

# First data about the Papilionoidea from Khara-Adzragyn-Nuruu Protected Area (South-Western Mongolia) (Lepidoptera: Papilionoidea)

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## Abstract

The article gives for the first time the list of the Papilionoidea, collected in July on the territory of Khara-Adzragyn-Nuruu Protected Area (Gobi-Altai aimak, Mongolia). The list includes 26 species, three of them are endemics of the Mongolian Altai: *Tongeia bisudu* Zhdanko & Yakovlev, 2001, *Agrodiaetus mediator* Dantchenko & Churkin, 2003 (Lycaenidae), and *Erebia chastilovi* Churkin, 2003 (Nymphalidae).

KEY WORDS: Lepidoptera, Papilionoidea, fauna, Mongolian Altai, Mongolia.

## Primeros datos acerca de los Papilionoidea del Área Protegida de Khara-Adzragyn-Nuruu (Sudoeste de Mongolia) (Lepidoptera: Papilionoidea)

## Resumen

El artículo da, por primera vez, la lista de los Papilionoidea, colectados en julio en el territorio del Área Protegida de Khara-Adzragyn-Nuruu (provincia de Gobi-Altai, Mongolia). La lista incluye 26 especies, tres de ellas son endémicas del Altai mongolés: *Tongeia bisudu* Zhdanko & Yakovlev, 2001, *Agrodiaetus mediator* Dantchenko & Churkin, 2003 (Lycaenidae) y *Erebia chastilovi* Churkin, 2003 (Nymphalidae).

PALABRAS CLAVE: Lepidoptera, Papilionoidea, fauna, Altai Mongol, Mongolia.

## Introduction

The fauna of Papilionoidea of Mongolia, including the Mongolian Altai, in general, is satisfactorily studied (TSHIKOLOVETS *et al.*, 2009; YAKOVLEV, 2012a). Taxa new to science continue to be still discovered (YAKOVLEV, 2015; DUBATOLOV *et al.*, 2016). The local faunas of western Mongolia Butterflies are described in several papers (YAKOVLEV & DOROSHKIN, 2006; YAKOVLEV, 2012b).

In the recent years in Mongolia, many protected areas have been created. Most often they are aimed at the protection of large mammals, rare bird species, and also at organizing scientific and ecological tourism. Though, local faunas of insects are completely not studied in these areas. In 2010, our expeditionary team managed to work on the territory of the mountain ridge Khara-Adzragyn-Nuruu (South-Western Mongolia, Gobi-Altai Aimak [district]) (Fig. 1), which later got the status of “protected area”. The present article gives a brief overview on the collected material.

## Material and methods

The collection was performed in two localities, indicated below as (1) and (2). The material was collected with a butterfly net in the daytime, later mounted on pins and labeled.

(1) SW Mongolia, Gobi-Altai aimak, Mongolian Altai Mts., Khara-Adzragyn-Nuru Mts., Najtvaryn-Sajr river Valley (upper stream), 13-14-VII-2010, 2500-2850 m, 45° 50'N; 95° 34'E; R. Yakovlev & E. Guskova leg. (Fig. 2).

(2) SW Mongolia, Gobi-Altai aimak, Mongolian Altai Mts., Hara-Adzragyn-Nuru Mts., Najtvaryn-Sajr river Valley (under stream), 15-16-VII-2010, 1700-2000 m, 45° 52'N; 95° 30'E; R. Yakovlev & E. Guskova leg. (Fig. 3).

The material deposited in the author's collection (Barnaul, Russia).

## Annotated list of species

(\*) - endemic species for Mongolian Fauna

Family Hesperidae Latreille, 1809

*Pyrgus alveus* (Hübner, [1803])

(2) 2 ♂♂.

Family Papilionidae Latreille, 1802

*Parnassius phoebus tsenguun* Churkin, 2003

(1) 4 ♂♂, 1 ♀.

*Papilio machaon* Linnaeus, 1758

(1) 2 ♂♂.

Family Pieridae Duponchel, 1835

*Pontia edusa* (Fabricius, 1777)

(2) 4 ♂♂.

*Pieris bryoniae* (Hübner, [1806])

(1) 3 ♂♂, 1 ♀.

*Colias chrysotheme* (Esper, 1781)

(2) 1 ♂, 1 ♀.

Family Lycaenidae Leach, 1815

*Lycaena phlaeas* (Linnaeus, 1761)

1) 2 ♂♂.

\**Tongeia bisudu* Zhdanko & Jakovlev, 2001

(2) 1 ♂.

*Plebejus argyrognomon* (Bergsträsser, 1779)

(2) 4 ♂♂, 2 ♀♀.

*Plebejus idas shadzgat* Yakovlev, 2012

(1) 12 ♂♂, 4 ♀♀.

*Eumedonia eumedon* (Esper, 1780)

(2) 4 ♂♂, 1 ♀.

*Agriades glandon ustjuzhanini* Yakovlev & Churkin, 2003

(1) 11 ♂♂, 4 ♀♀.

*Albulina orbitulus jugnei* Churkin, 2004

(1) 7 ♂♂, 2 ♀♀.

\**Agrodiaetus mediator* Dantchenko & Churkin, 2003

(2) 5 ♂♂.

Family Nymphalidae Swainson, 1827

*Boeberia parmenio* (Boeber, 1809)

(1) 2 ♂♂, (2) 4 ♂♂, 1 ♀.

*Coenomympha amaryllis* (Stoll, 1782)

(2) 14 ♂♂, 4 ♀♀.

*Triphysa nervosa mongolaltaica* Dubatolov, Korb & Yakovlev, 2016

(1) 3 ♂♂, 1 ♀.

\**Erebia chastilovi* Churkin, 2003

(1) 18 ♂♂, 3 ♀♀.

*Hyponephele lycaon kerzhneri* Yakovlev, 2011

(2) 19 ♂♂.

*Hyponephele cadusina* (Staudinger, 1881)

(3) 12 ♂♂, 3 ♀♀.

*Oeneis nanna* (Ménétriés, 1859)

(1) 1 ♂.

*Aglais urticae* (Linnaeus, 1758)

(1) 2 ♂♂.

*Euphydryas iduna eremita* Churkin, 2003

(1) 3 ♂♂.

*Melitaea cinxia mogoin* Churkin & Kolesnichenko, 2005

(2) 12 ♂♂, 6 ♀♀.

*Melitaea arcesia dea* Churkin & Kolesnichenko, 2003

(1) 11 ♂♂, 7 ♀♀.

*Boloria altica* (Grum-Grshimailo, 1893)

(1) 22 ♂♂, 3 ♀♀.

## Conclusion

Thus, on the territory of Khara-Adzragyn-Nuruu Protected Area, 26 species of Lepidoptera have been found; three of them are endemics of the Mongolian Altai: *Tongeia bisudu* Zhdanko & Jakovlev, 2001, *Agrodiaetus mediator* Dantchenko & Churkin, 2003 (Lycaenidae), and *Erebia chastilovi* Churkin, 2003 (Nymphalidae).

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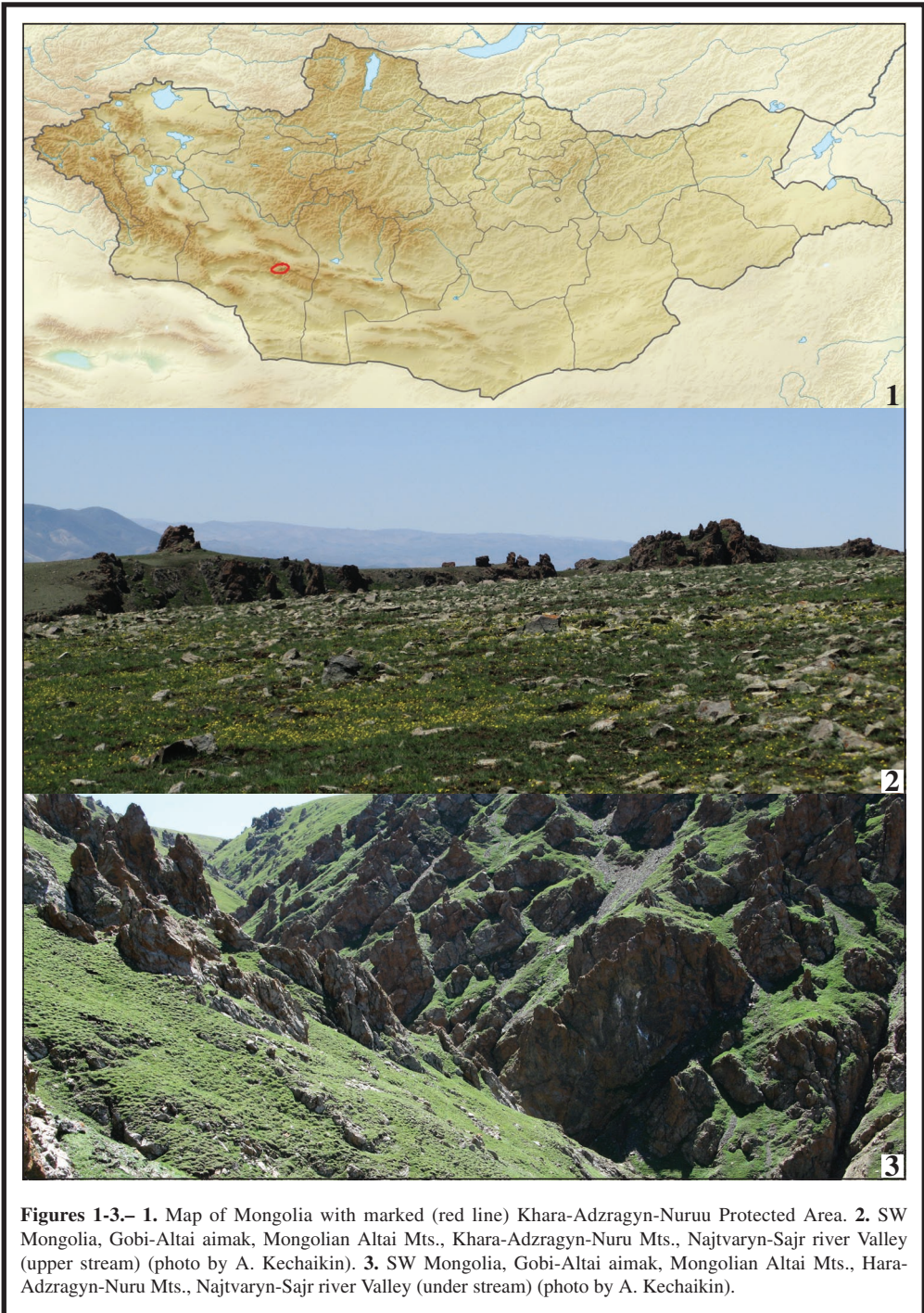
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**Figures 1-3.**– **1.** Map of Mongolia with marked (red line) Khara-Adzragyn-Nuruu Protected Area. **2.** SW Mongolia, Gobi-Altai aimak, Mongolian Altai Mts., Khara-Adzragyn-Nuru Mts., Najtvaryn-Sajr river Valley (upper stream) (photo by A. Kechaikin). **3.** SW Mongolia, Gobi-Altai aimak, Mongolian Altai Mts., Hara-Adzragyn-Nuru Mts., Najtvaryn-Sajr river Valley (under stream) (photo by A. Kechaikin).