

TWO NEW SUBSPECIES OF *PLEBEJUS* (*PLEBEJIDES*) *PYLAON*
FROM THE SOUTHERN AND NORTHERN SIDES OF THE
WEST CAUCASUS (LYCAENIDAE)

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This is the sixth article in a series 'Rhopalocera Caucasicca' (preceded by Nekrutenko, 1972; 1973; 1974a, b; 1975) dealing with the verification and precise determination of taxonomic positions of butterfly forms known to occur in the Caucasus area. A close examination of specimens of *Plebejus* (*Plebejides*) *pylaon* Fischer von Waldheim (1832: p. 357, tab. 19, figs. 5-6) collected on the southern side of the West Caucasus (Lake Ritsa) by Dr. Eugene S. Miljanowski and the author, and their comparison with a sample collected on the northern side (Teberda) by the late L. Sheljuzhko in 1933 (in the Zoological Museum, Kiev State University) showed that they represent different populations, distinct from all other geographic forms of the species hitherto described. They are herein described as new. In the descriptions I utilized Miller's (1969) veins and cells terminology.

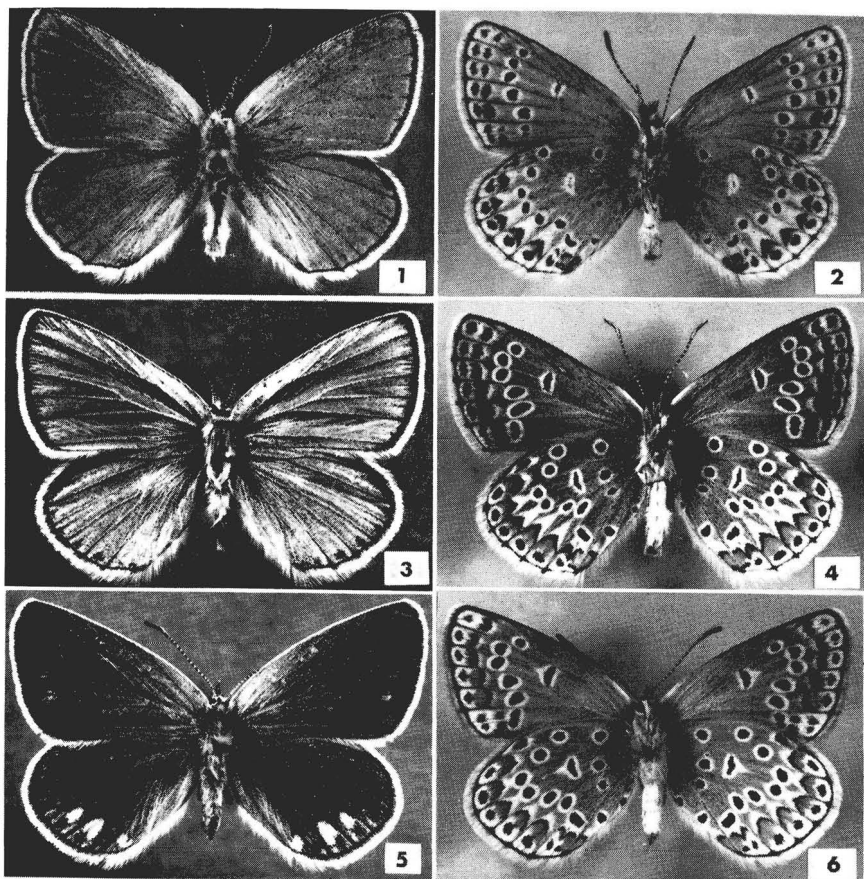
***Plebejus* (*Plebejides*) *pylaon abchasicus* Nekrutenko, new subspecies**

(Figs. 1, 2, 7-9)

Lycaena escheri Hb.: Miljanowski, 1971, p. 138 (incorrectly identified).

Male. Length of the forewing (base-tip) of the holotype 15.3 mm (variation in type series 14.5-16.7 mm). Upper side of wings of clear blue-violet color, with slight metallic tint (as in ssp. *trappi* Vty of Switzerland, but somewhat duller). Veins easily recognizable only in their distal parts, where they are marked with dark scales, except Rs and M₁ of hind wing entirely marked with dark scales. Along outer margin of both wings is a very narrow black line, darker than inner row of fringe scales. Hindwing bears 1-5 poorly expressed antemarginal spots, in most specimens examined absent. Fringe pure white, with dark brown basal line, differing by its color from the marginal line of wing. Underside ground color warm brown, so pale that white rings around the black spots seem to disappear (visible on photographs). Described subspecies is the palest form of *pylaon* ever seen. Yellow submarginal spots presented on hind wing by a complete row, *never confluent*. Basally each spot is limited with a black V-shaped mark; on forewing, the number of these spots never exceeds 2-3, they are diffused, basally transit into black shapeless spots. Antemarginal spots on hind wing presented by complete row, some of them with blue metallic pupils, especially those corresponding with antemarginal spots on upper side (differing from *sephirus* Friv. of Bulgaria). Basal part of hindwing underside of light bluish color with metallic tint. No spot in the forewing (underside) discal (D) cell.

Male genitalia (Figs. 7-9). By general appearance do not differ essentially from



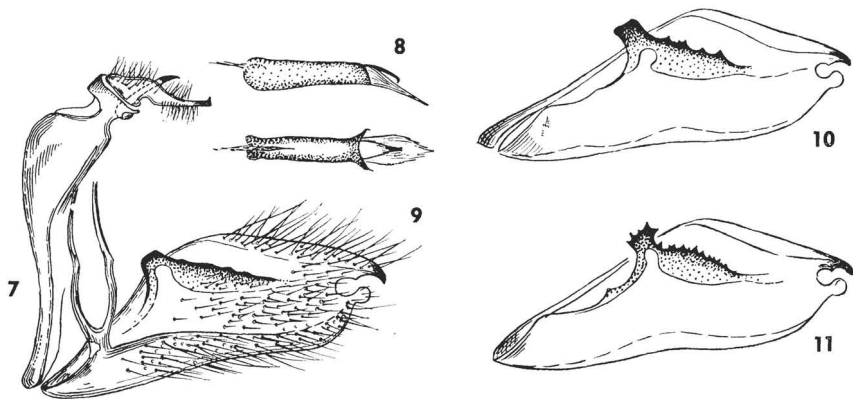
Figs. 1-2. *Plebejus (Plebejides) pylaon abchasicus* n. ssp.: 1, 2, ♂ holotype upper and underside, SW Caucasus, Lake Ritsa vic., 500-800 m, 6 June 1971.

Figs. 3-6. *Plebejus (Plebejides) pylaon albertii* n. ssp.: 3,4, ♂ holotype upper and underside, NW Caucasus, Teberda, Dzhmagat River Valley, 1200-1300 m, 28 July 1933 (L. Sheljuzhko leg.); 5,6, ♀ paratype, NW Caucasus, Teberda, Dzhmagat River Valley, 1200-1300 m, 25 July 1933 (L. Sheljuzhko leg.). All specimens figured are in the Lepidoptera Collection, Zoological Museum, Kiev State University.

other subspecies of *P. (P.) pylaon*. It is distinct with its smooth, rounded shape of the projection on the inner side of the valva ("Chitinleiste" of Forster (1938) and Sauter (1968)).

Female. Unknown, though we visited type locality many times in search for it; an additional description will be given if a female is collected.

Types. Holotype, male, SW Caucasus, Abkhassian Autonomous Soviet Socialist Republic, Lake Ritsa vicinity, 500-800 m, 6 June 1971, Y. Nekrutenko. Paratypes, 18 ♂♂, same locality, date and collector; 1 ♂ paratype, 15 July 1972, same locality and collector; 13 ♂♂ paratypes, same locality, June, July (? year) (coll.



Figs. 7–11. *Plebejus (Plebejides) pylaon* ssp. male genitalia: 7, *P. (P.) pylaon abchasicus* n. ssp., general view, right valva and aedeagus removed; 8, 9, *P. (P.) pylaon abchasicus* n. ssp., aedeagus, lateral and dorsal view; 10, *P. (P.) pylaon albertii* n. ssp., valva, inner side; 11, *P. (P.) pylaon ordubadi*, valva, inner side.

E. Miljanowski), 1 ♂ paratype, Gagra circ., 1 July 1949 (coll. E. Miljanowski). Holotype and 5 paratypes ex coll. Y. Nekrutenko will be deposited in the Zoological Museum, Kiev State University.

Type locality. An old, abandoned timber-tracking road at its junction with the Bzyb-Lake Ritsa Highway (34th km), 5 km down along the Yupshara River from Lake Ritsa; small streams, emerging from the neighbouring rocks, flow as a thin water layer over the road chip-cover, attracting on a hot day great numbers of butterflies. Type locality situated within the mixed forest characterized by *Pinus hamata* Sosn. at an elevation of 500–800 m.

***Plebejus (Plebejides) pylaon albertii* Nekrutenko, new subspecies**

(Figs. 3–6, 10)

Lycaena pylaon ssp.: Forster, 1938, p. 335, Taf. I–II, fig. d1.

Male. Length of forewing (base–tip) of the holotype 16.6 mm (variation in the type series 14.8–17.5 mm). Upper side of wings of blue-violet shining color, similar to *abchasicus* described above. Black marginal line varies in width, always notably wider than in *abchasicus*, in some specimens 1.0–1.5 mm wide. Antemarginal hindwing upper side spots developed well, in some specimens joining the marginal line, forming the wide marginal band; in others antemarginal spots shaded from basal side with dull brown (never in *abchasicus*). Under side ground color grey-brown, white rings around the black spots fairly visible. Yellow submarginal underside spots presented by complete row, in most specimens examined confluent (never in *abchasicus*), forming the continuous band, limited basally with a complete row of V-shaped black marks. Basally these black marks sharply contact bright white patches, contrasting with the ground color. Basal part of the hindwing underside of light blue color.

Male genitalia (Fig. 10). Projection of the inner surface of valva rounded in its proximal part, its ridge bears sharp incisions and projections (absent in *abchasicus*, more developed and presented on the proximal part too in *ordubadi* Forst. (Fig. 11)).

Female. Length of the forewing (base-tip) 14.0–14.5 mm. Upper side dark brown, with more recognizable dark discal spot. Hindwing upper side bears 3–4 dull yellow spots with diffused ground color pupils, distally rounded with violet tint. Basal part of hindwing under side powdered with scarce violet scales. Under-side ground color pale brown-grey, more vivid than in male. Underside pattern as in male, developed stronger and more contrast. Blue basal area very narrow. No spot in D in male and female.

Types. Holotype, male, NW Caucasus, Karachayevo-Cherkessian Autonomous Region, Teberda, Dzhmagat River Valley, 1200–1300 m, 28 July 1933, L. Sheljuzhko. 35 ♂♂, 3 ♀♀ paratypes, same locality and collector, 24 July–1 August 1933; 3 ♂♂, 1 ♀ paratype, Teberda, Mt. Chatipara, 4–7 August 1933; 4 ♂♂ paratypes, Teberda, Teberda River Valley, 22 July 1933; 2 ♂♂ paratypes, Elbrus Mt., Itkol, 24 June 1934 (A. Moltrecht leg.); 1 ♂ paratype, Elbrus Mt., Tegenekli, 25 June 1934 (A. Moltrecht leg.). Type material is the property of the Zoological Museum, Kiev State University.

Type locality. Vicinity of the town Teberda, Teberda Nature Reservation (Teberdinskiy Zapovednik) at an elevation of 1200–1400 m.

It is a pleasure to name this subspecies after Dr. B. Alberti of Göttingen (West Germany) in order to acknowledge his important contribution to the knowledge of the Lepidoptera of Caucasus.

Remarks

The geographic variation of *P. (P.) pylaon* (type locality: Sarepta, now Krasnoarmeisk, on Volga—see important data in Sheldon, 1914: 233–242, 273) has been studied in detail in western Europe, from where several subspecies have been described (Forster, 1938; Agenjo, 1967; Junge, 1971; Gómez-Bustillo & Fernández-Rubio, 1972). At the same time, the eastern and, especially, the northeastern part of the species range, including Caucasus and Transcaucasia, in much degree still remains a *terra incognita*, mainly because of the lack of reliable material. *P. (P.) pylaon abchasicus* ssp. nov. and *P. (P.) pylaon albertii* ssp. nov. are the very first geographic forms, representing two populations isolated by the Main Caucasus Ridge (Caucasioni), described from the Caucasus Major. The statement of “Elbrus” for ssp. *solimana* Forst. by Beuret (1961: 341) is a result of confusion with Elbrus in Iran. From Transcaucasia and adjoining areas, the following forms of the species are known: *ordubadi* Forster, *solimana* Forster, *iranica* Forster, *sephirus* Friv., *microsephyrus* Vty (for details see Forster, 1938).

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