

## A new subspecies of *Melitaea alraschid* HIGGINS, 1941 from Peter the Great Range

(Lepidoptera, Nymphalidae)

by

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**Summary:** A new subspecies, *Melitaea alraschid irinae* subsp. nov. (TL: Tadjikistan, Peter the Great Mts., Ganishou v.) is described. The new taxon well differs from other known subspecies in the very dark underside and the widened marginal bands on the upperside; the distribution area completes the area of the species between the areas of its relatives: *Melitaea ambrisia* HIGGINS, 1935 and *M. shandura* EVANS, 1924.

**Резюме:** В статье описан новый подвид *Melitaea alraschid irinae* subsp. nov. (Таджикистан, хр. Петра Первого, п. Ганишоу). Новый таксон хорошо отличается от известных подвидов темным исподом крыльев и расширенной черной краевой перевязью сверху; ареал подвида завершает ареал распространения вида в целом, располагающийся между ареалами *Melitaea ambrisia* HIGGINS, 1935 и *M. shandura* EVANS, 1924.

**Introduction:** *Melitaea alraschid* HIGGINS, 1941 is a little known species; the specimens are very rare in collections. The first author published the first notes about this taxon, making the species status and describing the subspecies *M. alraschid garum* CHURKIN, 2000. The nominate taxon is distributed in Ghissar (only a few specimens are known) while *M. a. garum* CHURKIN populates the Matcha mountain system at the border of the area of *M. ambrisia* HIGGINS, 1935. Some authors have treated *M. alraschid* HIGGINS as a full synonym of the latter (TSHIKOLOVETS, 2004; TSHIKOLOVETS, 2005); the arguments were fully absent. Such a position is simply based on the lack of material and adequate study.

When the distribution borders between *M. alraschid* HIGGINS and *M. ambrisia* HIGGINS were discussed (CHURKIN, 2000), the southern border of the distribution area of these species was not known. The southern relative, *M. shandura* EVANS, 1924 populates the West Pamirs and the Hindukush - thus, Darvas (Darwaz) as a zoogeographical district represented a "white spot" in the map of the distribution of this complex. Basing on this simple fact, the first author supposed that some taxon belonging to the complex must populate the high tops of the Darvasian ranges; the efforts in finding it had a quick success.

The new taxon was found by V. TREMASOV in the highlands of Peter the Great Range, in a very well known and explored locality - upper from Ganishou (Ganishob) village. A lot of collectors have worked in this place from the Soviet era up to the recent times, but no specimens belonging to the complex in study have ever been found. The newly discovered population flies at the tops of the range, close to the place of *Parnassius staudingeri inaccessibilis* J. J. SHCHETKIN, 1979, one of the rarest *Parnassius* taxon in the collections.

The species *M. alraschid* HIGGINS has a logical and complete distribution area now (except South Ghissar). This area simply borders on the area of *M. shandura* EVANS which was found on Mazorsky Range, not far in the south-eastern direction (unfortunately, only one pair of this species was collected, and this is not enough to make a decision about the status of the population).

The holotype of the new taxon will be deposited in the Darwin State Museum (Moscow); the paratypes are in the authors' collections.

**Abbreviations:** FW - fore wing, HW - hind wing, TL - type locality.

### *Melitaea alraschid irinae* subsp. nov. (figs. 5-8, 13-16)

Holotype: Tadjikistan, Peter the Great Mts., 23 km SE Tadzhibokad, Ganishou v., 3400-3500 m, 20.-27.07.2011, V. TREMASOV leg. Paratypes: 9 ♂♂, 7 ♀♀, same data.

**Description and diagnosis.** ♂: FW length 21 mm in the holotype and 18-21,5 mm in the paratypes. The size and general pattern are the same as in other subspecies, but all spots are developed and well expressed (in contrast to the nominate taxon). FW and HW margins with a thick black band which is united with the actual marginal black border and the row of small blackish marginal spots - in both known subspecies this row is reduced or clearly visible and not merged with the thin black border. FW submarginal black row is complete or almost complete (in other taxa it is totally or greatly reduced). HW upperside with well expressed d-spot which is not stretched compared to *M. a. garum* CHURKIN.

FW underside with a more developed pattern than it is known for the relatives.

HW underside is fully covered by dense bluish dark-grey suffusion, so that only the reddish-orange postdiscal band is relatively developed - in this character the new taxon can be easily distinguished from both known subspecies.

♂ genitalia: typical for the species, scaphium with long processes (specific character). The harpe is similar to that of *M. a. alraschid* HIGGINS, the proximal part is even wider while the teeth are smaller (*M. a. garum* CHURKIN shows an opposite version of this structure).

♀: FW pattern is typical for the species but orange-reddish submarginal lunules are not developed. The whole black pattern is expressed, the postdiscal row is fully developed but additional rows of unclear dark spots between this row and the submarginal row are absent (in other taxa the rows of darkened unclear spots appear if the black pattern is fully developed). HW underside is totally darkened by the same suffusion as in the ♂♂.

**Distribution:** Known only from the type locality - the discussion see above.

**Biology:** The butterflies fly at the non-steep stony screes and hollows under the ridges. Foodplant unknown.

**Etymology:** IRINA - feminine name; the subspecies is named after IRINA METAL'NIKOVA, the girlfriend of the third author.

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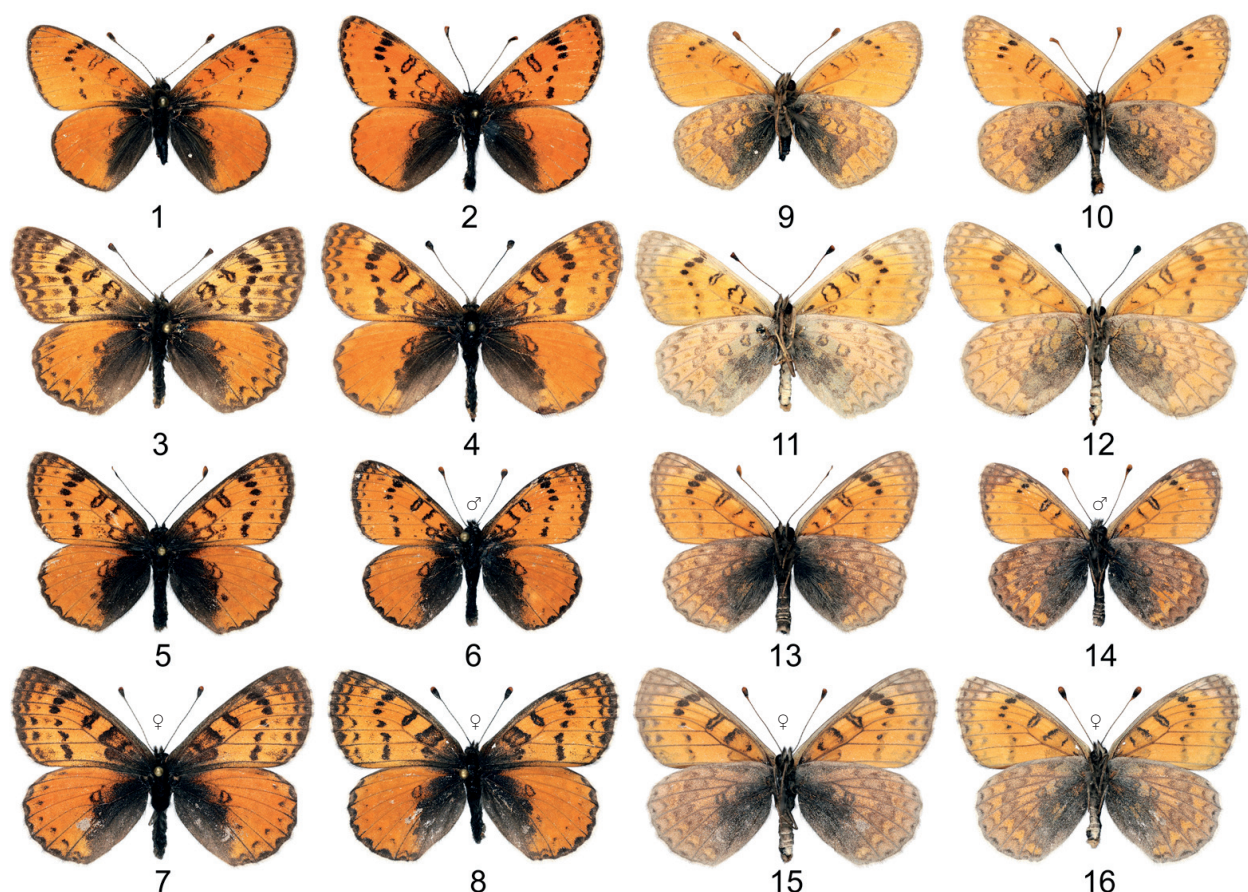
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Colour plate (figs. 1-8: upperside; figs. 9-16: underside)

- 1, 9: *Melitaea alraschid alraschid* HIGGINS, 1941, ♂, Tadjikistan, Fanskie Mts., Kulikalon L., 3300-3500 m, 23.07.1998, Yu. & A. VASILCHENKO leg.
- 2, 10: *Melitaea alraschid garun* CHURKIN, 2000, paratype ♂, Kyrgyzstan, Matcha, Eastern edge of Turkestansky Mts., upper stream of Ak-Terek River, Noo-Dzhailo, 3550-3700 m, 19.-26.07.1999, V. PLETNEV leg.
- 3, 11: *Melitaea alraschid alraschid* HIGGINS, 1941, ♀, same data as 1.
- 4, 12: *Melitaea alraschid garun* CHURKIN, 2000, paratype ♀, same data as 2.
- 5, 13: *Melitaea alraschid irinae* **subspec. nov.**, holotype ♂, Peter the Great Mts., 23 km SE Tadjikobad, Ganishou v., 3400-3500 m, 20.-27.07.2011, V. TREMASOV leg.
- 6, 7, 8, 14, 15, 16: *Melitaea alraschid irinae* **subspec. nov.**, paratypes; same data as 5, V. TREMASOV leg.

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