

Two new subspecies of diurnal butterflies from Siberia (Lepidoptera: Rhopalocera)

S.K. Korb & R.V. Yakovlev

Korb, S.K. & Yakovlev, R.V. 1997. Two new subspecies of diurnal butterflies from Siberia (Lepidoptera: Rhopalocera). *Zoosystematica Rossica*, 5(2), 1996: 313-314.

Pyrgus serratulae albertianus Korb, ssp. n. (Altai, Transbaikal) and *Oeneis tarpeia rozhddestvenskyi* Korb & Yakovlev, ssp. n. (Altai) are described.

S.K. Korb, ul. Pobedy 13, kv. 36, Oktyabr'skiy, Bor Distr., Nizhny Novgorod Prov. 606480, Russia.

R.V. Yakovlev, ul. Chkalova 57, kv. 81, Barnaul 656099, Russia.

Family HESPERIIDAE

Pyrgus serratulae albertianus Korb, ssp. n.

Holotype. ♂, **Russia**, *Altai*, Ukok, Kara-Bulak, 2800 m, 10.VII.1995 (Yakovlev), Zoological Institute, St.Petersburg.

Paratypes. **Russia**. *Altai*: 5 ♂, as holotype but 15.VII.1994, and 16 ♂, 2 ♀, as holotype but 7-13.VII.1995, collection of R. Yakovlev; 8 ♂, 1 ♀, Ongodai [Onguday] and Tchuja [Chuya] Valley, Museum of Natural History, London. *Transbaikal*: 1 ♂, 4 ♀, Jablonovyy Khrebet [Yablonovy Range], Museum of Natural History, London. The material from the Museum of Natural History was listed by de Jong (1972: 73).

Description. Wingspan 12.7-14.5 mm. Upperside black; forewing with white medial, subcostal and discoidal spots; hindwing with white submarginal and medial spots (names of wing markings after de Jong (1972: Fig. 1)). Underside with pattern typical of this species, but hindwing with distinct and compact pattern.

Comparison. The new subspecies resembles *P. s. uralensis* Warren (Warren, 1926: 98, pl. 29, figs 1-6; type locality: "Uralsk") and *P. s. serratulae* (Rambur) (Rambur, 1839: pl. 8, fig. 9m; type locality: Spain), but differs from them in the pattern of wings (in *P. s. uralensis*, upperside of forewings with larger white spots and underside of hindwings with distinct white spots; in *P. s. serratulae*, upperside of hindwing with reduced spots intersected by the ground colour).

Family SATYRIDAE

Oeneis tarpeia rozhddestvenskyi Korb & Yakovlev, ssp. n.

Holotype. ♂, **Russia**, *Altai Terr.*, Shtabka, 25.VI.1992 (Yakovlev), Zoological Institute, St.Petersburg.

Paratypes. **Russia**, *Altai Terr.*: 2 ♂, Shtabka, 1.VI.1992 (Rozhddestvensky); 1 ♂, Protasovo, Khabary Distr., 11.VI.1988 (Perunov). Paratypes in R. Yakovlev's collection.

Description. Wingspan 21-23 mm (21 mm in holotype). Upperside ochreous, with dark veins and dark outer margin. Each wing with 4 deep-black round spots of postdiscal series. Upperside of forewing yellow-ochreous; external third grey; area from submarginal belt to base of wing variegated; postdiscal series of black spots on underside as on upperside. Underside of hindwing variegated, with light veins; external to brown belt a white belt present; internally there is a white spot almost completely lying in discal cell; black postdiscal spots as on upperside.

Comparison. *Oeneis tarpeia* (Pallas) (Pallas, 1771: 18; type locality: "southern Russia" (Lower Volga – Nekrutenko, 1990: 155)) belongs to the species group *O. tarpeia* (Gross, 1968; Lukhtanov, 1984). This group also includes *O. lederi* Alphéraky (Alphéraky, 1897: 185; type locality: Irkut Valley and environs of Urga [Ulan-Bator]), now considered a subspecies of *O. tarpeia* (Korshunov, 1982; Korshunov & Gorbunov, 1995), and *O. sapozhnikovii* Korshunov

(Korshunov, 1982: 86-88, figs 1b, 2; type locality: Mongolia, Central Aimak, 10 km NW of somon Mungen-Mort). The new subspecies can be distinguished from all taxa of the *O. tarpeia* group by the coloration.

O. t. rozhdestvenskyi is considerably darker and larger than *O. sapozhnikov* (wingspan 20 mm in male of *O. sapozhnikov*, 21-24 mm in *O. t. rozhdestvenskyi*). On the forewing, in *O. sapozhnikov* only 3 eyes, while in the new subspecies 4 eyes are present (one paratype has even 5 eyes on the upperside, but only 4 on the underside). The number of eyes and other peculiarities of wing coloration in *O. tarpeia* and *O. sapozhnikov* are exceedingly constant (Nekrutenko, 1990: 156), though in some other species of *Oeneis* they are variable.

O. tarpeia from Europe (the nominotypical subspecies) can be distinguished from *O. t. rozhdestvenskyi* by the larger size (wingspan more than 24 mm), coloration of the outer margin (darker, brighter, contrasting with the ground colour in the new subspecies and not contrasting, light grey in the nominotypical subspecies), paler veins and less bright spots of the postdiscal series.

The new subspecies can be distinguished from *O. t. lederi* in coloration (bright yellow in *O. t. lederi*, and dark, ochre in the new subspecies).

From the recently described *O. t. grossi* Eitschberger & Lukhtanov (Eitschberger & Lukhtanov, 1994: 164-165, col. pl. Va, figs 1-3; type locality: Buryatia, 20 km NW of Selenduma), the new subspecies can be distinguished by the darker ground colour of the upperside, distinct middle belt on the underside of hindwings, and smaller black spots on the upperside of wings (3 well-defined black spots on the upperside of forewing in *O. t. grossi*, 4 well-defined spots in the new subspecies).

Acknowledgements

We would like to thank Y.E. Perunov and Y. Rozhdestvensky (Barnaul) for the opportunity to examine their samples from Altai.

References

- Alphéraky, S. 1897. Mémoire sur différents lépidoptères, tant nouveaux que peu connus, de la faune paléarctique. *Mém. Lépid.*, 9: 185-227.
- Eitschberger, U. & Lukhtanov, V.A. 1994. Eine neue Unterart von *Oeneis tarpeia* Pallas, 1771 aus Buratien im Transbaikal (Lepidoptera, Satyridae). *Atalanta*, 25(1/2): 163-166.
- Gross, F.J. 1968. Zur Systematik und Verbreitung der Arten der Gattung *Oeneis* Hübner (Lep., Satyridae). *Mitt. Münch. entomol. Ges.*, 58: 1-26.
- Jong, R. de. 1972. Systematic and geographic history of the genus *Pyrgus* in the Palaearctic region (Lepidoptera Hesperidae). *Tijdschr. Entomol.*, 115(1): 1-121.
- Korshunov, Y.P. 1982. New forms of *Rhopalocera* (Lepidoptera) from North Asia. *Gelminty, kleshchi i nasekomye* [Helminths, mites and insects]: 86-91. Novosibirsk. (In Russian).
- Korshunov, Y.P. & Gorbunov, P.Y. 1995. *Dnevnye babochki aziatskoi chasti Rossii* [The diurnal butterflies of the Asian part of Russia]: 1-202. Ekaterinburg. (In Russian).
- Lukhtanov, A.A. 1984. A review of the Palaearctic satyrids of the genus *Oeneis* Hübner (Lepidoptera, Satyridae). I. *O. hora* Gr.-Gr. species group. *Entomol. Obozr.*, 63(4): 776-789. (In Russian).
- Nekrutenko, Y.P. 1990. *Dnevnye babochki Kavkaza* [The diurnal butterflies of Caucasus]: 1-216. Kiev. (In Russian).
- Pallas, P.S. 1771. *Reisen durch verschiedene Provinzen des Russischen Reiches in den Jahren 1768-1774*, 1: 1-504. St.Petersburg.
- Rambur, P. 1838-1842. *Faune entomologique de l'Andalousie*, 2: 1-336. Paris.
- Warren, B.C.S. 1926. Monograph of the tribe Hesperii (European species) with revised classification of the subfamily Hesperinae (Palaearctic species) based on the genital armature of the males. *Trans. r. entomol. Soc. Lond.*, 74: 1-170.

Received 10 May 1996