

A new *Arctia* species from the Himalayas

(Lepidoptera, Arctiidae)

by

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Summary: A new species, *Arctia martinhoneyi* **spec. nov.** is described from the Pakistan provinces Azad Jammu and Kashmir. Formerly it was confused with *Arctia caja orientalis* MOORE, 1878, which was described also from the North-Western Himalayas, and differs by the presence of a blackish transversal band, the absence of clear subbasal spots at the forewing underside base, and an oblique (not nearly perpendicular) costal subbasal spot on the forewing upperside. In the ♂ genitalia, the new species is characterized by sharp peniculi apices; those of *A. caja* (LINNAEUS, 1758) are rounded.

Zusammenfassung: Als neue Art wird *Arctia martinhoneyi* **spec. nov.** von Pakistan, aus den Provinzen Azad Jammu und Kashmir, beschrieben. Diese Art wurde bisher fälschlicherweise mit *Arctia caja orientalis* MOORE, 1878 verwechselt, die auch aus dem Nordwesten des Himalayas bekannt ist. Letztere unterscheidet sich von der neuen Art durch eine schwarze, transversal verlaufende Binde, das Fehlen deutlicher, subbasaler Flecken an der Basis der Vorderflügelunterseite und eines schräg liegenden, subbasalen Flecks an der Costa der Vorderflügeloberseite. Im ♂-Genital ist die neue Art durch scharfe spitze Gnathosfinger charakterisiert, die bei *A. caja* (LINNAEUS, 1758) abgerundet sind.

During an expedition in 2003 by GURKO to the Pakistan Kashmir, he collected several specimens of the genus *Arctia* that were determined as *A. caja orientalis* MOORE, 1878 (DUBATOLOV & GURKO, 2004), based on the description of this subspecies by HAMPSON (1894). However, the later comparison of these specimens with the original description (Fig. 1) showed strong distinctions; our specimens have strong blackish fasciae at the forewing base on the underside; HAMPSON (1894) not correctly cited this character to be a distinctive for this subspecies. Nevertheless, such a conspicuous character was not mentioned in the original description of *A. caja orientalis* MOORE (Fig. 1). We asked Dr. MARTIN HONEY about the presence of the type specimen in the British Museum collection. He answered that there is a single such specimen (colour plate 16, fig. 1-3) which was labeled as a "type" by MOORE, but its geographical label do not coincide with those in the original description, being "Sonamurg, Cashmere (STOLICZKA)" [ENE from Srinagar, Indian Kashmir]. The available specimen was collected in Allahabad [now]—Anantnag, SE from Srinagar, Indian Kashmir], N. W. India by HELLARD, so it does not belong to the types. At the same time, the specimen from MOORE's collection almost corresponds to the original description and might be considered as a specimen determined by the author. It has the forewing underside pattern as in other *Arctia caja* (L.) subspecies and completely lacks blackish fasciae at its base. Moreover, GURKO obtained eggs from a ♀ specimen and reared them to a series of specimens, all of which have such a darker blackish fasciae at the forewing underside.

Such constancy on the main character provides us with a basis to consider that two species from the *A. caja*-group occur in the North-Western Himalayas. Because, following HAMPSON (1894), all specimens with blackish fasciae at forewing underside were mistakenly considered as *A. caja orientalis* MOORE, and are not yet described as a separate taxon. We here describe the taxon as a new species:

Arctia martinhoneyi DUBATOLOV & GURKO spec. nov.

(colour plate 16, fig. 4-7)

Holotype♂: Pakistan, prov. Azad Jammu & Kashmir, NW from Junkar [ca. 100 km NW from the Indian Kargil], 3000-3400 m, 1.-10.VIII.2003, V. GURKO & Co. leg. Preserved in Siberian Zoological Museum of the Institute on Animal Systematics and Ecology, SB RAS, Novosibirsk, Russia. Paratypes: 16 ♂♂, 7 ♀♀, the same label and ex ovo.

Description: Fore wing length 31 mm (wing expanse 62 mm) in the holotype. The basal brown pattern consists of 2-4 small spots, or wholly absent. The subbasal brown band is formed by two spots, fused or separated: costal one strongly oblique to costa and extending up to a fold between cubital and anal veins; anal one always fused with the same spot of medial band. Medial bands separate in cell and fused behind cubital veins, forming a fused y-shaped figure. Submarginal and marginal spots similar with those in *Arctia caja* (L.). Underside pattern characterized by a strong spreading of red coloration throughout basal and medial wing part, complete absence of subbasal band or spots, presence of a continuous blackish band, which is formed by proximal part of medial band. Only occasionally it is fused with its distal part, forming an y-shaped figure. Otherwise pattern similar with that of *A. caja* (L.).

♂ genitalia (Fig. 2) shows few peculiarities if compared with *A. caja* subspecies; most striking is the sharpness of the peniculi apices; those of *A. caja* L. are rounded (Fig. 3).

Diagnosis. The new species is characterized mainly by presence of a blackish band at the forewing underside base, which is absent in *A. caja* (L.). Moreover, the costal spot of the subbasal band is strongly oblique in the new species, and nearly perpendicular to the costal margin in all *A. caja* subspecies. In addition, in the new species, on the forewing underside, the subbasal band or spots are completely absent, while present in *Arctia caja* (L.).

Habitat. The mixed forest belt within subtropical foothills of the North-Western Himalayas. The larva is shown on the colour plate 16, fig. 8.

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Bombycidæ.

[230]

Arctia orientalis.

Similar to *A. caja*, differing above on the fore wing in the general form of the bands, these being entire and transversely continuous (not broken longitudinally as in *caja*) ; on the hind wing the spot at the end of the cell is absent ; this wing also has a yellowish-white narrow marginal line above, and brown

Mr. F. Moore on new Species of Lepidoptera. 231

cilia both above and beneath ; the dorsal black band is present on each segment, and longer.

Exp. 2½ inches.

Hab. Sonamurg, Cashmere (*Stoliczka*).

Fig. 1: Faksimile of the original description of *Arctia caja orientalis* MOORE, 1878.

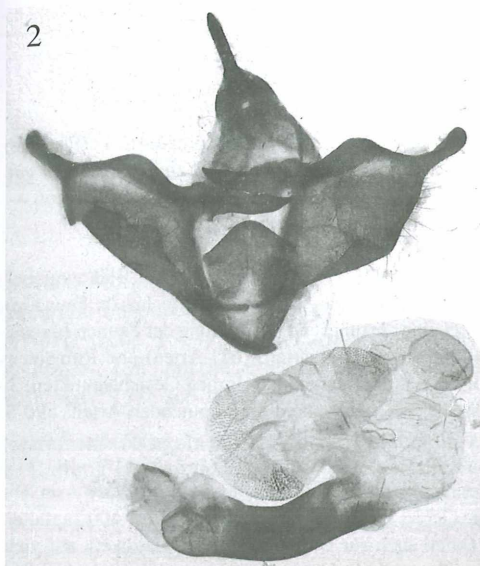


Fig. 2: ♂ genitalia of *Arctia martinhoneyi* **spec. nov.**, holotype ♂, Pakistan, prov. Azad Jammu & Kashmir, NW from Junkar [ca. 100 km NW from the Indian Kargil], 3000-3400 m, 1.-10.VIII.2003, V. GURKO & Co. leg., 4 – upperside, 5 – underside.

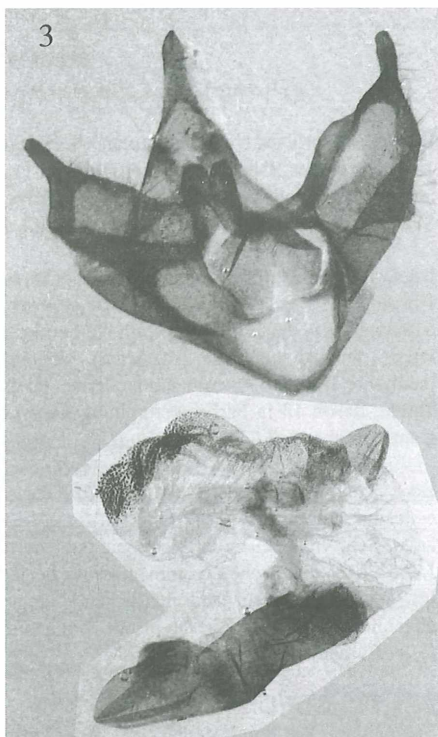


Fig. 3: ♂ genitalia of *Arctia caja pamiroalaica* Stshetkin, 1982, Tadzhikistan, Pamir, river Shakh-Dara valley, Barvoz, 2800 m, 9.VIII.1986, M. ZAPRYAGAEV leg.

Colour plate 15 (p. 607)

Figs. 1-3: *Arctia caja orientalis* MOORE, 1878, India, Kashmir, Allahabad (=Anantnag), Hellard leg. From BMNH collection. By the courtesy of Dr. M. HONEY. 1 – upperside, 2 – underside, 3 – labels.

Figs. 4-5: *Arctia martinhoneyi* **spec. nov.**, holotype ♂, Pakistan, prov. Azad Jammu & Kashmir, NW from Junkar [ca. 100 km NW from the Indian Kargil], 3000-3400 m, 1.-10.VIII.2003, V. GURKO & Co. leg., 4 – upperside, 5 – underside.

Figs. 6-7: *Arctia martinhoneyi* **spec. nov.**, series of paratypes ♂♂, ♀♀, Pakistan, prov. Azad Jammu & Kashmir, NW from Junkar [ca. 100 km NW from the Indian Kargil], 3000-3400 m, 1.-10.VIII.2003, V. GURKO & Co. leg. 6 – upperside, 7 – underside.

Fig. 8: Larva of *Arctia martinhoneyi* **spec. nov.**, reared from a ♀ specimen, collected in Pakistan, prov. Azad Jammu & Kashmir, NW from Junkar [ca. 100 km NW from the Indian Kargil], 3000-3400 m, 1.-10.VIII.2003, V. GURKO & Co.

Farbtafel 15/ Colour plate 15

DUBATOLOV, V. V. & V. O. GURKO: A new *Arctia* species from the Himalayas (Lepidoptera, Arctiidae). - Atalanta (Dezember 2005) 36 (3/4): 538-541, Würzburg.

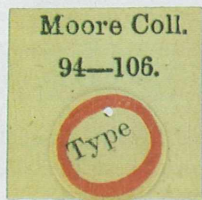
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Fig. 8: Larva of *Arctia martinhoneyi* **spec. nov.**, reared from a ♀ specimen, collected in Pakistan, prov. Azad Jammu & Kashmir, NW from Junkar [ca. 100 km NW from the Indian Kargil], 3000-3400 m, 1.-10.VIII.2003, V. GURKO & Co.

Farbtafel 15/ Colour plate 15



3



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