the tegumen in *Y. phania* (OBTH.) (Fig. 16).

Etymology: The specific name *pseudophania* composed by the Latin prefix *pseud*- and the name *phania*, means "false *phania*". **Distribution**: S. W. China (W. Guizhou).

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Fig. 1: *Ypthima medusa* LEECH, 1892: (a) & Yunnan, Gongshan, SATY(S)1277, ANDR(A)353, LSY; (b) &, ditto, S1289, A361, LSY; (c) &, Sichuan, Yanbian, S282, A351, LSY; (d) &, ditto, S1062, A241, LSY. **Fig. 2:** *Ypthima medusoides* **spec. nov.**: (a) HT &, Guizhou, Hezhang, A362, CMNH; (b) Paratype(PT), &, Guizhou, Liupanshui, S1278, LSY; (c) PT &, ditto, S1280, A346, LSY; (d) PT &, ditto, S1279, A345, LSY; (e) PT &, ditto, LSY. **Fig. 3:** *Ypthima methorina* OBERTHÜR, 1891: (a) &, Sichuan, Shimian, S1285, A357, LSY; (b) &, Sichuan, Kangding, S240, A240, LSY; (c) &, "*Y. methorina*", Ta-Tsien-Lou [Kangding], after OBERTHÜR (1891: pl. 2: 15); (d) &, "*Y. methorina-completa*", "Frontière chinoise du Thibet [W. Sichuan]", after OBERTHÜR (1911: pl. 60: 551).





<u>1 mm</u>

а

5

b



Fig. 7: Androconia. a. *Ypthima medusa* LEECH, 1892: (a1) Yunnan, Gongshan, S1289, A361, LSY; (a2) ditto, S1277, A353, LSY; (a3) Sichuan, Yanbian, S283, A352, LSY; (a4) ditto, S282, A351, LSY; (a5) ditto, S1062, A241, LSY. b. *Ypthima medusoides* spec. nov.: (b1) HT, Guizhou, Hezhang, A362, CMNH; (b2) PT, Guizhou, Liupanshui, S1279, A345, LSY; (b3) PT, ditto, S1280, A346, LSY. c. *Ypthima methorina* OBERTHÜR, 1891: (c1) Sichuan, Kangding, S240, A240, LSY; (c2) Sichuan, Shimian, S1285, A357, LSY. Fig. 8: Distribution map of *Ypthima medusa* LEECH, 1892, *Y. medusoides* spec. nov. and *Y. methorina* OBERTHÜR, 1891 (Sources of data: LANG, 2022a; specimens kept in LSY, CMNH).



◆ Ypthima conj. conjuncta ■ Y. conj. monticola ● Y. conj. yelanga ◆ Y. conj. yamanakai

Fig. 9: *Ypthima conjuncta* LEECH, 1891: (a-b) subspec. *conjuncta* LEECH: (a) \mathcal{O} , Chongqing, Nanchuan, LSY; (b) \mathcal{O} , Chongqing, Wuxi, LSY; (c) subspec. *yelanga* subspec. nov., HT \mathcal{O} , Guizhou, Hezhang, S1204, A313, CMNH; (d) subspec. *monticola* UÉMURA & KOIWAYA, 2000, \mathcal{O} , Yunnan, Chengjiang, LSY. Fig. 10-11: *Ypthima conjuncta yelanga* subspec. nov., HT \mathcal{O} , Guizhou, Hezhang, S1204, A313, CMNH; (10) \mathcal{O} genitalia; (11) androconia. Fig. 12: Distribution map of *Ypthima conjuncta* LEECH, 1891 (Sources of data: UÉMURA & KOIWAYA, 2000; LANG, 2022a; specimens kept in LSY, CMNH).



Fig. 13: *Ypthima phania* (OBERTHÜR, 1891): (a) J, Sichuan, Yanbian, S1054, A277, LSY; (b) J, ditto, S279, LSY. Fig. 14: *Ypthima pseudophania* spec. nov.: (a) HT J, Guizhou, Liupanshui, S1281, A347, CMNH; (b) PT J, ditto, S1282, A348, LSY; (c) PT J, Guizhou, Weining, S1287, A359, LSY; (d) PT J, ditto, S1288, A360, LSY; (e-g) PT J, ditto, LSY. Fig. 15: *Ypthima kitawakii* UÉMURA & KOIWAYA, 2001: (a-g) subspec. *kitawakii* UÉMURA & KOIWAYA: (a) J, Guizhou, Hezhang, S1291, A363; (b) J, Guizhou, Weining, S472, LSY; (c) J, ditto, S473, LSY; (d) J, ditto, S476, A356, LSY; (e) J, Sichuan, Yanbian, S280, A272, LSY; (f) J, Guizhou, Bijie, S1283, A350, LSY; (g) J, ditto, S1293, A365, LSY; (h) subspec. *menghuoi* LANG, 2022, HT, J, Sichuan, Shimian, S551, CMNH.



Fig. 16-18: ♂ genitalia. Fig. 16: *Ypthima phania* (OBERTHÜR, 1891), Sichuan, Yanbian, S1054, A277, LSY. Fig. 17: *Ypthima pseudophania* spec. nov.: (a) HT, Guizhou, Liupanshui, S1281, A347, CMNH; (b) PT, ditto, S1282, A348, LSY; (c) PT, Guizhou, Weining, S1287, A359, LSY. Fig. 18: *Ypthima kitawakii* Uémura & Koiwaya, 2001: (a) Guizhou, Weining, S474, A355, LSY; (b) Guizhou, Bijie, S1283, A350, LSY.



♦ Ypthima kitawakii kitawakii ♦ Y. k. menghuoi ● Y. phania ■ Y. pseudophania

Fig. 19: d' valva in lateral view. a. *Ypthima phania* (OBERTHÜR, 1891): (a1) Sichuan(SC), Yanbian, S279, LSY; (a2) ditto, S1054, A277, LSY. b. *Y. pseudophania* spec. nov.: (b1) HT, Guizhou(GZ), Liupanshui, S1281, A347, CMNH; (b2) PT, ditto, S1282, A348, LSY; (b3) PT, GZ, Weining, S1287, A359, LSY; (b4) PT, ditto, S1288, A360, LSY. c. *Y. kitawakii* UÉMURA & KOIWAYA, 2001: (c1-c5) subspec. *kitawakii* UÉM. & KOIW.: (c1) GZ, Weining, S471, LSY; (c2) ditto, S473, LSY; (c3) ditto, S474, A355, LSY; (c4) Yunnan, Kunming, S347, LSY; (c5) after UÉMURA (2021: 2.5a); (c6) subspec. *menghuoi* LANG, 2022, PT d', SC, Shimian, S552, LSY. Fig. 20: Androconia. a. *Y. phania* (OBTH.), SC, Yanbian, S1054, A277, LSY. b. *Y. pseudophania* spec. nov.: (b1) HT, GZ, Liupanshui, S1281, A347, CMNH; (b2) PT, ditto, S1282, A348, LSY; (b3) PT, GZ, Weining, S1287, A359, LSY; (b4) PT, ditto, S1288, A360, LSY. c. *Y. kitawakii* UÉM. & KOIW.: (c1) GZ, Hezhang, S1291, A363, LSY; (c2) GZ, Weining, S474, A355, LSY; (c3) ditto, S476, A356, LSY; (c4) GZ, Bijie, S1293, A365, LSY; (c5) SC, Yanbian, S280, A272, LSY. Fig. 21: Distribution map of *Y. phania* (OBTH.), *Y. pseudophania* spec. nov. and *Y. kitawakii* UÉM. & KOIW. (Sources of data: UÉMURA, 2020a, 2021; LANG, 2022a; LSY, CMNH).

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