

SOME NEW FORMOSAN BUTTERFLIES

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Chitoria ulupi esakii subsp. nov.

(Pl. 7, figs. 1-4, ♂; pl. 8, figs. 11-12, ♀)

This new subspecies differs from *C. ulupi morii* (Seok, 1937) (Pl. 7, figs. 5-6, ♂; pl. 8, figs. 13-14, ♀) from Korea in somewhat smaller size and much less produced apex of forewings in both sexes, usually more developed black markings on upperside of the wings, darker (greenish) ground colour and more deeply coloured markings on underside of the wings in the male, and in larger median white spots on forewings in spaces 2 and 1b, yellowish tint (against pure white of *morii*) of white band and spots on upperside, less pronounced marginal orange bands on upperside of hindwings in the female.

It also differs from *C. ulupi subcaerulea* (Leech, 1891) (♂ = *fulva* Leech, 1891) from Omei-shan, Western China, in slightly less produced apex of forewings, more developed dark area on the base of space 1b on upperside of forewings, a larger black patch on apical angle on upperside of hindwings in the male, and in larger white spots and smaller orange spots in spaces 2 and 1b of forewings, a narrower but more clearly marked straight band and less pronounced marginal orange bands on upperside of hindwings in the female.

From *C. chrysolona* (Fruhstorfer, 1908) (Pl. 7, figs. 7-8, ♂; pl. 8, figs. 15-16, ♀), a sibling species inhabiting in the same island, it can be distinguished in more produced apex of forewings, much developed black markings on upperside, darker (greenish) ground colour of underside in the male, and in more acute apex of forewings and tornus of hindwings, somewhat broader bands on upperside, silvery ground colour (against brownish-green of *chrysolona*) on underside of the wings in the female.

Length of forewings: 31-35 mm. (♂), 37 mm. (♀).

Holotype ♂, Makabubu, Central Formosa, 4. vi. 1958, W. Chung leg.; allotype ♀, Mt. Eli (6000 ft.), Central Formosa, 6. vi. 1958, W. Chung leg.; paratypes, 1 ♂, Malapa, Central Formosa, 20. v. 1958, W. Chung leg., 1 ♂, Baikei near Puli (Hori), Central Formosa, 10. viii. 1957, W. Chung leg.

Habitat: Formosa.

According to Mr. W. Chung, the collector, this species is a subalpine butterfly in Formosa, and is distributed at higher altitude than the closely allied species, *C. chrysolona* (Fruhstorfer). The subspecific name is dedicated to the late Professor Teiso Esaki. Holo- and allotype will be preserved in Kyushu University, and paratypes will be deposited in the British Museum (Nat. Hist.), London, and in the National Science Museum, Tokyo.

Strymonidia inouei sp. nov.

(Pl. 8, figs. 9-10, ♀)

♀. In general colour and markings this species is similar to *S. w-album*

(Linné), a well-known species distributed from Europe to Northern Asia. Comparing with *S. w-album fentoni* (Butler) from Japan, this new species can be distinguished from it by the following characters.

1) Upperside of the anal lobe of hindwings is provided with a round reddish-orange patch. In *fentoni*, upperside of the anal lobe provides the same coloration with the ground colour and with no patch.

2) A submarginal reddish-orange band on underside of hindwings is much narrower and darker in colour than in *fentoni*.

3) The white median band on underside of both wings is narrower, and, in space 2 of hindwings, the band is situated more far apart from the black line which is interiorly marginating reddish-orange band than in *fentoni*.

4) A somewhat ill-defined narrow white line which is becoming obscure posteriorly is recognizable at inside of the black line mentioned above on underside of hindwings in this new species, but it is entirely absent in *fentoni*.

Length of forewings: 16 mm. (♀).

Holotype ♀, Vicinity of Musha, Central Formosa, collected by a native collector and presented to the author by Mr. M. Inoue.

Habitat: Formosa.

The specific name of the butterfly is dedicated to Mr. M. Inoue, who placed this material at my disposal. The type will be preserved in Kyushu University. Though I described this butterfly as an entitled species, it may be a Formosan subspecies of widely distributed *S. w-album* (Linné).

Aporia hippia insularis nom. nov.

pro *Aporia hippia* var. *taiwana* Matsumura, 1919, Thous. Ins. Jap. Addit., 3: 497, as the name is preoccupied by *Aporia taiwana* (Wileman, 1909), Annot. Zool. Jap., 7(2): 95-96.

According to Dr. K. Jordan (Nov. Zool., Tring, 32: 277-287, 1925), the types of *Delias taiwana* Wileman, 1909 are including two species belonging to the different genera, and the male is *Aporia agathon moltrechtii* Oberthür, 1909 and the female is a species of *Delias*, which he described as a new species, *Delias wilemani*. Consequently, *Delias taiwana* Wileman is nothing but a synonym of *Aporia agathon moltrechtii* Oberthür, and the name "taiwana" must be transferred from the genus *Delias* to *Aporia*.

In publishing this notes the author expresses his sincere thanks to Professor Keizō Yasumatsu in reading through this manuscript and Messrs. Wensou Chung and Masasuke Inoue in getting materials of these rare butterflies.

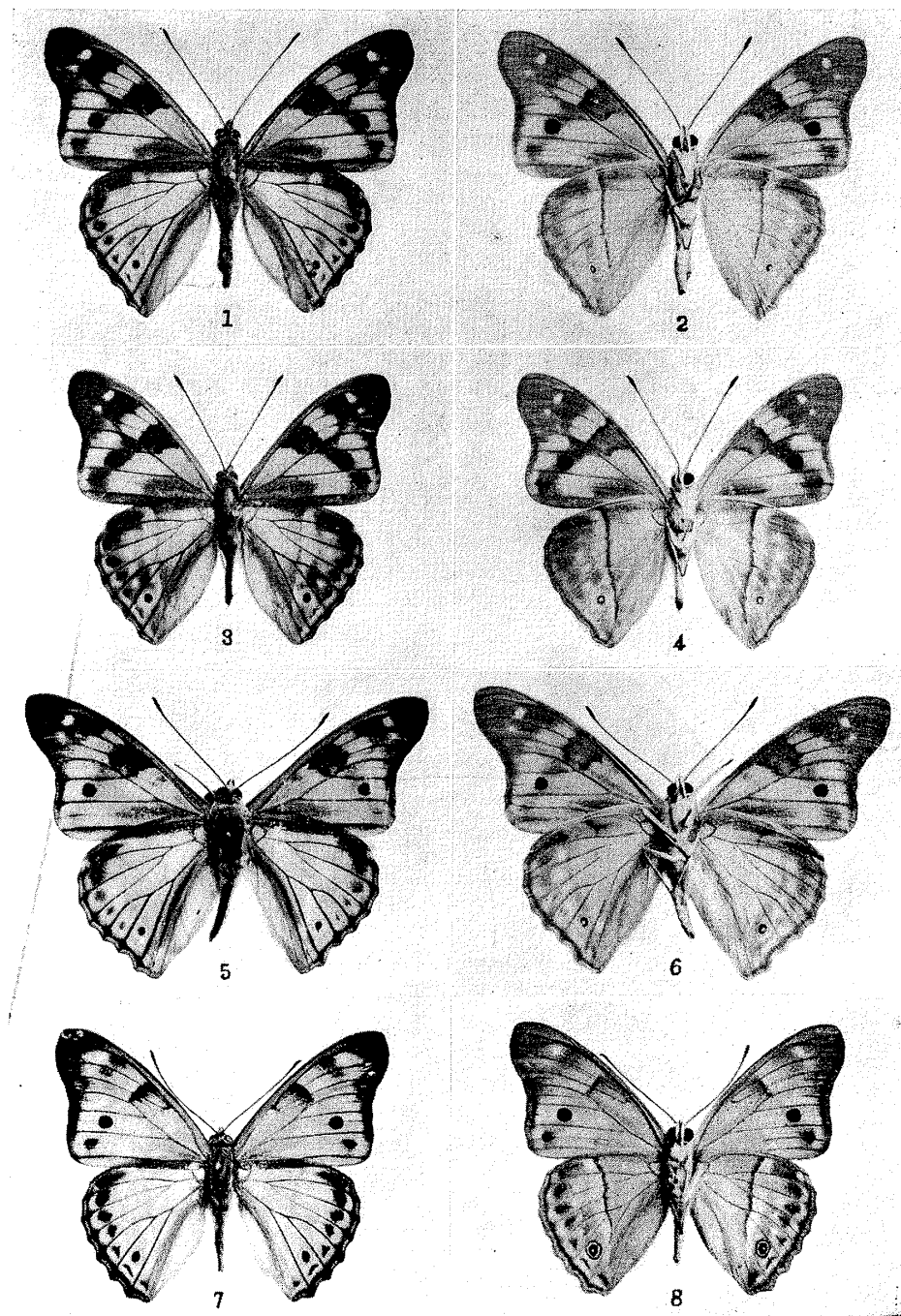
Explanation of Plates

Plate 7

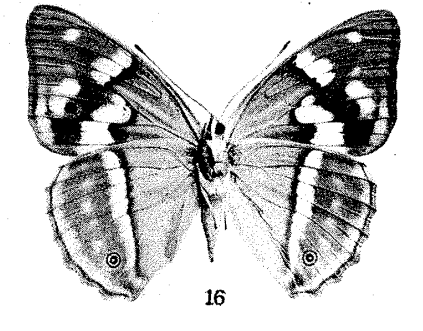
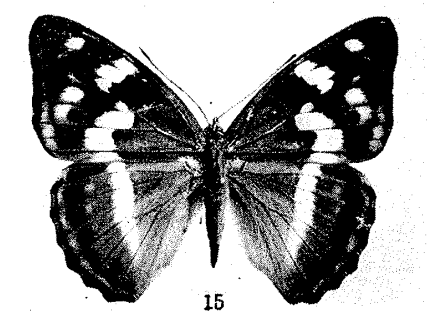
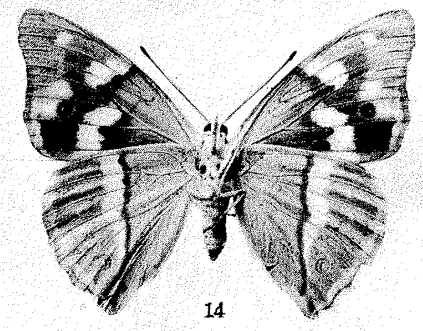
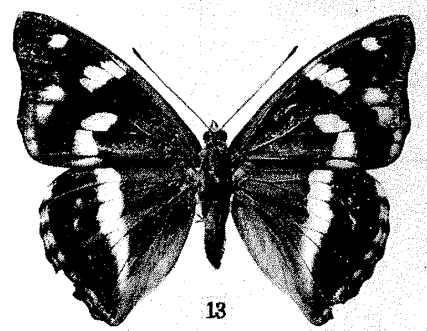
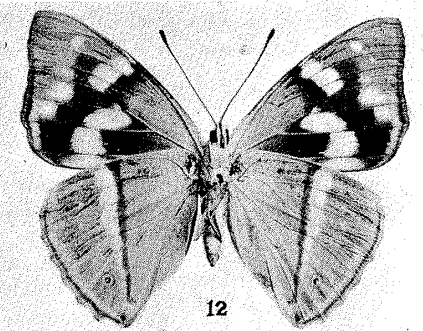
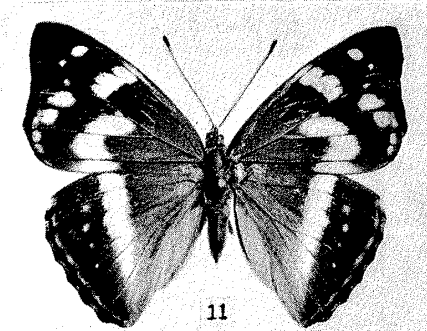
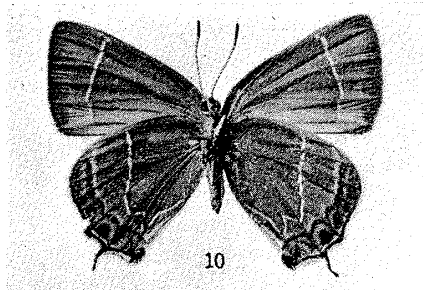
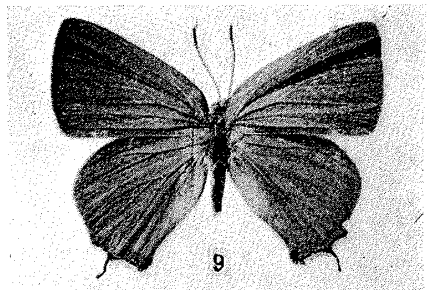
- Figs. 1-4. *Chitoria ulupi* subsp. nov. ♂ (Formosa).
 Figs. 5-6. *C. ulupi morii* (Seok), ♂ (Korea).
 Figs. 7-8. *C. chrysolona* (Fruhstorfer), ♂ (Formosa).

Plate 8

- Figs. 9-10. *Strymonidia inouei* sp. nov. ♀ (holotype).
 Figs. 11-12. *Chitoria ulupi esakii* subsp. nov. ♀ (Formosa).
 Figs. 13-14. *C. ulupi morii* (Seok), ♀ (Korea).
 Figs. 15-16. *C. chrysolona* (Fruhstorfer), ♀ (Formosa).



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