10. *Cardiopkorus yanagiharai* MIWA (n. sp.)
11. *Paracardiophorus nigro-apicalis* MIWA (n. sp.)
12. *Neodiploconus angulatus* CANDÈZE
13. *Neodiploconus melanopterus* CANDÈZE
14. *Neodiploconus ciprinus* CANDÈZE
15. *Neodipoconus ferrugineipennis* MIWA (n. sp.)
16. *Spheniscoomum pilosulus* MIWA (n. sp.)
17. *Spheniscoomum horishanus* MIWA (n. sp.)
18. *Spheniscoomum fuscos FABRICIUS*
19. *Melanotus ventralis* CANDÈZE
20. *Melanotus castanifex* PAYKULL
21. *Melanotus legatus* CANDÈZE
22. *Cremnostethus telum* CANDÈZE
23. *Meltraulacus formosanus* MIWA (n. sp.)

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**SOME NEW BUTTERFLIES**

**By**

**PROF. DR. S. MATSUMURA**

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**Papilio memnon thunbergi** SIEB. (Pl. III, fig. 1, ♀)

*ab. takamukui* n. ab.

♀. This differs from *thunbergi meta* FRUHST. in the following characters:
1. Secondaries on the upperside lacks entirely the white markings.
2. Secondaries on the underside with a few whitish part in the interspace 2 at the insides of the upper black patch, which is wanted by *thunbergi* SIEB.

This resembles also subsp. *agenor* L., but differs in lacking a broad band which runs along the inner margin of the secondaries.

Hab.—Kiushu; one single specimen was collected by T. TAMANUKI at Kagoshima.

*ab. shikokuana* n. ab. (Pl. III, fig. 6, ♀)

♀. Differs from subsp. *thunbergi* SIEB. as follows:
1. Reddish patch at the base on the upperside of the primaries smaller and narrower.

2. 4 discal white patches only on the upperside of the secondaries, while on the underside with only 3; underside of the secondaries lacks reddish lunular markings near the middle of each interspace, which are conspicuous in *thunbergi* Sieb.

Hab.—Shikoku; one single specimen was collected on the 20th of August, 1926, by K. Fujii at Uwajima.

*Papilio thaiwanus watanabei* n. ab. (Pl. III, fig. 2, ♀)

♀. Differs from the typical *thaiwanus* Rothschr. in lacking rosy lunular spot-series which runs from the anal angle to the patch of the 5th interspace, the latter being smaller and that of the 6th truncated at the outside.

Hab.—Formosa; one single specimen was collected in 1906 at Mt. Gakoki by the late K. Watanabe, chief of policemen at Hoppo.

*Papilio maackii jezoensis* n. subsp.

♀. Differs from the subspecies *raddei* Bremer. in the following points:

Upperside—Secondaries with a much broader bluish postdiscal band, at the costal half being concolorous with the ground colour, while in the typical *raddei* the band greenish and the costal half bluish.

Underside—Primaries with the outer ½ whitish grey, only at the extreme termen being fuscous; secondaries with a broader whitish band which is somewhat expanded at the interspace 3, being nearly twice as broad as that of *raddei*.

Hab.—Hokkaido; 2 male specimens were collected on the 28th of June, 1897, at Atsubetsu near Sapporo.

*Papilio maackii isshikii* n. ab.

♀. Differs from *jezoensis* Mats. in having a greenish blue band on the upperside of secondaries and a much narrower whitish band on the underside of primaries.

Hab.—Hokkaido; one male specimen was collected on the latter part of May, 1918, by S. Isshiki.

*Papilio maackii mandschurica* n. subsp.

Differs from *raddei* as follows:

♀. Upperside—Primaries dark brown, scattered with very few golden green scales; postdiscal band pale yellowish green, being somewhat broader than that of *raddei*. Secondaries with much larger reddish lunules, the greenish
postdiscal band somewhat narrower and at the costal half not bluish coloured as in raddei.

Underside—Primaries whitish grey, with a few fuscous scales, a narrow part of the termen and longitudinal stripes in the interspaces as well as in the discoidal cell being fuscous. Secondaries with very large reddish ocellar patches, pupilated with each a velvety black spot.

Hab.—Manchuria; one female specimen was collected on the 14th of July, 1924, by D. Miura at Koshurei.

_Hypolimnas bolina inornata_ n. ab. (Pl. III, fig. 8, ♂)

♂. Differs from the typical specimen in having no whitish blue patch on the upperside of secondaries.

Hab.—Formosa; one male specimen was collected on the 21st of July, 1918, by S. Watari at Horisha.

_Argynnis paphia formosicola_ n. subsp.

Closely allied to _paphioides_ Butl., but differs from it in the following points:

♂. Upperside—Primaries somewhat broader, deeper in colour, black patches much larger, those of the marginal series especially larger, being mostly confluent with the marginal black line; in the interspace 1b and 2 with each 3 black patches, while in _paphioides_ lacks the inner spot. Secondaries with also much larger spots in the marginal region.

Underside—patches of primaries correspond to those of the upperside and much larger; apex dark greenish with 2 or 3 broadly yellowish patches in it. Secondaries more deeply dark green with broader silvery bands, that of the 2nd being broad; on the postmedial region with a series of 4 fuscous spots, having each a paler pupil; at the submarginal region with a dark purplish line.

Hab.—Formosa; one male specimen was collected on the 12th of July, 1925, by T. Uchida, Y. Miwa and H. Kono.

_Argynnis selene chibiana_ n. subsp. (Pl. III, fig. 4, ♀)

Closely allied to _selene dilutior_ Fix., but differs from it as follows:

♂, ♀. Upperside—Primaries with much larger black spots especially in the cell, at the base being distinctly infuscated; black spots of the marginal series larger and roundish, defined inwardly by a series of roundish yellowish spots. Secondaries at the basal ¾ infuscated, so that the basal spot of the cell being invisible.

Underside—Markings of the primaries correspond to those of the upperside, being distinctly larger; secondaries with 2 large brownish patches, respectively,
one near the apex and another near the anal angle, so that the black spots of the submarginal region not conspicuous.

Hab.—Kuriles; numerous male and female specimens were collected on the first part of August, 1927, by K. Doi at Horomoshuru.

**Melitaea maturna konumensis** n. subsp. (Pl. III, fig. 5, ♀)

Differs from the typical specimens as follows:

♀, ♂. Upperside—Yellowish spots of the marginal series to primaries much larger, those of the female being similar to those of the submarginal series; pale yellowish spots of the marginal series to secondaries very small and not conspicuous, spots of the cell to primaries being much larger.

Underside—Postdiscal yellowish band towards the dorsum not divided into 2 as in the typical specimen.

Exp. — ♂ 46 mm.; ♀ 50–56 mm.

Hab.—Saghalien; 4 (2 ♂, 2 ♀) were collected on 6th of July, 1927, by Y. Miwa and S. Minowa at Konuma.

Nom. Jap.:—Konuma-kyomon-modoki.

**Thecla eximia watarii** n. subsp. (Pl. III, fig. 3, ♀)

Closely allied to *eximia fixeni* LEECH, but differs from it in the following points:

♀. Upperside—Primaries in the middle with a transverse, conical, orange patch which becomes suddenly narrower from the discocellulars towards the base, and which extends beyond the postmedial line and ends at the fork of the 2nd and median veins. Secondaries with 2 orange spots, respectively, one at the anal angle and another near the end of the interspace 2, that of the anal angle being obsolete.

Underside—Nearly the same with that of *fixeni* LEECH, but the submarginal series of fuscous spots to primaries prominent, which becomes smaller towards the interspace 6, that of 6 being very obsolete, and some orange spots being visible near the hind angle.

Hab.—Formosa; one male specimen was collected on the 14th of June, 1918, by S. Watari at Horisha.

**Taraka hamada formosana** n. subsp. (Pl. III, fig. 7, ♂)

Closely allied to subsp. *jezoensis* MATS.*, but differs from it in the following points:

Much smaller in size: ♂ 20 mm., ♀ 25 mm.

♂, ♀. Primaries in the middle scarcely paler. Underside with much smaller

*Thousand Insects of Japan, Add. III, p. 735 (1917).*
black spots, none of which are not connected with each other; termen of the primaries with only 2 or 3 spots, while that of the secondaries having none. Antennae on the inner sides orange yellow.

Hab.—Formosa; 3 (1 ♂, 2 ♀) specimens were collected on the 25th of October, 1926, by K. Kikuchi at Baibara in the district of Horisha.

**Lycaena arionides sugitanii** n. subsp. (Pl. III, fig. 10, ♂)

This differs from the typical specimens as follows:

♂. Primaries with a very broad black margin (about 3 mm. in width); discoidal lunule large and not divided into 2 as in the figure 1b* of the typical specimen given by Staudinger; underside along the submarginal spot-series much infuscated.

Secondaries with a similar broad black margin as that of the primaries, so that the spot-series on the submarginal region indistinct, having a series of bluish spots on that place; black discal spots distinctly larger; underside with larger spots in a series.

Hab.—Corea; 2 male specimens were collected on 30th, July, 1927, by Prof. I. Sugitani at Choonji.


**Lycaena euphemus shiriyensis** n. subsp. (Pl. III, fig. 9, ♂)

Closely allied to *euphemus ogumae* from Saghalien, but differs from it in having a broad black margin to both wings (about 3 mm. in primaries and 4 mm. in secondaries); underside much darker, but somewhat paler than that of *kazamotodruec*.

Hab.—Honshu (Aomori); 6 (5 ♂, 1 ♀) specimens were collected on 8th, August, 1927, at Shiriya by H. Kono.

*Rom. Mém. III, p. 141, pl. VII, fig. 1 a, b, c (1887).*

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**Summary**

This paper describes the new subspecies of *Lycaena arionides* and *Lycaena euphemus* from the USA. The subspecies are distinguished by their wing patterns and habitat preferences. The classification is based on morphological characteristics such as wing coloration, spot patterns, and geographical distribution.

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*Rom. Mém. III, p. 141, pl. VII, fig. 1 a, b, c (1887).*
EXPLANATION OF PLATE III

1. *Papilio mennon thunbergi takamukui* Mats. (n. ab.) ♂
2. *P. thaisanus watanabei* Mats. (n. ab.) ♀
3. *Thecla eximia watarii* Mats. (n. subsp.) ♀
4. *Argynnis selene chibiana* Mats. (n. subsp.) ♀
5. *Melitaea maturna konumensis* Mats. (n. subsp.) ♀
6. *Papilio mennon shikokuana* Mats. (n. ab.) ♀
7. *Taraka hamada formasana* Mats. (n. subsp.) ♂
8. *Hypolimnas bolina inornata* Mats. (n. ab.) ♂
10. *L. arioides sugitanii* Mats. (n. subsp.) ♂