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Linzer biol. Beitr.	42/1	477-484	30.7.2010

On some Palaearctic Xantholinini, primarily from Kazakhstan (Coleoptera: Staphylinidae: Staphylininae)

V. ASSING

A b s t r a c t : Ten species of Xantholinini are reported primarily from Kazakhstan, among them six first country records and three first records from Middle Asia. An additional new record is reported from Kyrgyzstan. Two species of Xantholinini are reported from Nepal. The binomina *Vulda kazachstanica* (JANÁK 1979), nov.comb. (previously in *Xantholinus*, subgenus *Typhlolinus*) and *V. afghanica* (COIFFAIT 1982), nov.comb. (previously in *Sylea*) are established. The following synonymy is proposed: *Vulda* JACQUELIN DU VAL 1858 = *Sylea* BORDONI 2001, nov.syn. The genus *Vulda* is reported from Kazakhstan, Afghanistan, and Middle Asia for the first time. The external and sexual characters of *Vulda afghanica*, *Atopolinus nigroaeneus* (COIFFAIT 1982), and *Medhiama schawalleri* BORDONI 2002 are illustrated. The distributions of *V. afghanica* and *V. kasachstanica* are mapped.

K e y w o r d s : Coleoptera, Staphylinidae, Staphylininae, Xantholinini, *Vulda*, new synonymy, new combinations, new records, Kazakhstan, Afghanistan, Nepal, Middle Asia.

Introduction

At present, rather little is known about the staphylinid fauna of Kazakhstan, as well as about the whole of Middle Asia. According to SMETANA (2004) and an updated version of this catalogue (SCHÜLKE unpubl.), a mere 374 species and subspecies of Staphylinidae, among them only seven species of Xantholinini, have been reported from the vast area of Kazakhstan. For comparison, according to GEREND (2006), 560 species are known from Luxemburg, a country covering less than 0.1 % of the area of Kazakhstan.

Material of Staphylinidae collected in Kazakhstan and kindly made available to me by Vitaly Kastcheev, Almaty, included ten species of Xantholinini. Six of them represent first records from Kazakhstan, three at the same time first records from Middle Asia. For some species, additional records from Ukraine and Kyrgyzstan are listed. Also, a new synonymy and two new combinations are proposed, and records of two xantholinine species from Nepal are reported.

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Material, methods, and measurements

The material referred to in this study is deposited in the following public institutions and private collection:

MNHNP ..... Muséum national d'Histoire naturelle, Paris (A. Taghavian)

ZFMK ..... Zoologisches Forschungsmuseum Alexander Koenig (D. Rohwedder, K. Ulmen)

SNSD ..... Staatliche Naturhistorische Sammlungen Dresden (O. Jäger)

cAss..... author´s private collection

The morphological studies were carried out using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena) with a drawing tube. For the photographs a digital camera (Nikon Coolpix 995) was used.

The map was generated using the online generic mapping tool (GMT) of the Geomar website at www.aquarius.ifm-geomar.de/omc.

Results

Stenistoderus versicolor (SOLSKY 1871)

M a t e r i a l e x a m i n e d : Kazakhstan: 1♀, Aral sea region, Kambash lake, 21.IX.1991, leg. Kastcheev (cAss).

C o m m e n t : In Middle Asia, this species was previously known only from Tajikistan (SMETANA 2004). The above specimen represents the first record from Kazakhstan.

Leptacinus sulcifrons (STEPHENS 1833)

M a t e r i a l e x a m i n e d : Kazakhstan: 1 ex., Ile river, Buryndysu, 4.VI.1982, leg. Kastcheev (cAss); 2 exs., Ile river Aidarly, 12.IV.1986, leg. Kastcheev (cAss); 3 exs., Ile Alatau, Zhynishke river, 17.VI.1988, leg. Kastcheev (cAss); 7 exs., Ile river, Kapchagai, 20.IX.1981, leg. Kastcheev (cAss); 4 exs., Ural river, Bogatskoe, 16.X.1980, leg. Kastcheev (cAss); 4 exs., Ural river, Dzhangala, 20.IV.1982, leg. Kastcheev (cAss); 4 exs., Ural district, Budarino, 20.X.1980, leg. Kastcheev (cAss); 2 exs., Djungar mountain, Aksu river, near Suyksai, 16.VIII.1987, leg. Kastcheev (cAss); 2 exs., Tarbagatai, Bazar river, 21.VIII.1988, leg. Kastcheev (cAss); 2 exs., Karachaganak, Utwa river, 9.VI.1989, leg. Kastcheev (cAss). Kyrgyzstan: 13 exs., Issyk-Kul, Tort-Kul, 42°07', 76°56'E, 1760 m, 11.IV.2007, leg. Schmid (cAss); 3 exs., Osch, Andi-Shan reservoir, 40°49'N; 73°10'E, 900 m, 18.-19.VII.2003, leg. Schmidt (cAss); 1 ex., Tschui, U. Bischkek, Boz Pel'dek, 42°46'N, 74°35'E, 1050 m, 15.III.2007, leg. Schmidt (cAss); 1 ex., Talass, Kirgizskiy Alatau, Terek-Sai valley, 42°34'N, 72°43'N; 1850 m, 18.-20.VII.2006, leg. Schmidt (cAss); 3 exs., Zalal-Abad, Tasch-Kumyr, 41°26'N, 72°15'E, 650 m, 17.-18.VII.2003, leg. Schmidt (cAss). Ukraine: 4 exs., Kharkov district, Nizhnie, Melnitsy, 25.IX.1975, leg. Kastcheev (cAss).

C o m m e n t : In Asia, this widespread species was previously known only from Afghanistan, Mongolia, and Uzbekistan (SMETANA 2004). The above specimens from Kazakhstan and Kyrgyzstan represent new country records.

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Leptacinus othioides BAUDI DI SELVE 1870

Material examined: Kazakhstan: 1♂, Chylik river, Taldy river, 10.VII.1987, leg. Kastcheev (cAss); 2♀♀, Ile river, Aidarly, 22.V.1986, leg. Kastcheev (cAss); 1♀, Ile river, splav, Zhelturanga, 29.V.1984, leg. Kastcheev (cAss); 5♀♀, Ile river, splav, 28.VIII.1982, leg. Kastcheev (cAss).

Comment: *Leptacinus othioides* is widespread and has been recorded from numerous countries in Europe, the Middle East, and North Africa. The above specimens represent the first record of this species from Kazakhstan and Middle Asia.

Gyrohypnus punctulatus (PAYKULL 1789)

Material examined: Kazakhstan: 1♂, Altai, Bukhtarma, Archaty, 12.VIII.1988, leg. Kastcheev (cAss); 1♂, Dzhungar mountains, Keskenterek river, 2.VIII.1988, leg. Kastcheev (cAss); 1♂, Ketmen mountain, Tuyuk river, 18.IX.1988, leg. Kastcheev (cAss).

Comment: The previously known distribution of *G. punctulatus* was confined to the Western Palaearctic region, exclusive of Middle Asia (ASSING 2003). The above specimens represent the first records from Kazakhstan and Middle Asia.

Gyrohypnus fracticornis (MÜLLER 1776)

Material examined: Kazakhstan: 1♂, 3♀♀, Chylik river, Sarybastau, 13.VI.1988, leg. Kastcheev (cAss).

Comment: This common, today almost Cosmopolitan species is one of the few xantholinines previously known from Kazakhstan.

Gyrohypnus angustatus STEPHENS 1833

Material examined: Kazakhstan: 2♂♂, 1♀, Irtysh river, Lebyazh'e, 21.V.1979, leg. Kastcheev (cAss). Ukraine: 1♀, 1 sex? (abdomen missing), Kharkov district, Lebedinovka, 3.IV.1974, leg. Kastcheev (cAss).

Comment: *Gyrohypnus angustatus* is widespread in the Western Palaearctic region. It has been reported also from western and eastern Siberia, and doubtfully from Tajikistan (ASSING 2003, SMETANA 2004). The above specimens from Kazakhstan represent a new country record and confirm the presence of this species in Middle Asia.

Gyrohypnus ochripennis (EPPELSHEIM 1892)

Material examined: Kazakhstan: 1♂, Ural district, Furmanovo, 20.VI.1984, leg. Kastcheev (cAss).

Comment: The known distribution of *G. ochripennis* is confined to Middle Asia, including Mongolia (ASSING 2003).

Nudobius lentus (GRAVENHORST 1806)

Material examined: Kazakhstan: 1♂, Aksu-Djabagly, Aksu river, 17.V.1988, leg. Kastcheev (cAss).

Comment: *Nudobius lentus* has a trans-Palaearctic distribution, from Western Europe to Japan (HERMAN 2001). The above specimen represents the first record from Kazakhstan and Middle Asia.

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***Vulda kazachstanica* (JANÁK 1979), nov.comb.** (Map 1)

Xantholinus (*Acanthophallus*) *kazachstanicus* JANÁK 1979: 111 f.

M a t e r i a l e x a m i n e d : Kazakhstan: 1♂, Bajankol river, near Karatogan village, 11.IX.1988, leg. Kastcheev (cAss).

C o m m e n t : The original description of *Xantholinus kazachstanicus* is based on two males from "mont Medeo (2000 m) près d'Alma-Ata, Kazakhstan" (JANÁK 1979). The aedeagus of the specimen listed above is identical to the illustration provided in the original description. Based on external characters such as the posteriorly narrowed head, the narrow pronotum, and particularly the undivided ante-sternal plate of the pronotum, as well as on the internal structures of the aedeagus, this species does not refer to *Xantholinus* DEJEAN 1821, but to *Vulda* JACQUELIN DU VAL 1853.

The record of *V. kazachstanica* is remarkable also from a zoogeographic perspective. Previously, the easternmost record of a *Vulda* species was from northern Turkey (ASSING 2007). The discovery that *X. kazachstanicus* refers to *Vulda* considerably expands the distribution of the genus eastwards. It is newly recorded not only from Kazakhstan, but also from Middle Asia as whole. The currently known distribution of *V. kasachstanica* is illustrated in Map 1.

***Vulda* sp.**

M a t e r i a l e x a m i n e d : Kazakhstan: 1♀, Ile Alatau, Zhynishke river, 17.VI.1988, leg. Kastcheev (cAss).

C o m m e n t : The above female is evidently not conspecific with *V. kazachstanica* and probably refers to an undescribed species.

***Vulda afghanica* (COIFFAIT 1982), nov.comb.** (Figs 1-5, Map 1)

Xantholinus (*Leptophallus*) *afghanicus* COIFFAIT 1982: 75 f.

Sylea afghanica: BORDONI (2001): 413 f.

T y p e m a t e r i a l e x a m i n e d : Holotype ♂: "♂ / J. Klapperich, Kandahar, 950 m, 18.2.53, S-Afghanistan / Xantholinus afghanicus nov. spec. / Typus *Xantholinus afghanicus* O. Scheerpeltz / Holotypus / Xantholinus (Leptophallus) afghanicus H. Coiffait 1981 / Sylea gen. n. afghanica (Coiff), Bordoni det. 2000 / museum Koenig, Col 2010/42 / Vulda afghanica (Coiffait), det. V. Assing 2009" (ZFMK). Paratypes: 1♂: "♂ / J. Klapperich, Kandahar, 950 m, 18.2.53, S-Afghanistan / Cotypus *Xantholinus afghanicus* O. Scheerpeltz / Paratypus / H. Coiffait det. 1981 / Museum Koenig Bonn / Sylea gen. n. afghanica (Coiff), Bordoni det. 2000 / Vulda afghanica (Coiffait), det. V. Assing 2009" (ZFMK); 1♀: "♀ / J. Klapperich, Bashgultal, 1300 m, Nuristan, 24.5.53, O-Afghanistan / Cotypus *Xantholinus afghanicus* O. Scheerpeltz / Paratypus / Museum Koenig Bonn / Sylea gen. n. afghanica (Coiff), Bordoni det. 2000 / Vulda afghanica (Coiffait), det. V. Assing 2009" (ZFMK); 1♂ [aedeagus missing]: "J. Klapperich, Kandahar-Kuna, 950 m, 21.2.53, Afghanistan / Cotypus *Xantholinus afghanicus* O. Scheerpeltz / Museum Koenig Bonn / Xantholinus (Leptophallus) afghanicus, H. Coiffait det. 1981 / Muséum Paris / Vulda afghanica (Coiffait), det. V. Assing 2009" (MNHNP).

A d d i t i o n a l m a t e r i a l e x a m i n e d : Afghanistan: 1♂, Afghanistan, Kabul env., III.2009, leg. Reuter (cAss).

C o m m e n t : The original description is based on a male holotype from "S. Afghanistan, Kandahar 950 m, 18-2-53" and three paratypes (two males and one male) from the same locality (COIFFAIT 1982); one male paratype is deposited in the Coiffait collection at the MNHNP, the remainder at the Museum Alexander König Bonn. All the type specimens were examined; in contrast to the details indicated in the original description,

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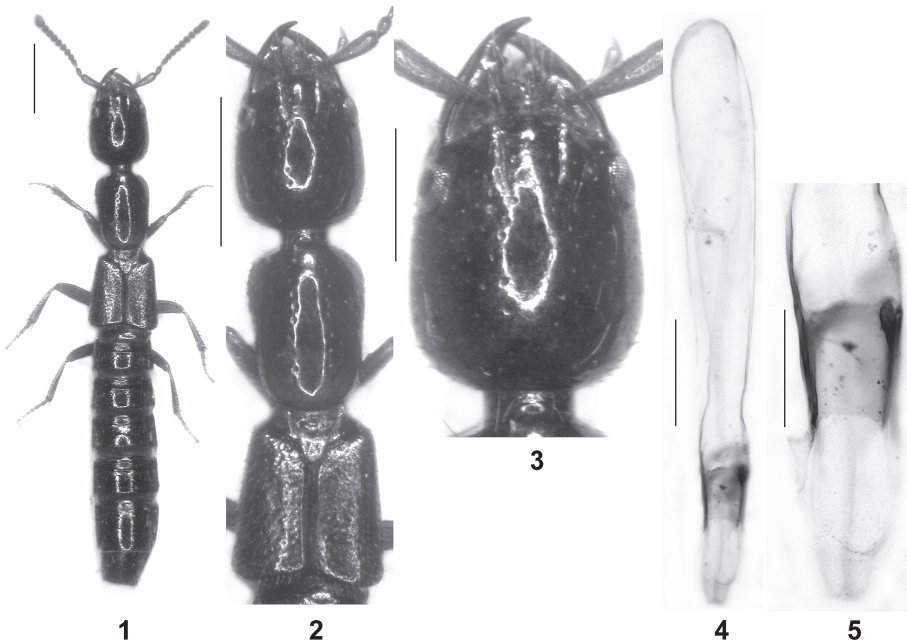
two paratypes, a male and a female, were not collected together with the holotype, the female even in eastern Afghanistan.

COIFFAIT (1982) correctly observed the similarity of this species to *Xantholinus anatolicus* COIFFAIT 1965, which is now a junior synonym of *Vulda ottomana* (CAMERON 1912) (ASSING 2007).

Based on an examination of the holotype and two paratypes, BORDONI (2001) attributed *X. afghanicus* to the new and still monotypical genus *Sylea*. In the description of this genus, he indicates some differences distinguishing *Sylea* from *Xantholinus*, but there is no reference whatsoever to *Vulda*. A study of the above type material and the additional male from the environs of Kabul, however, revealed that the species is indeed closely related to *Vulda ottomana* and yielded no significant characters distinguishing it from other species of *Vulda* on the generic level. Also, the presence of an endemic genus in Afghanistan would not appear plausible from a zoogeographic perspective. Consequently, the following synonymy is proposed: *Vulda* JACQUELIN DU VAL 1853 = *Sylea* BORDONI 2001.

The illustrations of the male sexual characters provided by COIFFAIT (1982) and BORDONI (2001) are based on a deformed aedeagus. The external characters and the aedeagus are figured in Figs 1-5. The distribution of *V. afghanica* is ilustrated in Map 1.



Figs 1-5: *Vulda afghanica* (COIFFAIT): (**1**) habitus; (**2**) forebody; (**3**) head; (**4**) aedeagus; (**5**) distal portion of aedeagus. Scale bars: 1-2: 1.0 mm; 3: 0.5 mm; 4: 0.2 mm; 5: 0.1 mm.

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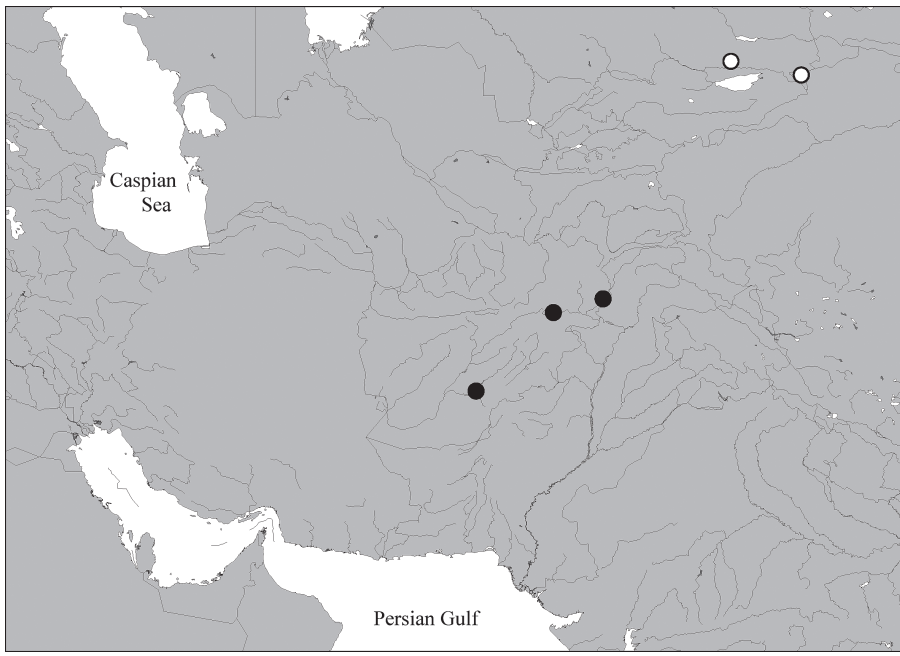

Map 1: Distributions of *Vulda afghanica* (COIFFAIT) (filled circles) and *V. kasachstanica* (JANÁK).

Atopolinus subnigroaeneus (COIFFAIT 1982) (Figs 6-8)

M a t e r i a l e x a m i n e d : Nepal: 4 exs., SW-Annapurna, SE Ghorepani, Banthanti, 28°22'N, 83°44'E, 2350 m, sifted, 31.V.2002, leg. Jäger (SNSD, cAss).

C o m m e n t : The known distribution of *A. subnigroaeneus* ranges from central Nepal eastwards to Darjeeling (India) (BORDONI 2002). The habitus and the aedeagus are illustrated in Figs 6-8.

Medhiama schawalleri BORDONI 2002 (Figs 9-11)

M a t e r i a l e x a m i n e d : Nepal: 8 exs., Dhaulagiri Himal, Myagdi Khola valley, Italy camp, 3500 m, 25.VI.1998, leg. Jäger (SNSD, cAss); 2 exs., same data, but 3400-3500 m, 4.VII.1998, leg. Berndt & Schmidt (SNSD, cAss).

C o m m e n t : Previously, only the holotype of this species was known. The above material was collected close to the type locality ("Myagdi Distr., Mygdi Khola N Dobang") (BORDONI 2002). The habitus and the aedeagus are illustrated in Figs 9-11.

Acknowledgements

I am indebted to Vitaly Kastcheev, Almaty, for the generous gift of Staphylinidae from Kazakhstan, as well as to Benedikt Feldmann, Münster, for proof-reading the manuscript and for the generous gift of the additional specimen of *Vulda afghanica*.

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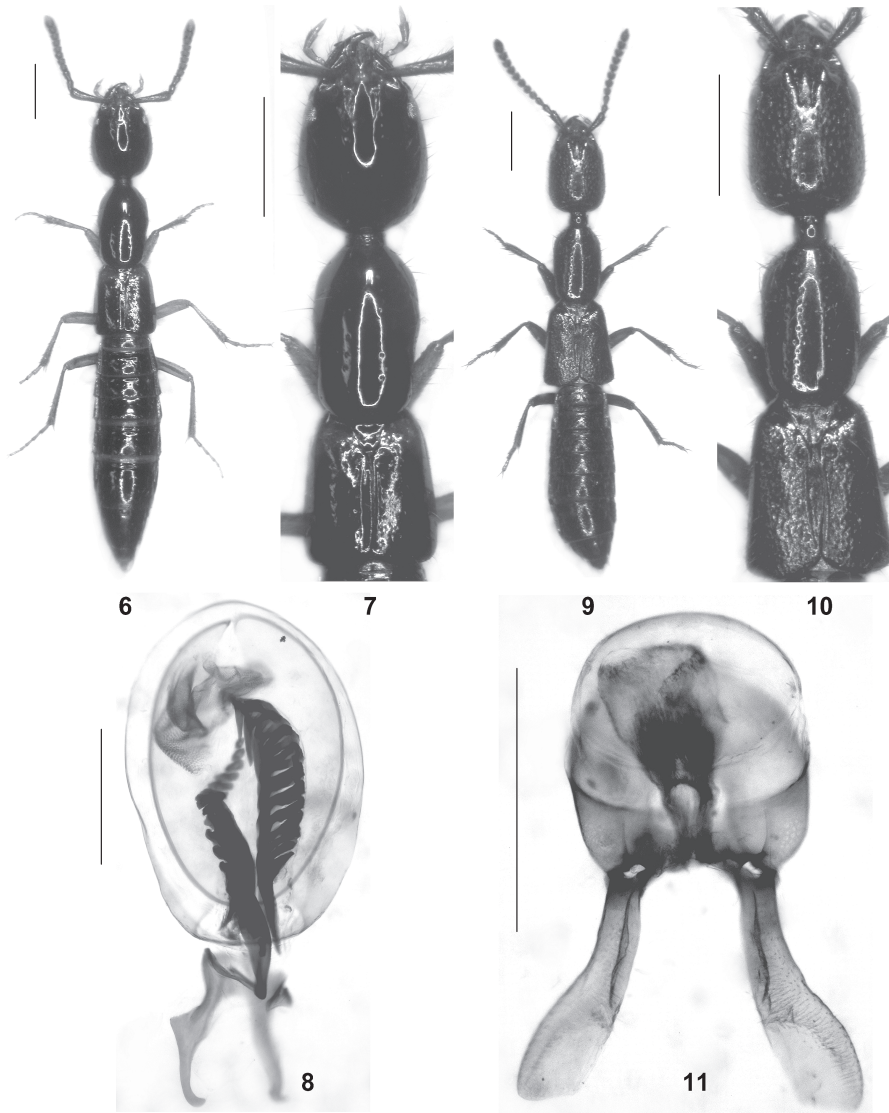

Figs 6-11: *Atopolinus subnigroaeneus* (COIFFAIT) (**6-8**) and *Medhiama schawalleri* BORDONI (**9-11**): (**6, 9**) habitus; (**7, 10**) forebody; (**8, 11**) aedeagus. Scale bars: 6-7, 9-10: 1.0 mm; 8, 11: 0.5 mm.

Zusammenfassung

Zehn Arten der Tribus Xantholinini werden aus Kasachstan gemeldet, darunter sechs Erstnachweise für Kasachstan und drei für Mittelasien. Ein weiterer Erstnachweis wird für Kirgisistan gemeldet. *Xantholinus* (*Typhlolinus*) *kazachstanicus* JANÁK 1979 und *Sylea afghanica* (COIFFAIT

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1982) werden in die Gattung *Vulda* JACQUELIN DU VAL 1853 gestellt, die erstmals aus Kasachstan, Afghanistan und Mittelasien nachgewiesen wird. *Sylea* BORDONI 2001 (Typusart: *Xantholinus afghanicus*) wird mit *Vulda* synonymisiert. Zwei Arten werden aus Nepal gemeldet. Die äußeren Merkmale und der Aedeoagus von *Vulda afghanica*, *Atopolinus nigroaeneus* (COIFFAIT 1982) und *Medhiama schawalleri* BORDONI 2002 werden abgebildet. Die Verbreitung von *Vulda kasachstanica* und *V. afghanica* wird anhand von Karten illustriert.

References

ASSING V. (2003): On the taxonomy of *Gyrohypnus* LEACH: new synonymies, new species, and a key to the Western Palaearctic and Middle Asian representatives of the genus (Insecta: Coleoptera: Staphylinidae). — Entomologische Blätter **99**: 55-81.

ASSING V. (2007): On the Xantholinini of Turkey and adjacent regions (Coleoptera: Staphylinidae: Staphylininae). — Zootaxa **1474**: 1-54.

BORDONI A. (2001): Un nuovo genere di Stafilinide dell'Afghanistan (Coleoptera, Staphylinidae, Xantholininae). — Bollettino del Museo Regionale di Scienze Naturali, Torino **18**: 413-416.

BORDONI A. (2002): Xantholinini della Regione Orientale (Coleoptera Staphylinidae). Classificazione, filogenesi e revisione tassonomica. — Memorie del Museo Regionale di Scienze Naturali, Torino **33**: 1-998.

COIFFAIT H. (1982): Nouveaux Staphylinides afghans du Muséum A. Koenig de Bonn. — Bonner zoologische Beiträge **33**: 75-97.

GEREND R. (2006). Für Luxemburg neue und interessante Arten der Kurzflügler und Palpenkäfer (Insecta, Coleoptera: Micropeplidae, Staphylinidae, Pselaphidae). — Bulletin de la Société des Naturalistes Luxembourgeois **106**: 123-150.

HERMAN L.H. (2001): Catalog of the Staphylinidae (Insecta: Coleoptera). 1758 to the end of the second millennium. Volumes I–VII. — Bulletin of the American Museum of Natural History **265**: 4218 pp.

JANÁK J. (1979): *Xantholinus* (*Acanthophallu*s) *kazachstanicus* sp. n. d'U.R.S.S. (Coleoptera, Staphylinidae). — Nouvelle Revue d'Entomologie **9**: 111-113.

SMETANA A. (2004): Staphylinidae, tribe Xantholinini ERICHSON, 1839, pp. 687-698. — In: LÖBL I. & A. SMETANA (eds): Catalogue of Palaearctic Coleoptera. II. Hydrophiloidea-Histeroidea-Staphylinoidea. — Apollo Books, Stenstrup: 942 pp.

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Zeitschrift/Journal: Linzer biologische Beiträge

Jahr/Year: 2010

Band/Volume: 0042_1

Autor(en)/Author(s): Assing Volker

Artikel/Article: On some Palaearctic Xantholinini, primarily from Kazakhstan (Coleoptera: Staphylinidae: Staphylininae) 477-484