A NEW SUBSPECIES OF *CALINAGA BUDDHA* MOORE FROM YUNNAN, CHINA (LEPIDOPTERA: NYMPHALIDAE)

MASAO OKANO[1] and TETSUO OKANO[2]

The following nine forms of *Calinaga buddha* MOORE have hitherto been known from China.

dubernardi OBERTHÜR, 1920	Tseku, N. E. Yunnan.
davidis OBERTHÜR, 1879	E. Xizang (E. Tibet); Sichuan (Szechwan).
nebulosa OBERTHÜR, 1920	Kanding (Tatsienlu), Sichuan (Szechwan).
saka MOORE, 1901	Changyang, Hubei (Hupeh); W. China.
lactoris FRUHSTORFER, 1908	Changyang, Hubei (Hupeh).
concolor MELL, 1952	W. Tianmushan, Zhejiang (Chekiang).
fokiensis FRUHSTORFER, 1914	N. Fujian (N. Fukien).
kuangtungensis MELL, 1952	N. Guangdong (N. Kwangtung).
formosana FRUHSTORFER, 1908	Taiwan (Formosa).

Although these forms were treated as subspecies of *C. buddha* by all the previous authors, some of them will have to be revised on the systematic station. In this paper we intend to describe a further new subspecies of this species recently found in the central part of Yunnan.

Calinaga buddha yunnana subsp. nov.
(Pl. 1, figs. 1–8, ♂)

Male. The forewing costa is rounder than in the other forms. On the upper surface the ground colour is black, darker than in subsp. *brahma* BUTLER from Assam which is said to be the darkest extreme; the light markings are creamy-white, sharply contrasted with the ground colour. On the forewing the light area in the cell is enlarged from the base to near the end; the transverse black bar in the cell is variable in the extent of development among individuals; the light area in space 1b is limited to the basal two-thirds, slightly bifurcated at the end; the basal light spots in spaces 4 and 5 are faint if present; most of the discal and postdiscal light spots are well defined and distinct; the discal spots are developed in spaces 2 to 6, but reduced in space 4; the postdiscal spots are developed in spaces 1c to 6, but reduced or disappeared in space 1c or 6. On the hindwing the cell and spaces 1a and 1b are filled up with creamy-white;

1) Laboratory of Biology, College of Humanities and Social Sciences, Iwate University.
2) Laboratory of Silviculture, Faculty of Agriculture, Kyushu University.

the basal halves of spaces 1c and 7 are also same coloured; the basal light spots in spaces 4 and 5 and the mid light spot in space 7 are variable in the extent of development among individuals; the discal light spots in spaces 5 and 6 are well developed, but those in spaces 1c to 4 are reduced and often disappeared; the postdiscal light spots are developed in spaces 1c to 6. On the under surface the ground colour is similar to that of subsp. *davidis*, but the tone is darker; the light markings are more distinct. The hairs on the prothorax above are reddish brown as in subsp. *brahma*, more reddish than in subsp. *davidis*.

Length of forewing: 43–46 mm., ♂.

Holotype ♂, Dali (Tali), C. Yunnan, 1981.

Paratypes 3 ♂, same data as holotype.

All the types are preserved in our collection.

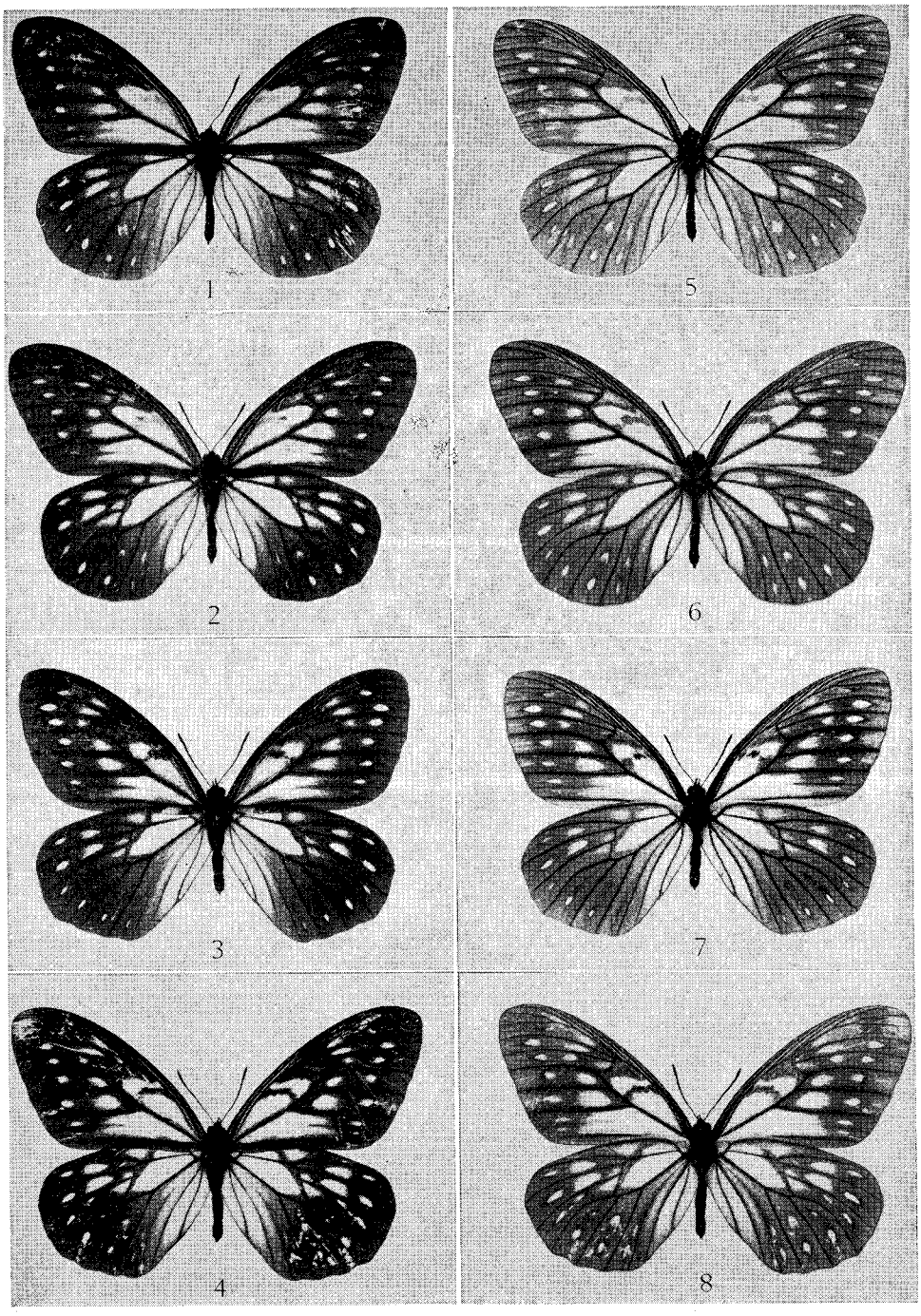
In Yunnan, besides subsp. *yunnana*, subsp. *dubernardi* occurs in the north-eastern part. This is characterized in having an orange-yellow spot at the hindwing anal angle.

In preparing this small manuscript, we express our hearty thanks to Dr. TAKASHI SHIRÔZU, Mr. KIKUMARO OKANO and Mr. SHUNZO KAMMURI for their Kindness rendered in various ways.

Explanation of Plate 1

Figs. 1–4. *Calinaga buddha yunnana* M. & T. OKANO, subsp. nov., ♂. Dali, C. Yunnan, 1981. (Fig. 2, holotype).

Figs. 5–8. Uudersides of figs. 1–4.


1
5
2
6
3
7
4
8