SOME NEW BUTTERFLIES FROM JAPAN AND KOREA

By

SHONEN MATSUMURA

(With Plate V)

Parnassius everesmani f. sasai n. f. (Pl. V, fig. 5)

♂. Differs from f. daisetsuzana Mats, in the following points:
Fore wing at the base yellowish, with 2 fuscous patches near the middle; at the bases of the first 4 interspaces below the cell with each a yellowish spot, that of the first being very large.
Hind wing with one third of the cell fuscous; the reddish markings of the 5th and 7th interspaces larger; the basal part of the 2nd interspace not fuscous; the central spot of the 2nd cell independent, somewhat incurved, and not connected with that of the 5th; the submarginal fuscous band more highly waved.
Hab.—Korea. One male specimen was collected at Yurinryo, in the Prov. Kankyonando (27. VII, 1935) by K. SASA.
The holotype is now preserved in the cabinet of S. HIRAYAMA.
This differs from the typical form in having the basal portion of the fore wing yellowish, the premedial fuscous band broader, and the submarginal band of the hind wing more highly wavy and more distinct.

Parnassius citrinarius f. kyotonis n. f. (Pl. V, fig. 6)

Closely allied to the typical form, P. citrinarius MOTSCH., but differs from it as follows:
♀. Fore wing preponderately fuscous, subhyaline; 2 patches of the cell, 3 spots at the outside of the cell and 2 patches below the cell pale yellow, lacking the submarginal line. Hind wing pale yellowish, with a broad fuscous band at the submarginal region, the dorsal black part distinctly narrower.
Hab.—Honshu. One female specimen was collected at Chikuitamura, Kyoto, (10. V, 1936) by S. HIRAYAMA.
This resembles somewhat f. umbrosa LICHTEL, but differs from the latter in having the pale yellowish patches and spots on the fore wing.

[Ins. Mats., Vol. XI, No. 4, June, 1937]
Anthocaris cardamines f. isshikii Mats. (Pl. V, fig. 2)


The male of this species has not yet been described, so the author on this occasion will describe it.

♂. Differs from the typical form as follows:

Upperside—The orange-red marking of the fore wing extends far inner the discoidal spot and at its inner margin diffusely much arched; the fuscous marking at the apex paler; the discoidal spot larger and of a crescent form; the fuscous basal portion at the costa extends nearly to the discoidal spot. The basal black portion of the hind wing extends to the middle of the cell; the fuscous markings owing to the transparency of the underside much obscure.

Underside—Paler yellow, the orange-red marking much reduced, and of an oblong form, the discoidal spot being larger and of a crescent form. The olivaceous markings of the hind wing concolorous, being not paler at the distal half.

Hab.—Honshu. Few male specimens were collected in Shinano by S. Hirayama. The allotype was collected at Mt. Nyukasa (7. VI, 1936).

Anthocaris cardamines f. kobayashii Mats. (Pl. V, fig. 3)


The male has not yet been described, so the author will describe it.

♂. Differs from the typical form as follows:

Upperside—The basal black portion much reduced; the discoidal spot very small, becoming merely a point; the apical fuscous portion also much reduced. Hind wing with the basal fuscous portion also much reduced, the fuscous marking being much obscure. Fore wing at the proximal portion of the cell much paler; the orange-red patch of a roundish form.

Underside—The olivaceous markings of the hind wing larger, the marginal spots being scarcely paler than the interior ones.

Hab.—Saghalien. One male specimen was collected by S. Hirayama (18. VI, 1934) at the southern part of Saghalien.

Anthocaris cardamines f. koreana n. f. (Pl. V, fig. 1)

♂. Upperside—Wings with a paler yellowish shade. The orange-red marking of the fore wing deeper red, extending only a little beyond the discoidal spot and at the inner margin scarcely arched; the fuscous marking at the apex darker; the fuscous marking at the base much smaller. Hind wing with more obvious fuscous markings, owing to the darker marking of the underside;
the black portion at the base smaller in dimension, not extending to the middle of the cell.

Underside—The olivaceous marking of the fore wing much larger, the proximal portion of the cell being darker yellow.

Hab.—Korea. One male specimen was collected at Tetsuzan (VII, 1936) by S. Hirayama. The allotype is preserved in the cabinet of S. Hirayama.

Explanation of Plate V.

1. *Anthocaris cardamines* f. koreana Mats. (n. f.) ♂
2. *Anthocaris cardamines* f. isshikii Mats. ♂
3. *Anthocaris cardamines* f. kobayashii Mats. ♂
4. *Anthocaris cardamines* L. ♂
5. *Parnassius everesmani* f. sasai Mats. (n. f.) ♂
6. *Parnassius citrinarius* f. kyotonis Mats. (n. f.) ♀