

**A new subspecies of *Satyrus ferula* (FABRICIUS, 1793)
from the Amur Province**

(Lepidoptera, Satyridae)

by

V. V. DUBATOLOV & A. N. STRELTZOV

received 30.IV.1999

Summary: A new subspecies—the easternmost one—of *Satyrus ferula* is described from the Amur Province of Russia. Butterflies are relatively large and characterized by a deep yellowish tint of the wing underside and by a contrasting light margination along the outer side of the dark medial band on the hindwing underside. A key to all Siberian subspecies is given.

Резюме: С территории Амурской области России описывается новый подвид *Satyrus ferula*, самый восточный из всех известных. Бабочки относительно крупные, характеризуются сильным оттенком писунка на нижней стороне крыльев и контрастным светлым окаймлением темной спединной перевязи синизу задних крыльев. Приводится определительная таблица для сибирских подвидов *S. ferula*.

Three subspecies of *Satyrus ferula* (FABRICIUS, 1793) were known so far from the Asian part of Russia: *S. ferula altaica* GRUM-GRSHIMAILO, 1893 inhabits the plain southern part of West Siberia; *S. ferula medvedevi* KORSHUNOV, 1996 was recently described from Tuva (Tyva); specimens from Transbaikalia were provisionally referred to *S. ferula liupiuschani* O. BANG-HAAS, 1933 (KORSHUNOV & GORBUNOV, 1995; KORSHUNOV, 1996), which was described from China, Southern Gansu ("Kansu mer."), Tsingschu (most probably, Tianshui). The description of the latter subspecies is very brief, and it is difficult to understand its characteristic features: "Spannweite: 60–64 mm. Vfl. ♂, 2 bläulich-weißgekernte Ozellen, dazwischen meist 2 deutliche, weiße Pünktchen; beim ♀ 2 große Ozellen, die obere Ozelle doppelt gekernt. Us. Hfl. ♂ weiße Mittel- und Außenbinde, Basis bräunlich-weiß, beim ♀ bräunlich-weiß mit 1–2 Analaugen" Nevertheless, it is clear that there is no yellowish tint on the wing underside in the females. This yellowish tint is an important character of the Amurian subspecies. Therefore we describe the Amurian butterflies as a new subspecies.

The new subspecies is named in honour of Prof. M. G. SERGEEV (Novosibirsk, Russia), a friend of the first author and a teacher of the second.

The holotype and part of the paratypes are preserved in the Siberian Zoological Museum at the Institute of Animal Systematics and Ecology, Siberian Branch of the Russian Academy of Sciences (Novosibirsk, Russia); 2 ♂♂ and 1 ♀ in the Institute of Biology and Pedology of the Far Eastern Branch of the Russian Academy of Sciences (Vladivostok, Russia); 2 ♂♂ in R. V. YAKOVLEV's private collection (Barnaul, Russia); few specimens in the collection of T. FUJIOKA (Tokyo, Japan); and others in the collection of the department of Zoology, Blagoveshchensk State Pedagogical University (Blagoveshchensk, Russia).

Satyrus ferula sergeevi subsp. nov.
(colour plate IXa, figs. 1–6)

Holotype ♀: Amur Province, 17 km SSW of Svobodnyi [Свободный] town, Malaya Sazanka [Малая Сазанка] village, 19.VII.1994, STRELTZOV leg.

Paratypes: 22 ♂♂, 18 ♀♀, same locality, 20., 23.VII.1994, STRELTZOV leg.; 17 ♂♂, 6 ♀♀, same locality, 13.–14.VII.1998, DUBATOLV, STRELTZOV leg.

Female: forewing length 33 mm in the holotype, 29–33 mm in paratypes. Wing upperside is very dark brown with a slightly lighter postdiscal band, becoming dirty-yellow around the ocelli. Forewings with 2 large black ocelli, centered with bluish-white cores, as in all the other Siberian subspecies. Small bluish-white spots on the postdiscal band of the forewing upperside are present between veins M2 and M3, M3 and CuA. The pattern of the underside is very variable, of a general type as in *S. ferula medvedevi* KORSHUNOV, 1996 and *S. ferula liupiuschani* O. BANG-HAAS, 1933, namely, the light pattern is rather contrasted, especially along the dark median band, but the hindwing underside always bears a noticeable yellowish tint.

Male: forewing length 29–33 mm. The wing upperside is deep dark-brown, almost black. Forewing usually with 2 postdiscal ocelli of different expression, centered with bluish-white cores. Usually there are small bluish-white spots on the discal wing part between veins M2 and M3, M3 and CuA. The pattern of the wing underside is very variable, of a general type as in *S. ferula medvedevi* KORSHUNOV, 1996 and *S. ferula liupiuschani* O. BANG-HAAS, 1933, namely, the light pattern is rather contrasted, especially along the dark median band.

The male and female genitalia (figs. 1, 2) do not deviate from the species' structure.

Habitat

The butterflies occur on dry meadows on mountain slopes, often near villages. The flight period is July, and possibly, August.

A key to the Siberian subspecies of *Satyrus ferula* (FABRICIUS, 1793)

- 1 In ♀♀ the light pattern on the hindwing underside is diffuse even along the outer margin of the dark median band. In ♂♂ the wing upperside is black with a light yellowish tint only around the apical ocellus. Forewing length ♂♂: 28–31 mm, ♀♀: 30 mm. Russia: southern regions of West Siberia. *S. ferula altaica* GR.-GR.
In ♀♀ the light pattern on the hindwing underside is contrasted along the external margin of the dark median band. 2
- 2 Smaller butterflies, forewing length ♂♂: 25–29 mm, ♀♀: 26–29 mm. In ♀♀ the wing upperside with a deep yellow tint, mainly in the postdiscal area; basal area often with a yellow tint as well. Russia: Tuva. Western Mongolia (?).
. *S. ferula medvedevi* KORSH.
Larger butterflies, forewing length ♂♂: 28–31 mm, ♀♀: 29–33 mm. In ♀♀ the wing upperside is dark, the light suffusion is visible only around the ocelli. 3
- 3 In ♀♀ the light diffuse pattern on the hindwing underside is white, without any yellow tint. Russia: Transbaikalia. eastern Mongolia, North China.
. *S. ferula liupiuschani* O. B.-H.

In ♀♀ the light diffuse pattern on the hindwing underside with a deep yellow tint. Russia: southern part of the Amur Province. North-Eastern China (?).

. *S. ferula sergeevi* subsp. nov.

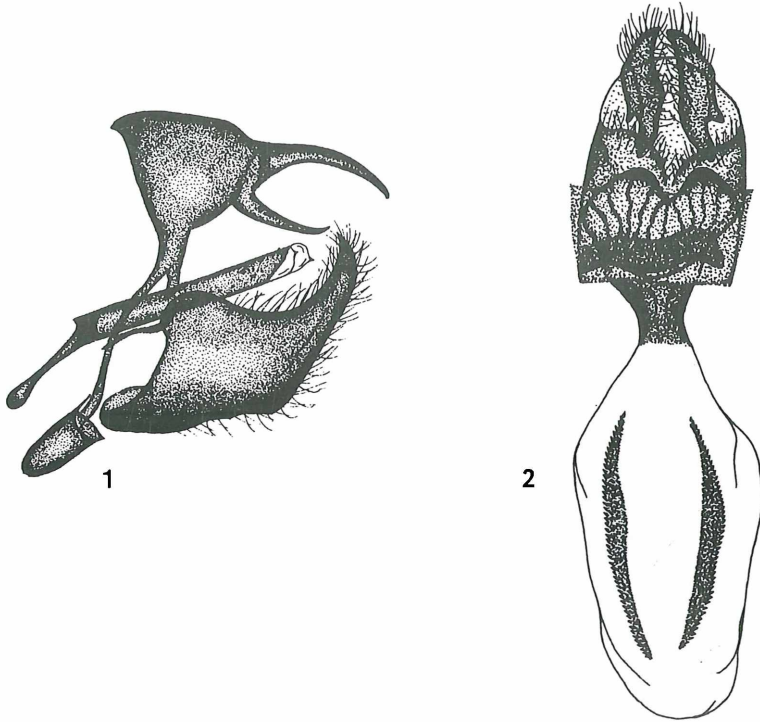


Fig. 1, 2: Genitalia of *Satyrus ferula sergeevi* subsp. nov. 1 – male. 2 – female.

The authors express their sincere gratitude to Dr. A. L. Lvovskiy (Zoological Institute, St.-Petersburg) for sending the description of *Satyrus ferula liupiuschani* and to Dr. O. E. KOSTERIN (Novosibirsk) for the correction of the English version of the paper.

References

- KORSHUNOV, Yu. P. (1996): Dopolneniya i ispravleniya k knige "Dnevnye babochki Aziatskoi chasti Rossii" [Additions and corrections to the book "Butterflies of Asian part of Russia"]. – Novosibirsk, 66 pp. (in Russian).
- KORSHUNOV, Yu. & P. GORBUNOV (1995): Dnevnye babochki Aziatskoi chasti Rossii. Spravochnik [Butterflies of Asian part of Russia. A guide]. – Ekaterinburg, 202 pp. (in Russian).

BANG-HAAS, O. (1933): Neubesreibungen und Berichtigungen der Palaearktischen Macrolepidopterenfauna VI. Ent. Zt. 47 (12): 97-100.

Explanation of colour plate IXa (p. 395):

Figs. 1-6: *Satyrus ferula sergeevi* subsp. nov. 1, 2 holotype ♀; 3, 4 - paratype ♀; 5, 6 paratype ♂. 1, 3, 5 upperside; 2, 4, 6 - underside.

1	2
3	4
5	6

addresses of the authors

V. V. DUBATOLOV
Siberian Zoological Museum
Institute of Animal Systematics and Ecology
Siberian Branch of Russian Academy of Sciences
Frunze street, 11
630091, Novosibirsk, Russia

A. N. STRELTZOV
Department of Zoology
Blagoveshchensk State Pedagogical University
Lenin street, 104
675000, Blagoveshchensk, Russia

Colour plate IXa

DUBATOLOV, V. V. & A. N. STRELTZOV: A new subspecies of *Satyrus ferula* (FABRICIUS, 1793) from the Amur Province (Lepidoptera, Satyridae). – *Atalanta* 30 (1/4): 125–128.

Figs. 1–6: *Satyrus ferula sergeevi* subsp. nov. 1, 2 – holotype ♀; 3, 4 – paratype ♀; 5, 6 – paratype ♂. 1, 3, 5 – upperside; 2, 4, 6 – underside.

1	2
3	4
5	6

Farbtafel IXb

LUKHTANOV, V. A.: Eine neue ungewöhnliche Art der Gattung *Neolycaena* aus Kirgisien (Lepidoptera, Lycaenidae). – *Atalanta* 30 (1/4): 129–134.

Abb. 1: *Neolycaena olga* spec. nov., Holotypus ♂, Kirgisien, Tienschan, Suusamyr-Kette (östlicher Teil), Kysyloi, 30 km W Tschaek, 1800 m, 3.–4.VII.1995, V. LUKHTANOV leg. (in coll. Zoologisches Institut St. Petersburg). Oberseite.

Abb. 2: *Neolycaena olga* spec. nov., Paratypus ♀, Kirgisien, Tienschan, Suusamyr-Kette (östlicher Teil), Kysyloi, 30 km W Tschaek, 1800 m, 3.–4.VII.1995, V. LUKHTANOV leg. (in coll. Zoologisches Institut St. Petersburg). Oberseite.

Abb. 3: *Neolycaena olga* spec. nov., Paratypus ♀, Kirgisien, Tienschan, Suusamyr-Kette (östlicher Teil), Kysyloi, 30 km W Tschaek, 1800 m, 3.–4.VII.1995, V. LUKHTANOV leg. (in coll. Zoologisches Institut St. Petersburg). Oberseite.

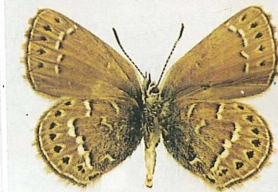
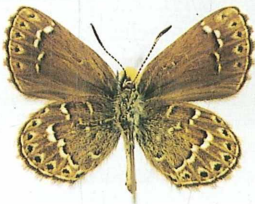
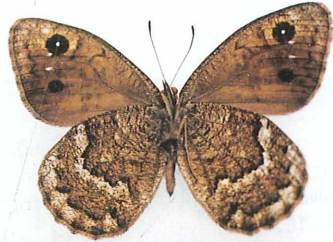
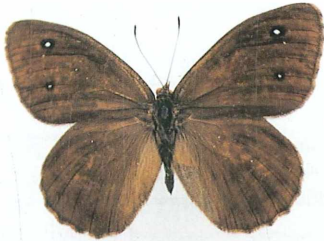
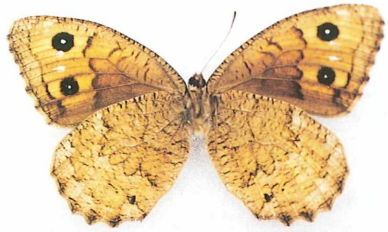
Abb. 4: *Neolycaena olga* spec. nov., Holotypus ♂, Kirgisien, Tienschan, Suusamyr-Kette (östlicher Teil), Kysyloi, 30 km W Tschaek, 1800 m, 3.–4.VII.1995, V. LUKHTANOV leg. (in coll. Zoologisches Institut St. Petersburg). Unterseite.

Abb. 5: *Neolycaena olga* spec. nov., Paratypus ♀, Kirgisien, Tienschan, Suusamyr-Kette (östlicher Teil), Kysyloi, 30 km W Tschaek, 1800 m, 3.–4.VII.1995, V. LUKHTANOV leg. (in coll. Zoologisches Institut St. Petersburg). Unterseite.

Abb. 6: *Neolycaena olga* spec. nov., Paratypus ♀, Kirgisien, Tienschan, Suusamyr-Kette (östlicher Teil), Kysyloi, 30 km W Tschaek, 1800 m, 3.–4.VII.1995, V. LUKHTANOV leg. (in coll. Zoologisches Institut St. Petersburg). Unterseite.

1	2	3
4	5	6

Colour plate IXa / Farbtafel IXb



ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Atalanta](#)

Jahr/Year: 1999

Band/Volume: [30](#)

Autor(en)/Author(s): Dubatolov Vladimir V., Streltsov A. N.

Artikel/Article: [A new subspecies of *Satyrus ferula* \(Fabricius, 1793\) from the Amur Province \(Lepidoptera, Satyridae\) 125-128](#)