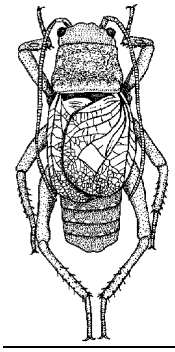


Far Eastern Entomologist

Дальневосточный энтомолог

Journal published by Far East Branch
of the Russian Entomological Society
and Laboratory of Entomology,
Institute of Biology and Soil Science,
Vladivostok

Number 250: 1-6 ISSN 1026-051X August 2012

NEW AND LITTLE KNOWN FOR RUSSIAN FAUNA MOTHS (LEPIDOPTERA, MACROHETEROCERA) FROM THE SOUTH OF FAR EAST

Y. A.Tshistjakov[1)], G. A. Grigoriev[2)] and S. I. Didenko[3)]

1) *Institute of Biology and Soil Science, Far Eastern Branch of Russian Academy of Sciences, Vladivostok, 690022, Russia. E-mail: chistyakov@ibss.dvo.ru*

2) *Industrialnyi prospect 38/2, apt. 270, St-Petersburg, 195279, Russia. E-mail: cajarc@mail.ru*

3) *National University of Science and Technology, Moscow, 119049, Russia. E-mail: sdi13@mail.ru*

Somena pulverea (Leech, 1889) (Lymantriidae) is recorded from Russia for the first time. *Peridea elzet* Kiriakoff, 1963 (Notodontidae) is newly recorded from Khabarovskii krai. Short diagnosis, description and the pictures of their genitalia are given.

KEY WORDS: Notodontidae, Lymantriidae, new records, Russian Far East.

Ю. А.Чистяков[1)], Г. Г. Григорьев[2)], С. И. Диденко[3)]. Новые и малоизвестные для фауны России чешуекрылые (Lepidoptera, Macroheterocera) с юга Дальнего Востока // Дальневосточный энтомолог. 2012. N 250. С. 1-6.

Somena pulverea (Leech, 1889) (Lymantriidae) впервые указывается для фауны России, а *Peridea elzet* Kiriakoff, 1963 (Notodontidae) – для Хабаровского края. Для обоих видов приводятся диагнозы, описания и рисунки гениталий.

1) *Биолого-почвенный институт Дальневосточного отделения Российской академии наук, Владивосток, 690022, Россия.*

2) *Индустриальный проспект, 38, корп. 2, кв. 270, Санкт-Петербург, 195279, Россия.*

3) *Московский институт стали и сплавов, Ленинский проспект, 4, Москва, 119049, Россия.*

INTRODUCTION

So far *Peridea elzet* Kiriakoff, 1963 from Notodontidae was known in the Russian Far East upon two records (Dolinskaya, 1993; Lepidoptera, 2011), consisting nothing more, but data about two localities of this species within south part of Primorskii krai only.

Somena pulverea (Leech, 1889) from Lymantriidae described upon 3 specimens from Gensan (Kangwon-Do, North Korea) and Hakodate (South-East Hokkaido, Japan) (Leech, 1889) has rather wide area in East Asia, including adjacent to the Russian Far East territories, but still never was recorded from Russia.

The first author got a possibility to study some material on Lepidoptera, collected by amateurs during their collecting trips to Russian Far East in 2010-2011. Among this material both of these species were found. After that two males of *Peridea elzet* were found in the collection of the Institute of Biology and Soil Science, Vladivostok, where they have been misidentified with *Peridea graeseri* Stgr. specimens.

The data about collecting sites of the species mentioned above are given herein. Material under discussion (besides two mentioned above males of *P. elzet* and one female of *S. pulverea* in the collection of the Institute of Biology and Soil Science) is deposited in the private collections of the persons, indicated in the proper places of the paper. In addition, short diagnosis with descriptions and the genitalia figures of the species under discussion are given also.

Family Notodontidae

Peridea elzet Kiriakoff, 1963

MATERIAL EXAMINED. **Russia**: Khabarovskii krai: 1♀, Khabarovsk, airport, 48˚24´176´´N, 135˚5´4583´´E, 25.VIII 1972 (M.G. Nagomatulin leg.); Primorskii krai: 1♀, Arsenjev, 44˚18´4666´´N, 133˚28´064´´E, 27.VII 1987 (G.A. Grigoriev leg., this specimen was recorded by I.V. Dolinskaya (1993) also); 1♀, Nahimovka vil., 20 km E Spassk, 44˚37´6´´N, 133˚07´´E, 19-25.VII 2010 (V.N. Vasilenko leg.); 2♂, Barabash-Levada vil., 44°45'0"N, 131°25'0"E, 16.VII 1976 (Yu.A. Tshistjakov leg.)

DISTRIBUTION. Russian Far East: Khabarovskii krai (first record) and south of Primorskii krai; North, Central and South China (Schinlmeister, 1991), North and South Korea (Witt, 1985; Tshistjakov & Kwon, 1999), Japan (Honshu, Shikoku, Kyushu, Tsushima Is.) (Sugi, 1982). The closest locality of this species to the Russian localities was known from Mt. Myohang-san, North Korea (Schintlmeister, 1989).

DIAGNOSIS. In appearance (Fig. 1) similar to *Peridea graeseri* (Staudinger, 1892), but fore wing shorter, with antemedian line curved after costa (it is straight near

Figs. 1–2. Moths: 1 – *Peridea elzet* Kir.; 2 – *Euproctis pulverea* Leech.

costa in *P. graeseri*) and with clearly distinguishable postmedian line (it is weakly visible in *P. graeseri*). MALE GENITALIA (Fig. 3, 4). Quite identical to those of the specimens from Korea (see fig.: Tshistjakov & Kwon, 1999: 239) and resembles those of *P. gigantea* Butler, 1877, differing by narrow costa before top of valva and by aedeagus without cornuti in vesica.

REMARKS. This species was omitted in the "Key to the Insects of the Russian Far East" (Tshistjakov, 2001) and the proper paragraph in the text on page 553 of this book after couplet 5 should be added by following couplets:

6. Basal and antemedian lines on the fore wings are well developed. A top of the hind wings without dusting of the rusty-brown scales …..……..…….... 7
– Basal and antemedian lines on the fore wings are weakly developed. A top of the hind wings with dusting of the rusty-brown scales. (Herein after the text dealt with *Peridea jankowskii* Oberth. should be).
7. Fore wing elongated, nearly two and half times longer then its width, with antemedian line straight near costa and with indistinct postmedian line; ground color of fore wing ash- or silver-grey. (Then the proper text dealt with *Peridea graeseri* Stgr. up to phrase "aedeagus with 1 short stilet process on top" and then additional remark as following: costa of valva of the same width along all its length; vesica with numerous spicular cornuti. After this remark – the rest part of the thesis dealt with *P. graeseri* Stgr.)
– Fore wing shorter, nearly two times longer then its width, with antemedian line curved after costa and with with clearly distinguishable postmedian line; ground color of fore wing darker, dingy grey or blackish-grey. In male genitalia costa of valva more slender in distal third, after ventral process; ventral process of costa blunt-pointed at top; aedeagus with 2 long stilet processes on top; vesica without spicular cornuti. Male: 49-50, female: 50-51. – Russian Far East (Primorskii krai); North, Central and South China, North and South Korea, Japan (Honshu, Shikoku, Kyushu, Tsushima Is.) …… ***P. elzet*** Kir.

Family Lymantriidae

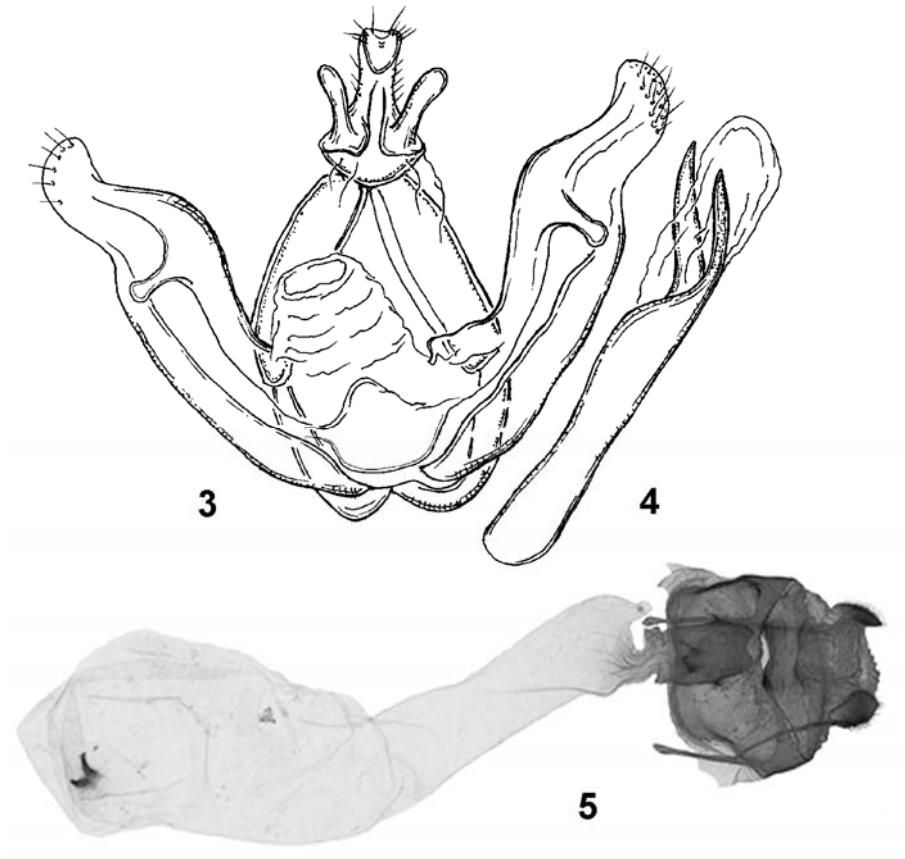
***Euproctis* (*Somena*) *pulverea* (Leech, [1889]).**

MATERIAL EXAMINED. Primorskii krai: 2 ♀, Nahimovka vil., 44˚37´60´´N, 133˚07´00´´E, 19-25.VII 2010 (V.N. Vasilenko leg.); 1 ♀, Novovladimirovka vil., 44˚36´00´´N, 133˚07´00´´E, 31.VII 2011 (S.I. Didenko leg); 4 ♀, Anuchino vil., 43˚57´24´´N, 133˚03´34´´E, 25-28.VII 2011 (S.I. Didenko leg).

DISTRIBUTION. Russia (first record): south of Primorskii krai; North, Central and South China, Taiwan, (Chao Chung-ling, 1982), North and South Korea (Park, 2000), Japan (Honshu, Shikoku, Kyushu, Okinoshima, Tanegashima, Yakushima, Okinawa) (Inoue, 1957).

DIAGNOSIS. In appearance (Fig. 2) similar to *Euproctis piperita* (Oberthür, 1880), but in general smaller, especially the males; fore wing pattern (if it is expressed) represented by dusting of brown scales on the most part of the wing, but without black dots in the outer space, as they are in *E. piperita*. Male genitalia (see: Inoue, 1957: 202, fig. 48) quite differs from those of *E. piperita* by double-peak, but not trifurcate uncus and by deeply emarginated, but not solid valva.

FEMALE GENITALIA (Fig. 5). Papillae anales flattened at top, widely separated apart. Apophises anteriores nearly of the same length as apophises posteriores. Antrum broad, moderately sclerotized, about quarter of ductus bursae length, separated from ductus bursa by narrow strangulation; ductus bursae long, cylindrical; corpus bursae elliptical, with two-horned signum near bottom.



Figs. 3–5. Genitalia: 3, 4 – *Peridea elzet* Kir., male: 3 – caudal view; 4 – aedeagus; 5 – *Euproctis pulverea* Leech, female.

REMARKS. This species was not included in the "Key to the Insects of the Russian Far East" (Tshistjakov, 2003) and the proper paragraph in the text on page 636 of this book should be added by following couplets:

1. Fore wing pattern represented by dusting of the brown scales in the middle or on the most part of a wing ……..…….. 2
– Fore wing pattern represented by narrow arcuate ocherous or dark-yellow band, crossing wing from costa up to dorsum. (Then the proper text dealt with *Euproctis subflava* Brem.)

2. (Thesis dealt with *Euproctis piperita* Oberth.)

– Fore wing pattern without black dots in outer space. In male genitalia uncus concave, with two small and sharply pointed processes on top; valva broad, bilobated, with ventral process sharply pointed on top. In female genitalia ostium in a deep membranous sinus; ductus bursae cylindrical, nearly the same length as corpus bursae; corpus bursae elliptical, with with two-horned signum near bottom. Male: 22-25, female: 28-32. – Russian Far East (south of Primorskii krai); North, Central and South China, North and South Korea, Japan (Honshu, Shikoku, Kyushu, Okinoshima, Tanegashima, Yakushima, Okinawa), Taiwan …….…… ***E. pulverea*** Leech

REFERENCES

Chao, Chung-ling, 1982. Lymantriidae. P. 163–190, pl. 50-62. *In*: Fang, C. et al. *Iconographia Heterocerorum Sinicorum. Vol. 2*. Institute of Zoology, Academia Sinica, Beijing.

Dolinskaya, I.V. 1993. Pervaya nakhoka hohlatki *Peidea elzet* Kiriakoff (Lepidoptera, Notodontidae) v Primorskom krae. Vestnik zoologii, 3: 84. (In Russian).

Inoue, H. 1957. A revision of Japanese Lymantriidae (II). *Japanese Journal of Medical Science and Biology*, 10: 187–219.

Leech, J.H. 1889. On the Lepidoptera of Japan and Corea. Part II. Heterocera. *Proceeding of the Zoological Society, London*, 2: 474–571, pl. 50-53.

Lepidoptera. 2011. http://szmn.eco.nsc.ru/old/Lepidop/Lepidopt.htm (accessed 20.12. 2011)

Park, K.T. 2000. Family Arctiidae, Lymantriidae, Lasiocampidae, Sphingidae. Economic Insects of Korea 1. *Insecta Koreana*, Suppl. 8: 1–276.

Schinlmeister, A. 1989. Ein Beitrag Eur Zahnspinnerfauna der Koreanicshen Halbinsel (Lepidoptera, Notodontidae). Nota Lepidopterologica, 12: 206–226.

Schinlmeister, A. 1991. Die Zahnspinner Chinas (Lepidoptera, Notodontidae). *Nachr. Entomol. Ver. Apollo*. Frankfurt. Suppl. 11: 1–343.

Sugi, S. 1982. Notodontidae. *In*: Inoue et al., *Moths of Japan*. Kodansha Co. Ltd., Tokyo. 1982. Vol. 1: 603–628, Vol. 2: 322–330, pl. 137-146. (In Japanese).

Tshistjakov, Yu.A. & Kwon, Y.D. 1999. Notodontidae. *In*: Park, K.T. (ed.). *Illustrated Catalogue of Moths in Korea. Insects of Korea.* Series 4. P. 179–335.

Tshistjakov, Yu.A. 2001. 62. Fam. Notodontidae. *In*: Lehr, P.A. (ed.). *Key to the Insects of the Russian Far East. Vol. V. Trichoptera and Lepidoptera. Pt. 3*. Vladivostok, Dal'nauka. P. 525–589.

Tshistjakov, Yu.A. 2003. 63. Fam. Notodontidae. *In*: Lehr, P.A. (ed.). *Key to the Insects of the Russian Far East. Vol. V. Trichoptera and Lepidoptera. Pt. 4*. Vladivostok, Dal'nauka. P. 603–636.

Witt, T. 1985. Bombyces et Sphinges aus Korea, III. (Lepidoptera: Notodontidae, Thyatiridae, Limacodidae, Sesiidae, Cossidae). *Folia Entomologica Hungarica*, 46(2): 195–210.