



Entomofauna

ZEITSCHRIFT FÜR ENTOMOLOGIE

Band 30, Heft 4: 53-60

ISSN 0250-4413

Ansfelden, 2. Jänner 2009

A new species of *Trichiura* STEPHENS, 1828 (Lepidoptera, Lasiocampidae) from Lebanon

Vadim V. ZOLOTUHIN & Aidas SALDAITIS

Abstract

Trichiura brandstetteri sp. n. is described from Lebanon with type locality “Hadath el Joubbe, Wadi Ain er Raha, H-1470 m”. The new species belongs to *Trichiura verenae* WITT, 1981 - *stroehlei* ZOLOTUHIN, 2007 group and is distinguished from both by having an almost straight forewing postmedial fascia, angled ventral margin of valva and longer, straight saccular processes in male genitalia. The holotype of the new species is preserved in the collection of Thomas Witt Museum (Munich). The genus is for the first time recorded from Lebanon. An annotated check list of the genus is given.

Key words. Lepidoptera, Lasiocampidae, *Trichiura*, taxonomy, new species, Lebanon.

Zusammenfassung

Trichiura brandstetteri sp. n. wird aus dem Libanon beschrieben mit der Typenlokalität “Hadath el Joubbe, Wadi Ain er Raha, H-1470 m”. Die neue Art gehört zur *Trichiura verenae* WITT, 1981 - *stroehlei* ZOLOTUHIN, 2007 Gruppe und unterscheidet sich von beiden durch die fast gerade Vorderflügel-Postmedialbinde, gewinkelten Ventralrand der Valve und längeren, geraden Saccularfortsätzen in den männlichen Genitalien. Der Holotypus der neuen Art wird in der Sammlung des Thomas Witt Museum (München) hinterlegt. Die Gattung wird zum ersten Mal aus dem Libanon gemeldet. Eine kommentierte Checkliste der Gattung ist beigefügt.

Introduction

The genus *Trichiura* STEPHENS, 1828 was recently revised (ZOLOTUHIN, 2007) and its specific composition arranged in a more or less understandable way. Some new species and very interesting records were obtained since the revision was sent to the redaction (yet in 2004!). One of them is the presence of a new species of *Trichiura* in Lebanon, collected by J. KRÜGER and A. SALDAITIS in 2005. The present article is devoted to its description.

The following abbreviations are used in the text of the article:

BIN – Biological Institute, Novosibirsk (Russia);

BMNH – The Natural History Museum, London (Great Britain);

CJBW – collection of Johann BRANDSTETTER (Winhoring, Germany);

CMSW – collection of Manfred STRÖHLE, Weiden (Germany);

MNHN – Museum national d’Histoire naturel, Paris (France);

MWM – entomological Museum of Thomas J. WITT (Munich, Germany);

NHMK – Staatliches Museum für Naturkunde, Karlsruhe (Germany);

ZMHUB – zoological Museum of the Humboldt University of Berlin (Germany).

***Trichiura brandstetteri* ZOLOTUHIN & SALDAITIS, sp. n.**

Figs 1, 2

Holotype ♂: Lebanon, Hadath el Joubbe, Wadi Ain er Raha, H-1470 m, 11-14. XI. 2005, leg. KRÜGER & SALDAITIS (MWM).

Paratypes: 2 ♂, Lebanon, Hadath el Joubbe, Wadi Ain er Raha, H-1470 m, 11-14.XI. 2005, leg. KRÜGER & SALDAITIS; 2 ♂, Lebanon, Aarab ei Laqlouq vill. env., H-1640 m, 9-10. XI. 2005, leg. KRÜGER & SALDAITIS. The paratypes of the new species will be deposited in Thomas WITT Museum (MWM), and collections of Johann BRANDSTETTER (Winhoring, Germany) and Vadim V. ZOLOTUHIN (Uljanovsk, Russia).

Description. Male. Wingspan 24-27 mm, forewing length 13-14 mm. Externally is a typical member of the genus strongly resembling *Trichiura stroehlei* Zolotuhin, 2007. Antennae with very long rami (fig. 5). Forewings light ash-grey with abundant admixture of whitish scales in external field; pattern consists of darker basal field, dark grey medial field, serrate and vague grey external fasciae and suffused greyish triangular shadow between external and postmedial fasciae. Shape of both medial fasciae is especially characteristic (fig. 4). Antemedial fascia slightly curved, with distinct fracture on R branch; postmedial fascia almost straight, without teeth or only very unapparent ones in some specimens.

Hindwings light ash-grey, more or less uniform colored, with lighter transversal fascia. Cilia uniformly greyish in hindwings, but lighter in forewings, with darker tips of the scales and characteristic triangular dark grey spots between veins basally.

Male genitalia (fig. 6). Uncus with medial narrowing and two apical spherical lobes; gnathos of typical shape for the genus, rectangular ventrally; valvae with distinct sacculus, having right-angular ventral projection and distal process long, straight and awl-shaped. Aedeagus tubular, very insignificantly C-curved, with short coecum and suffused basally elongated cornutus situated on small zone of scobination. Apical spur absent.

Female unknown.

Diagnosis. This small species with light general coloration can be easily confused with light colored specimens of *T. stroehlei* ZOLOTUHIN, 2007. It occurs in sympatry with the latter which is also known from the environments of Aarab ei Laqlouq village (fig. 3). Externally, both species can be distinguished by very characteristic shape of postmedial fascia which is straighter in the new species but with two distinct teeth in *T. stroehlei* (fig. 4). Male genitalic preparation should be used to define specific attribution exactly. In male genitalia, the angled ventral margin of valva and longer straight saccular processes are very characteristic (figs 6, 7).

Taxonomic notes. The species should be considered as a member of one complex with *Trichiura stroehlei* ZOLOTUHIN, 2007, and *T. verenae* WITT, 1981, which is proved by long rami in male antennae as well as by characteristic genitalia with shortened saccular tip and angled ventral edge of valve.

Biology. Little known. The 5 specimens known were collected in first half of November inhabiting altitudes of 1470-1640 m. They were attracted to both kind a light, UV and day-light, in a very cold night with about just +5°C. *Griposia pinkeri* KOBES, 1973, *Dasypolia (D.) ferdinandi libanotica* DRAUDT, 1933 and some other autumnal Noctuidae were also collected together with it.

Nothing is known about females, pre-imaginal stages and host-plants of the new species. Presumably the caterpillars feed on *Cerasus*, *Amygdalus* and *Quercus* quite abundant in the type locality. In the biotope (fig. 8), small river valleys in Cedrus mountains with very rich trees, bushes and different grass vegetation are present. Here dominate *Berberis cretica*, *Fraxinus ornus*, *Origanum libanoticum*, *Paeonia kesrouanensis*, *Prangos asperula* and different species of *Cerasus*, *Amygdalus*, *Quercus*, *Carduus*, *Echinops*, *Euphorbia*, *Glaucium*, *Onybrachis* and *Acantholimon*. A part of the those river valleys are used by local people for growing apple trees with application of a lot of pesticides, a probable reason for the minor quantity of new species and other moths generally.

Distribution. Lebanon. It is first information of presence of the genus for the country.

Etymology. The new species is named in honour of famous German painter Johann BRANDSTETTER, who has a very interesting moth collection.

Thus, with description of this new species, the specific composition of the genus can be presented as follows:

***Trichiura* STEPHENS, 1828**

Ill. Br. Ent. (Haustellata) 2: 42. Type-species: *Phalaena Bombyx crataegi* LINNAEUS, 1758, *Sys. Nat.* (ed. 10) 1: 502, by monotypy.

Trichola GISTL, 1848, Naturg. Tierreichs: xi. *Trichola* was established unnecessarily as an objective replacement name for *Trichiura* STEPHENS, 1828.

Achnocampa RAMBUR, 1858, Cat. syst. Lepid. Andalousie (1): pl. 5, fig. 4. Type-species: *Achnocampa ilicis* RAMBUR, 1858, ibidem (1): pl. 5, fig. 4, by monotypy.

***Trichiura crataegi* (LINNAEUS, 1758)**

***Trichiura crataegi crataegi* (LINNAEUS, 1758)**

Phalaena Bombyx crataegi LINNAEUS, 1758, Syst. Nat. (ed. 10) 1: 502. Type-locality: not stated [Europe]. Type: male

Bombyx ariae HÜBNER, 1823/24, Samml. Eur. Schmet., Bomby., pl. 69, figs 288-289. Type-locality: not stated (montaneous dark form). Types: [not examined].

Trichiura crataegi ssp. *scytharum* SEITZ, 1912, Großschmett. Erde 2: 447. Type-locality: [Russia, east Siberia] Sajan Mts. Holotype: male (ZMHUB) [examined].

Trichiura crataegi albicans DANIEL, 1956, NachrBl. bayer. Ent. 5: 69. Type-locality: [Southern France] Dép. Charente inf., Boussay. Holotype: male (coll. MWM) [examined].

Trichiura crataegi vallisincola DANIEL, 1956, NachrBl. bayer. Ent. 5: 79. Type-locality: Nordtirol, Kössen, 580m. Holotype: male (coll. MWM) [examined].

Trichiura crataegi griseotincta DANIEL, 1956, NachrBl. bayer. Ent. 5: 79. Type-locality: Teriolis mer., Überetsch, Kaltern bei Bozen, 600m. Holotype: male (coll. MWM) [examined].

Trichiura crataegi borealis DANIEL, 1956, NachrBl. bayer. Ent. 5: 91. Type-locality: [Schweden] Jämtland. Holotype: male (coll. MWM) [examined].

Trichiura crataegi f. *passini* BOURSIN, 1957, Bull. mens. Soc. linn. Lyon 26: 111. Type-locality: [France] Ruillé Froid-Fonds (Mayenne), commune située à 10 km au nord-est de Château-Gontier. Holotype: male [not examined].

Distribution: From Europe to north-eastern Siberia of Russia, Ciscaucasus, southern part of Russian Far East, northern and north-eastern Kazakhstan and northern Mongolia.

***Trichiura crataegi anatolica* DANIEL, 1956**

Trichiura crataegi anatolica DANIEL, 1956, NachrBl. Bayer. Ent. 5: 71. Type-locality: Syria sept., Taurus c., Marasch, 600-900 m. Holotype (by original designation): male (MWM) [examined].

Distribution: Mountains of asiatic part of Turkey (very local: prov. Bolu, Artvin and Taurus, Marasch), Caucasus and Transcaucasus (Georgia, Armenia, Aserbajan).

***Trichiura crataegi lasistana* de FREINA, 1979**

Trichiura crataegi lasistana de FREINA, 1979, Atalanta, Würzburg 10: 195, fig. 5b. Type-locality: [NE Turkey] Rize, Soganli-Daghları, Aygır-Paß, northern side, 1600-1800 m. Holotype (by original designation): male (MWM) [examined].

Distribution: Turkey, the sub-coastal line of prov. Rize.

***Trichiura castiliana* SPULER, 1908**

***Trichiura castiliana castiliana* SPULER, 1908**

Trichiura crataegi var. *castiliana* SPULER, 1908, Schmett. Europas 1: 114. Type-locality: Kastilien. Lectotypus: male (coll. DAUB in NHMK) [examined].

Distribution: Spain and southern France.

***Trichiura castiliana minotaurus* ZOLOTUHIN, 2007**

Trichiura castiliana minotaurus ZOLOTUHIN, 2007, Nachr. ent. Ver. Apollo, Suppl. 19: 39, figs 6, 7, 43, 44. Locus typicus: Turkey, Prov. Tunceli, 14 km N Pülümlür, 1700 m. Holotype: male (CMSW).

Distribution: Turkey (Tunceli, Elazig), northern Greece and Macedonia.

***Trichiura moghrebana* RUNGS, 1940**

Trichiura crataegi ssp. *moghrebana* RUNGS, 1940, Bull. Soc. Sci. nat. Maroc 20: 96, pl. 4, figs 1, 2. Type-locality: Moyen Atlas, Ifrane, 1650m. Lectotype: male (MNHN) [examined]. Distribution: Known only from Morocco (mountain range).

***Trichiura verenae* WITT, 1981**

Trichiura verenae WITT, 1981, Entomofauna 2 (23): 275, figs 9, 10, 11. Type-locality: Asia min., Kızılıcahaman. Holotype (by original designation): male (MWM) [examined].

Trichiura verenae witti GANEV, 1982, Entomofauna 3 (5): 58, figs 1, 3, 4. Type-locality: southwestern Bulgaria, Konyavska mountain, Skakavitsa railway station, 500m. Holotype (by original designation): male; coll. J. GANEV [not examined].

Distribution: Turkey (Prov. Konya, Kirikkale, Kızılıcahamam, Kütahya, Bursa, Agri, Tokat, Isparta, Ankara); eastern Greece (Alexandropoulis); south-western Bulgaria (Konyavska mt.; Struma valley, Kresna) and jugoslavian Macedonia (Titov Veles and Strumica); Cyprus.

***Trichiura stroehlei* ZOLOTUHIN, 2007**

***Trichiura stroehlei stroehlei* ZOLOTUHIN, 2007**

Trichiura stroehlei ZOLOTUHIN, 2007, Nachr. ent. Ver. Apollo, Suppl. 19: 40, figs 9, 13-15, 45, 55, Locus typicus: Türkei, Prov. Malatya, Karahan gecidi, 1800 m. Holotype: male (CMSW).

Distribution: Widely distributed in Turkey (Provinces Gaziantep, Adiyaman, Bingöl, Hatay, Elazığ, Siirt, Antalya, Tokat, Erzincan, Corum, Tunceli, Icel, Vozgat), Syria (Akbes), Israel, Jordania, southern Iraq (see below); Cyprus (Troodos Mts., 3 km E Spilia, 1500 m); Lebanon.

***Trichiura stroehlei carmelea* ZOLOTUHIN, 2007**

Trichiura stroehlei carmelea ZOLOTUHIN, 2007, Nachr. ent. Ver. Apollo, Suppl. 19: 41, figs 16, 56. Locus typicus: Jordanien, Irbid. Holotype: male (MWM).

Distribution: Israel, Jordanien, and probably Southern Iran, Fars

***Trichiura stroehlei* ssp. n. [ZOLOTUHIN & ZAHIRI, in prep.]**

Distribution: Southern Iran: Fars.

***Trichiura brandstetteri* ZOLOTUHIN & SALDAITIS, sp. n.**

Distribution: Lebanon.

***Trichiura mirzayani* EBERT, 1971**

Trichiura mirzayani EBERT, 1971, Beitr. naturk. Forsch. SüdwDtl. 30: 70, text-fig. 8, 9, pl. 1, fig. 5. Type-locality: Nord-Iran, 12 km S Amol, 250 m. Holotype 9by (original designation): male (NHMK) [examined].

Distribution: Northern Iran (Guilan, Mazandaran, Golestan and Tehran provinces), south-eastern Aserbijan (Talysh) and north-eastern Turkey (Ovit-Ges.).

***Trichiura kopetdaghi* DUBATOLOV & ZOLOTUHIN, 1992**

Trichiura mirzayani kopetdaghi DUBATOLOV & ZOLOTUHIN, 1992, Atalanta, Würzburg 23 (3/4): 541, figs. 2, 3, 9, 10b. Type-locality: Turkmenia, Central Kopetdag, 15 km W Firjuza, Dushak mt., 2100 m. Holotype (by original designation): male (BIN) [examined].

Distribution. Southwestern Turkmenia, Kopetdag Mts. (Ai-dere, Firjuza outsk., 10 km W of Nokhur, 50 km E Kara-Kala, 6 km W Germob, Dushak mts), and Northern Iran (Golestan and Khorasan provinces).

***Trichiura gornoscythica* ZOLOTUHIN, 2007, stat. nov.**

Trichiura mirzayani gornoscythica ZOLOTUHIN, 2007, Nachr. ent. Ver. Apollo, Suppl. 19: 41, figs 23, 47. Locus typicus: Kirgisia, Sandyk Mts., 2300 m, Kyzart river, 42°05'30"N, 75°04'E. Holotype: male (MWM).

Distribution: Mountains of Uzbekistan and Kirghisia.

***Trichiura sapor* WILTSHERE, 1946**

***Trichiura sapor sapor* WILTSHERE, 1946**

Trichiura sapor Wiltshire, 1946, Entomologist's Rec. J. Var. 58: 27. Type-locality: SW Iran, Fars, Shapur, 3000 ft. Holotype (by original designation): female (BMNH) [examined].

Distribution: Iran (prov. Fars, Gilan, Kohkiluye va Boyerahmad and Bushehr, SE-Zagros).

***Trichiura sapor wiltshirei* ZOLOTUHIN, 2007**

Trichiura sapor wiltshirei ZOLOTUHIN, 2007, Nachr. ent. Ver. Apollo, Suppl. 19: 46, figs 27, 28, 49. Locus typicus: Türkei, Prov. Malatya, Gölbaşı nördl. Erkenek, 1400 m. Holotype: male (CMSW).

Distribution: Turkey (prov. Malatya, Diyabakir, Siirt) and north-western Iran (prov. East Azerbaijan).

***Trichiura ilicis* (RAMBUR, 1858)**

Achnocampa ilicis RAMBUR, 1858, Cat. Lep. Andal.: 362. Type-locality: Andalusien. Lectotype: male (MNHN) [examined].

Distribution: Morocco (mountains), Portugal, Spain and southern France.

Acknowledgements

The authors express their special thanks to the participant of the expedition, Mr. Jürgen KRÜGER, for his passionate enthusiasm in collecting Lebanon moths.

References

ZOLOTUHIN, V. V. (2007): An annotated distributional check-list of the genus *Trichiura* STEPHENS, 1828 with descriptions of six new taxa, especially from Asia Minor (Lepidoptera: Lasiocampidae). — Nachrichten des entomologischen Vereins Apollo, Suppl. 19: 37–48.

Legend for the plate

1. *Trichiura brandstetteri* ZOLOTUHIN & SALDAITIS, sp. n., male holotype (MWM);
2. *T. brandstetteri* ZOLOTUHIN & SALDAITIS, sp. n., male paratype, Lebanon, Aarab ei Laqlouq vill. env., H-1640 m, 9-10. XI. 2005, leg. KRÜGER & SALDAITIS (coll. Saldaitis);
3. *T. stroehlei* ZOLOTUHIN, male, Lebanon, Aarab ei Laqlouq vill. env., H-1640 m, 9-10. XI. 2005, leg. KRÜGER & SALDAITIS (MWM); scale bar 1 cm;
4. Forewings showing pattern differences between *T. brandstetteri* sp. n. (left) and *T. stroehlei* ZOLOTUHIN (right);
5. *T. brandstetteri* sp. n., head of the holotype showing shape of antennae;
6. *T. brandstetteri* sp. n., male genitalia of paratype, Lebanon, Hadath el Joubbe, Wadi Ain er Raha, H-1470 m, 11-14. XI. 2005, leg. KRÜGER & SALDAITIS (MWM);
7. *T. stroehlei* ZOLOTUHIN, male genitalia, Lebanon, Aarab ei Laqlouq vill. env., H-1640 m, 9-10.XI 2005, leg. KRÜGER & SALDAITIS (MWM);
8. Biotope of *T. brandstetteri* sp. n. (photo: A. Saldaitis).

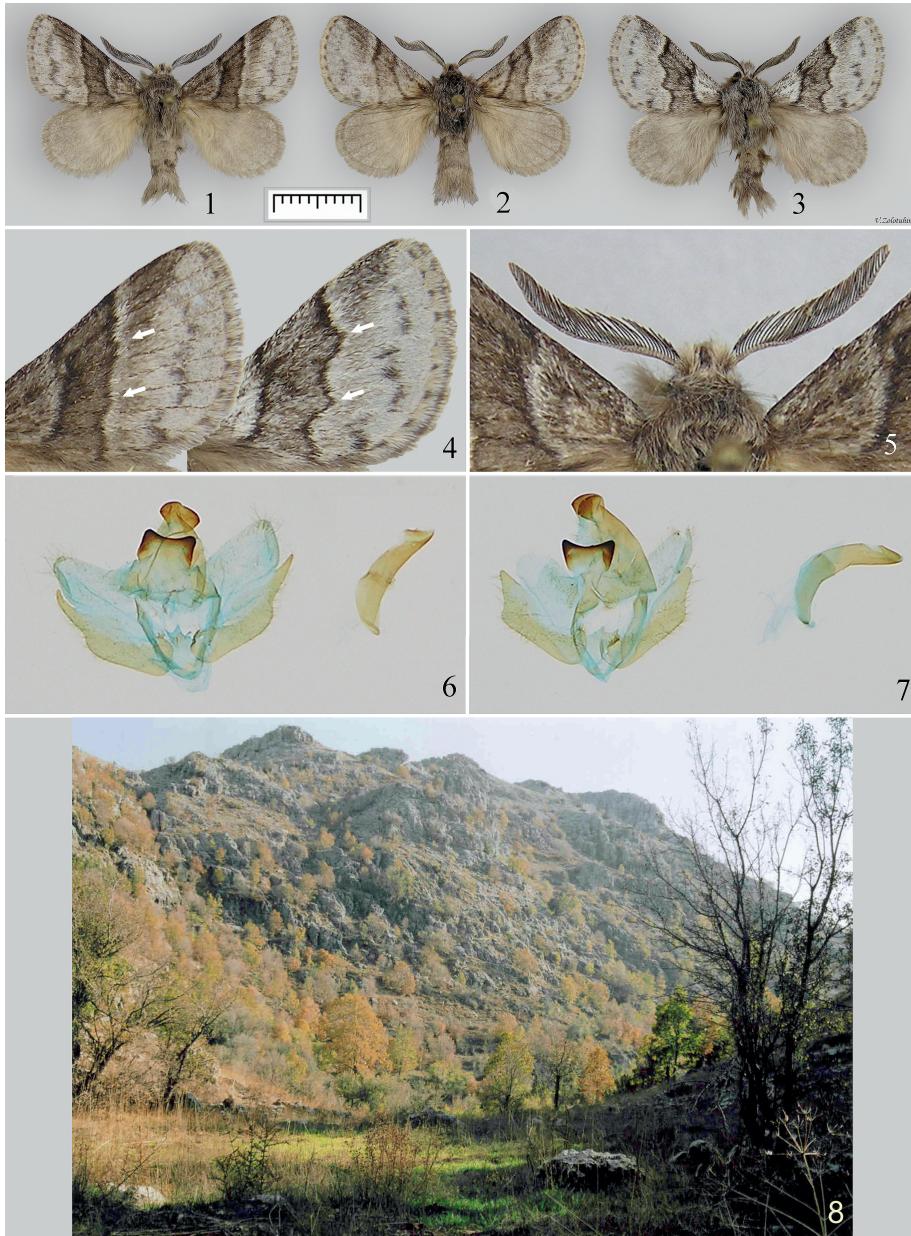
Addresses of authors:

Vadim V. ZOLOTUHIN	Aidas SALDAITIS
Department of Zoology	Institute of Ecology of Vilnius University,
State Pedagogical University of Uljanovsk	Akademijos 2
pl. 100letiya Lenina, 4	LT-08412 Vilnius-21, Lithuania
RUS-432980 Uljanovsk, Russia	E-mail: saldrasa@gmx.net
E-mail: v.zolot@mail.ru	

Druck, Eigentümer, Herausgeber, Verleger und für den Inhalt verantwortlich:
Maximilian SCHWARZ, Konsulent f. Wissenschaft der Oberösterreichischen Landesregierung, Eibenweg 6,
A-4052 Ansfelden, E-Mail: maximilian.schwarz@liwest.at.

Redaktion: Erich DILLER, ZSM, Münchhausenstraße 21, D-81247 München;
Fritz GUSENLEITNER, Lungitzerstr. 51, A-4222 St. Georgen/Gusen;
Wolfgang SCHACHT, Scherrerstraße 8, D-82296 Schöngeising;
Wolfgang SPEIDEL, MWM, Tengstraße 33, D-80796 München;
Thomas WITT, Tengstraße 33, D-80796 München.

Adresse: Entomofauna, Redaktion und Schrifttausch c/o Museum Witt, Tengstr. 33, 80796 München,
Deutschland, E-Mail: thomas@witt-thomas.com; Entomofauna, Redaktion c/o Fritz Gusenleitner,
Lungitzerstr. 51, 4222 St. Georgen/Gusen, Austria, E-Mail: f.gusenleitner@landesmuseum.at



ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Entomofauna](#)

Jahr/Year: 2009

Band/Volume: [0030](#)

Autor(en)/Author(s): Zolotuhin Vadim V., Saldaitis Aidas

Artikel/Article: [A new species of Trichiura STEPHENS, 1828 \(Lepidoptera, Lasiocampidae\) from Lebanon 53-60](#)