# A revision of Othiini. XX. Two new species of *Othius*, the first record of the genus from Myanmar, and additional records (Coleoptera: Staphylinidae: Staphylininae)

# Volker Assing

A b s t r a c t : *Othius arater* nov.sp. (China: South Sichuan) and *O. burmensis* nov.sp. (Northeast Myanmar), the first representative of the genus recorded from Myanmar, are described and illustrated. New illustrations of the external and male sexual characters of *O. discrepans* ASSING, 1999 are provided. Additional records of ten species are reported. The distributions of three Caucasian species are mapped. *Othius* STEPHENS, 1829 and the Othiini now include a total of 130 and 147 species and subspecies, respectively.

K e y w o r d s : Coleoptera, Staphylinidae, Othiini, *Othius*, Palaearctic region, Oriental region, China, Myanmar, Caucasus, taxonomy, new species, new records, distribution maps.

# Introduction

The Palaearctic genus *Othius* STEPHENS, 1829 previously included 128 species and subspecies (ASSING 2015). It is the largest of the four genera of the Holarctic tribe Othiini (total: 145 species and subspecies). Except for the recent discoveries of one species in North Vietnam and of two adventive species, *O. subuliformis* STEPHENS, 1833 and *O. punctulatus* (GOEZE, 1777), in North America (ASSING 2003b, 2015), all previous records of *Othius* have been reported from within the Palaearctic region sensu SMETANA (2004). An updated checklist of the *Othius* species known from China and Taiwan was provided by ASSING (2013).

The present article is based on material examined since the latest contribution to the taxonomy and zoogeography of the Othiini (ASSING 2015). This material included a new species from Myanmar, the first record of the genus from this country, as well as a new species from South Sichuan, China.

# Material and methods

The material treated in this study is deposited in the following public and private collections:

MNB ...... Museum für Naturkunde Berlin (incl. coll. Schülke; J. Frisch, M. Schülke)

NMP...... National Museum of Natural History, Praha (J. Hájek)

NHMW ...... Naturhistorisches Museum Wien (H. Schillhammer)

cApf ..... private collection Wolfgang Apfel, Eisenach

cAss..... author's private collection

cFel ..... private collection Benedikt Feldmann, Münster

cPüt ..... private collection Andreas Pütz, Eisenhüttenstadt

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss), a Discovery V12 microscope (Zeiss), and a Jenalab compound microscope (Carl Zeiss Jena). The images were created using a digital camera (Nikon Coolpix 995) and Axiocam ERc 5s, as well as a photographing device constructed by Arved Lompe (Nienburg) and CombineZ software. The maps were created using MapCreator 2.0 (primap) software.

The measurements in the descriptions are given in mm and abbreviated as follows: HW: maximal head width; HL: head length from anterior margin of frons to neck; PW: maximal width of pronotum; PL: length of pronotum along median line; EL: length of elytra from apex of scutellum to elytral hind margin; TiL: length of metatibia (external aspect, from knee to insertion of first metatarsomere); TaL: length of metatarsi (claws not included); TL: total length from apex of mandibles to posterior margin of tergite VIII. The length of the aedeagus was measured from the apex of the median lobe to the base of the aedeagal capsule. The "parameral" side (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

# Additional records and species descriptions

Records of well-known species from the West Palaearctic region are only listed and not commented on. For detailed accounts of the distributions of these species see ASSING (1997, 1998, 2013).

# Othius lapidicola MÄRKEL & KIESENWETTER, 1848

Material examined: <u>Russia</u>:  $1^{\circ}$ , Arhangelsk region, Kanin Peninsula, sea coast at Pescovaja river, 10.-20.VII.2007, leg. Pilate (cAss). Armenia: 1∂, 1♀, 2 exs., N Yerevan, W Hrazdan, 40°32'N, 44°33'E 2130 m, secondary forest margin, litter and roots sifted, 25.VI.2016, leg. Assing & Schülke (cAss, MNB); 1033, 19, 5 exs., N Yerevan, NW Hrazdan, 40°42'N, 44°29'E, 2500 m, grassy W-slope with scattered Salix, litter and roots of grass sifted 26.VI.2016, leg. Assing & Schülke (cAss, MNB); 1 ♀, N Yerevan, NW Hrazdan, 40°40'N, 44°28'E, 2100 m, grassy W-slope with bushes, litter and grass roots sifted 26.VI.2016, leg. Assing (cAss); 5∂∂, 1♀, N Yerevan, NW Hrazdan, 40°38'N, 44°30'E, 2010 m, mixed deciduous forest, litter and grass roots sifted, 27.VI.2016, leg. Assing (cAss); 333, 299, 1 ex., N Yerevan, NW Hrazdan, 40°38'N, 44°28'E, 2110 m, stream valley, mixed deciduous forest, litter and grass roots sifted, 28.VI.2016, leg. Assing (cAss, MNB); 11, 3, 9, 6 exs., ca. 50 km NW Sisian, Jermuk, 39°50'N, 45°40'E, 2110 m, oak forest and forest margin, litter and roots sifted, 30.VI.2016, leg. Assing (cAss, MNB); 5♂♂, 5♀♀, 10 exs., same data, but 3.VII.2016 (cAss, MNB); 8♂♂, 5♀♀, 20 exs., same data, but 12.VII.2016 (cAss, MNB); 3♂♂, 3♀♀, 5 exs., 25 km S Kapan, N Gomarants Pass 39°02'N, 46°22'E, 2190 m, oak forest, litter and dead wood sifted, 7.VII.2016, leg. Assing & Schülke (cAss, MNB); 222, 25 km S Kapan, N Gomarants Pass, 39°02'N, 46°22'E, 2050 m, oak forest with Acer, Carpinus, and fern undergrowth, litter and dead wood sifted, 7.VII.2016, leg. Assing (cAss); 333, 19, 2 exs., WSW Kapan, S Meghri Pass, 39°06'N, 46°10'E, 2090 m, stream valley, litter near stream sifted, 8.VII.2016, leg. Assing & Schülke (cAss, MNB); 3 3, 2 9, 3 exs., SSE Dilijan, NW Semyonovka, 40°40'N, 44°53'E, 2050 m, Sorbus forest, litter sifted, 29.VI.2017, leg. Assing & Schülke (cAss, MNB); 1∂, 222, E Dilijan, road Ttujur-Berd, 40°41'N, 45°20'E,

1900 m, moist mixed deciduous forest with Fagus orientalis, Sorbus, etc., litter and roots sifted, 30.VI.2017, leg. Assing (cAss); 333, 19, road Berd-Ijevan, 40°52'N, 45°18'E, 1350 m, beech forest margin, litter and roots sifted, 30.VI.2017, leg. Assing (cAss); 1♀, road Dilijan-Vanadzor, 40°46'N, 44°37'E, 1790 m, birch forest, litter sifted, 1.VII.2017, leg. Assing (cAss); 1♂, N Vanadzor, N Pushkin pass, 40°55'N, 44°27'E, 1900 m, mixed forest (oak, pine, etc.), litter sifted, 1.VII.2017, leg. Assing (cAss); 1 ex., N Vanadzor, S Pushkin pass, 40°54'N, 44°26'E, 1850 m, forest with Quercus, Fagus, Sorbus, etc., litter and roots sifted, 1.VII.2017, leg. Schülke (MNB); 733, 299, 3 ex., S Spitak,  $40^{\circ}46$ 'N,  $44^{\circ}16$ 'E, 2000 m, deforested stream valley, bank of small stream, roots and moss sifted, 7.VII.2017, leg. Assing & Schülke (cAss, MNB); 233, 299, WSW Dilijan, Kalavan, 40°38'N, 45°06'E, 1960 m, forest with Quercus, Betula, and Carpinus, litter sifted, 5.VII.2017, leg. Assing (cAss); 1♂, WSW Dilijan, Kalavan, 40°38'N, 45°06'E, 1960 m, forest with Quercus, Betula, and Carpinus, bark of dead oak sifted, 5.VII.2017, leg. Assing (cAss); 433, WSW Dilijan, Kalavan, 40°38'N, 45°06'E, 2100 m, forest at timber line with oak and birch, litter and large fungus on oak sifted, 5.VII.2017, leg. Assing (cAss); 13, 19, pass road E Ijevan, 40°52'N, 45°13'E, 1790 m, forest with old Quercus and Carpinus, litter and roots sifted, 6.VII.2017, leg. Assing (cAss); 1 ex., pass road E Ijevan, 40°52'N, 45°12'E, 1630 m, oak and beech forest, litter and roots sifted, 6.VII.2017, leg. Schülke (MNB); 1 ex., pass road E Ijevan, 40°52'N, 45°11'E, 1400 m, young beech forest, litter and dead wood sifted, 6.VII.2017, leg. Schülke (MNB); 1∂, S Spitak, 40°46'N, 44°16'E, 2070 m, deforested stream valley with scattered trees and bushes, litter and roots beneath small trees and bushes sifted, 7.VII.2017, leg. Assing (cAss); 4∂∂, 1♀, 5 exs., SE Spitak, 40°48'N, 44°18'E, 1840 m, oak forest margin, litter and roots sifted, 7.VII.2017, leg. Assing (cAss, MNB); 1♀, pass N Goris, 39°36'N, 46°19'E, 1990 m, Nslope with small stream valleys with and without water, litter, debris, and moss sifted, 9.VII.2017, leg. Assing (cAss); 13, 40 km NW Sisian, Vorotan Pass, 39°41'N, 45°45'E, 2140 m, stream valley, *Rosa* bushes, litter and roots sifted, 10.VII.2017, leg. Assing (cAss); 433, 1092, 7 exs., NW Goris, W Verishen, 39°32'N, 46°19'E, 1670 m, margin of oak forest, litter, moss, and roots beneath Quercus and Rosa sifted, 12.VII.2017, leg. Assing & Schülke (cAss, MNB); 433, 2 exs., SW Goris, ESE Tatev, 39°22'N, 46°17'E, 1950 m, margin of mixed deciduous forest (Quercus, Carpinus, Acer, etc.), litter and roots sifted, 13.VII.2017, leg. Assing & Schülke (cAss, MNB); 13, 1 ex., same data, but 14.VII.2017 (cAss, MNB); 1 ex., SW Goris, ESE Tatev, 39°22'N, 46°17'E, 1950 m, mixed deciduous forest (Quercus, Carpinus, Acer, etc.), stream valley, moist litter near small stream sifted, 13.VII.2017, leg. Schülke (MNB); 1♀, SW Goris, ESE Tatev, 39°22'N, 46°17'E, 1820 m, margin of mixed deciduous forest (Quercus, Carpinus, Acer, etc.), litter and debris between rocks sifted, 14.VII.2017, leg. Assing (cAss).

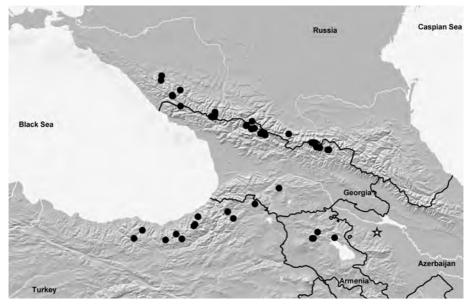
C o m m e n t : The above female from the Kanin Peninsula represents the first record from the region between Fennoscandia and the Yenissey region in Siberia. Only few records of *O. lapidicola* were previously known from Armenia; the material listed above reveal that the species is very common in this country.

#### Othius stenocephalus EPPELSHEIM, 1881 (Map 1)

M a t e r i a l e x a m i n e d : Georgia: S v a n e t i : 1♀, Zerno-Svaneti, Svaneti Mountains, NW Koruldashi, 42°55'N, 43°06'E, 2620, 3.VII.2015, leg. Pütz (cPüt); 1♂, 3♀♀, Mestia Ughviri Pass, 43°02'N, 42°50'E, 1900 m, 27.VII.2016, leg. Meybohm (cAss); 1♀, 4 km N Mazeri, 43°06'N, 42°36'E, 1690 m, 28.VII.2016, leg. Meybohm (cAss); 3♂♂, 1♀, W Koruldashi, 42°56'N, 43°07'E, 2350 m, 30.VII.2016, leg. Meybohm (cAss); 2♂♂, 7 km NE Ushguli, 42°57'N, 43°04'E, 2280 m, 31.VII.2016, leg. Meybohm (cAss); 1♂, 2♀♀, 3 km S Koruldashi, 42°53'N, 43°09'E, 1790 m, 1.VIII.2016, leg. Meybohm (cAss); 2♂♂, Mestia-Hatsvali, 43°01'N, 42°45'E, 2350 m, 27.VI.2017, leg. Brachat & Meybohm (cAss); 1♀, Ushguli, Zagaro pass, 42°55'N, 43°06'E, 2600 m, 29.VI.2017, leg. Brachat & Meybohm (cAss); 4♂♂, 5♀♀, Ushguli, Zagaro pass, 42°55'N, 43°01'E, 2190 m, 30.VI.2017, leg. Brachat & Meybohm (cAss); 1⊲°, 5♀♀, Neguli, North slope, 42°55'N, 43°01'E, 2190 m, 30.VI.2017, leg. Brachat & Meybohm (cAss). 4*T*menia: 2♀♀, N Yerevan, NW Hrazdan, 40°38'N, 44°30'E, 2010 m, mixed deciduous forest, litter and grass roots sifted, 27.VI.2016, leg. Assing (cAss); 1♀, N Yerevan, NW Hrazdan, 40°38'N, 44°28'E, 2110 m,

stream valley, mixed deciduous forest, litter and grass roots sifted, 28.VI.2016, leg. Assing (cAss); 13, road Dilijan–Vanadzor, 40°46'N, 44°37'E, 1790 m, birch forest, litter sifted, 1.VII.2017, leg. Assing (cAss); 13, WSW Dilijan, Kalavan, 40°38'N, 45°06'E, 1960 m, forest with *Quercus*, *Betula*, and *Carpinus*, litter sifted, 5.VII.2017, leg. Assing (cAss); 22, WSW Dilijan, Kalavan, 40°38'N, 45°06'E, 2100 m, forest at timber line with oak and birch, litter and large fungus on oak sifted, 5.VII.2017, leg. Assing (cAss).

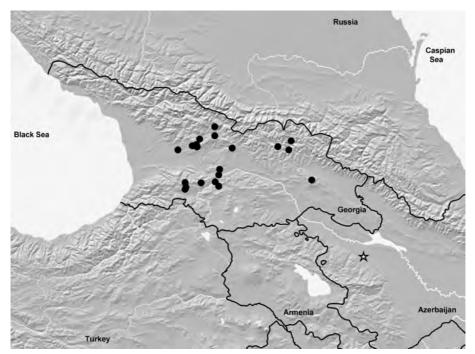
C o m m e n t : The distribution of this species was mapped by ASSING (2013). Based on new evidence, however, the type locality "Helenendorf" (= Göygöl in Azerbaijan) is doubtful. Not only has the species never been recorded from Azerbaijan again. It was recently suggested that at least part of the old material labelled "Helenendorf" is most likely mislabelled (ASSING & SCHÜLKE 2017). With numerous additional records now available (see also ASSING 2015), the currently known distribution is illustrated in Map 1. The above specimens from Armenia represent new country records.



**Map 1**: Distribution of *Othius stenocephalus* (black circles) in the Caucasus region, based on examined records. White star: type locality "Helenendorf".

#### Othius permutatus ASSING, 1997

M a t e r i a l e x a m i n e d : <u>Romania</u>: 1♂, 1♀, Munții Vladeasa, Stina de Vale env., 46°42'N, 22°38'E, 1300 m, leg. Zieris (cApf); 1♂, Cluj, Munții Gilau, 46°37'N, 23°12'E, 1400 m, 22.VII.2013, leg. Buse (cFel).



Map 2: Distribution of *Othius hebes* (black circles) in the Caucasus region, based on examined records. White star: doubtful locality "Helenendorf".

#### Othius hebes ASSING & SOLODOVNIKOV, 1998 (Map 2)

M a terial examined: <u>Georgia</u>: R atcha: $2\sqrt[3]{3}$ ,  $1\bigcirc$ , 4 km N Nakerala, 42°24'N, 43°02'E, 1150 m, 18.V.2016, leg. Brachat & Meybohm (cAss);  $3\sqrt[3]{3}$ ,  $1\bigcirc$ , Nakerala pass, 42°23'N, 43°02'E, 1260 m, 18.V.2016, leg. Brachat & Meybohm (cAss);  $1\sqrt[3]{3}$ , Nakerala pass, 42°22'N, 43°03'E, 1320 m, 22.V.2016, leg. Brachat & Meybohm (cAss);  $2\sqrt[3]{3}$ , Nakerala pass, 42°23'N, 43°02'E, 1220 m, 22.V.2016, leg. Brachat & Meybohm (cAss);  $1\sqrt[3]{3}$ , Nakerala pass, 42°23'N, 43°02'E, 1220 m, 22.V.2016, leg. Brachat & Meybohm (cAss);  $1\sqrt[3]{3}$ , Nakerala pass, 42°23'N, 43°02'E, 1220 m, 22.V.2016, leg. Brachat & Meybohm (cAss);  $1\sqrt[3]{3}$ , south slope of Letchkhumskiy mountain range, Khideshlebi env., 42°40'N, 43°24'E, 1235 m, 5.VII.2015, leg. Pütz (cPüt);  $1\bigcirc$ , south slopes of Ratchinskiy mountains, 5 km NW Nakerala pass, Tkibili env., 42°23'N, 42°59'E, 1440 m, 6.VII.2015, leg. Pütz (cPüt, cAss). S a m t s k h e - J a v a k h e t i :  $1\sqrt[3]{3}$ ,  $6\bigcirc 9$ , N Abastumani, 41°47'N, 43°29'E, 1450 m, 13.V.2016, leg. Brachat & Meybohm (cAss);  $1\sqrt[3]{3}$ ,  $6\bigcirc 9$ , N Abastumani, 41°46'N, 42°50'E, 1370 m, 15.V.2016, leg. Brachat & Meybohm (cAss). S h i d a K a r t 1 i :  $2\bigcirc 9$ , 8 km SW Surami, 42°02'N, 43°30'E, 960 m, 14.V.2016, leg. Brachat & Meybohm (cAss). S h i d a K a r t 1 i :  $3\sqrt[3]{3}$ ,  $3\bigcirc 9$ , 6 km W Nakerala, 42°23'N, 42°57'E, 1450 m, 17.V.2016, leg. Brachat & Meybohm (cAss).

C o m m e n t : The original description is based on type material, with the labels indicating more or less extensive regions rather than specified localities (ASSING & SOLODOVNIKOV 1998). One of the specified localities, "Helenendorf" (= Göygöl) in Azerbaijan, must be considered doubtful, not only because other records from Azerbaijan or from the adjacent Armenia are unknown, but also because material labelled "Helenendorf" has been shown to most likely be mislabelled (ASSING & SCHÜLKE 2017). Subsequent records, again most of them old and without specified localities, were

reported by ASSING (1999b, 2005). Records of more recently collected material with detailed localities were published by ASSING (2015). As a result of significantly greater collecting activity in the Caucasus region, numerous additional specimens are now available (see material listed above), making a first assessment of the distribution of *O. hebes* possible (Map 2). The altitudes range from 960 to 2280 m.

# Othius ponticus COIFFAIT, 1978

M a t e r i a l e x a m i n e d : <u>Turkey</u>: 1♂, Artvin, 20 km W Borçka, Cankurtaran Geçidi, 41°24'N, 41°32'E, 730-780 m, forest margin with dominant beech and chestnut, 29.-30.VI.2004, leg. Růžička & Hájek (NMP).

C o m m e n t : *Othius ponticus* has been recorded only from Rize and Artvin provinces in northeastern Anatolia and from the environs of Batumi in southwestern Georgia (AssING 2010).

#### Othius parentium SOLODOVNIKOV, 1996

M a t e r i a l e x a m i n e d : <u>Russia</u>: 2 exs., Krasnodarskiy Kray, south slopes of Chernogorie Mountains, Otdalyenniy env., 44°05'N, 39°44'E, 780 m, 23.V.2014, leg. Pütz (cPüt, cAss).

C o m m e n t : The above specimens represent the first record since the original description, which is based on a unique male.

## Othius punctulatus (GOEZE, 1777)

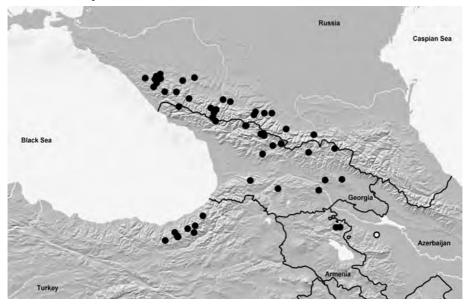
Material examined: <u>Armenia</u>: 1♂, 1♀, N Yerevan, W Hrazdan, 40°32'N, 44°33'E 2130 m, secondary forest margin, litter and roots sifted, 25.VI.2016, leg. Assing (cAss, MNB); 13, 2♀♀, N Yerevan, W Hrazdan, 40°30'2N, 44°34'E, 1870 m, mixed deciduous forest margin, litter sifted, 25.VI.2016, leg. Assing (cAss, MNB); 1♀, N Yerevan, NW Hrazdan, 40°42'N, 44°29'E, 2500 m, grassy W-slope with scattered Salix, litter and roots of grass sifted 26.VI.2016, leg. Assing (MNB); 1♂, N Yerevan, NW Hrazdan, 40°38'N, 44°30'E, 2010 m, mixed deciduous forest, litter and grass roots sifted, 27.VI.2016, leg. Assing (cAss); 13, N Yerevan, NW Hrazdan, 40°38'N, 44°28'E, 2110 m, stream valley, mixed deciduous forest, litter and grass roots sifted, 28.VI.2016, leg. Assing (cAss); 333, 322, ca. 50 km NW Sisian, Jermuk,  $39^{\circ}50^{\circ}N$ ,  $45^{\circ}40^{\circ}E$ , 2110 m, oak forest and forest margin, litter and roots sifted, 30.VI.2016, leg. Assing (cAss, MNB); 1 $\delta$ , same data, but 3.VII.2016 (cAss);  $8\delta\delta$ ,  $3\uparrow$ , same data, but 12.VII.2016 (cAss, MNB);  $1\delta$ ,  $1\uparrow$ , 40 km NW Sisian, W-side of Vorotan Pass,  $39^{\circ}43$ 'N,  $45^{\circ}40$ 'E 1960 m, dry oak forest, litter and roots sifted, 30.VI.2016, leg. Assing (cAss, MNB); 13, N Vanadzor, S Pushkin pass, 40°54'N, 44°26'E, 1850 m, forest with Quercus, Fagus, Sorbus, etc., litter and roots sifted, 1.VII.2017, leg. Assing (cAss); 1<sup>o</sup>, 1<sup>o</sup>, WSW Dilijan, Kalavan, 40°38'N, 45°06'E, 2100 m, forest at timber line with oak and birch, litter and large fungus on oak sifted, 5.VII.2017, leg. Assing (cAss, MNB); 18, 222, SE Spitak, 40°48'N, 44°18'E, 1840 m, oak forest margin, litter and roots sifted, 7.VII.2017, leg. Assing (cAss, MNB).

#### Othius grandis HOCHHUTH, 1849

M a t e r i a l e x a m i n e d : Georgia: R a t c h a : 1♀ [slightly teneral], south slope of Letchkhumskiy mountain range, Khideshlebi env., 42°40'N, 43°24'E, 1235 m, 5.VII.2015, leg. Pütz (cPüt); 1♂, 4 km NW Nikortsminda, 42°29'N, 43°06'E, 1395 m, 23.V.2016, leg. Brachat & Meybohm (cAss). K a c h e t i a : 2♂♂, Tsiv-Gombori mountain range, 5 km W Telavi, 41°54'N, 45°24'E, 1090 m, beech forest, 8.VII.2015, leg. Pütz (cPüt, cAss). S v a n e t i : 1♂, 1♀, 3 km S Koruldashi, 42°53'N, 43°09'E, 1790 m, 1.VIII.2016, leg. Meybohm (cAss); 2♂♂, Mazeri, 43°06'N, 42°36'E, 1660 m, 26.VI.2017, leg. Brachat & Meybohm (cAss); 2♂♂, 1♀, Ushguli, Zagaro pass, 42°55'N, 43°08'E, 2250 m, 29.VI.2017, leg. Brachat & Meybohm (cAss).

<u>Russia</u>: 1 $\bigcirc$ , Krasnodarskiy Kray, Lagonakskiy Mountains, Matazyk Mountain, 9 km S Guamka, 44°09'N, 39°55'E, 1080 m, 21.V.2014, leg. Pütz (cPüt); 1 $\bigcirc$ , Krasnodarskiy Kray, Chernomoeskiy Mountains, NE Podgornye, 44°08'N, 41°04'E, 820 m, meadows, 28.V.2014, leg. Pütz (cAss). <u>Armenia</u>: 1 $\bigcirc$ , road Berd–Ijevan, 40°52'N, 45°18'E, 1350 m, beech forest margin, litter and roots sifted, 30.VI.2017, leg. Assing (cAss); 1 $\bigcirc$ , pass road E Ijevan, 40°52'N, 45°11'E, 1400 m, young beech forest, litter and dead wood sifted, 6.VII.2017, leg. Assing (cAss).

C o m m e n t : The distribution of *O. grandis* is confined to the Caucasus region, including the Greater and the Lesser Caucasus, as well as Northeast Turkey and North Armenia. The species was also reported from Azerbaijan, based on an old record from "Kirovabad" (=Gandza) (ASSING 1999b). It is currently unclear if this record is correct or, like material from "Helenendorf", based on a mislabelled specimen (see comments in the sections on *O. stenocephalus* and *O. hebes*. The currently known distribution is illustrated in Map 3.



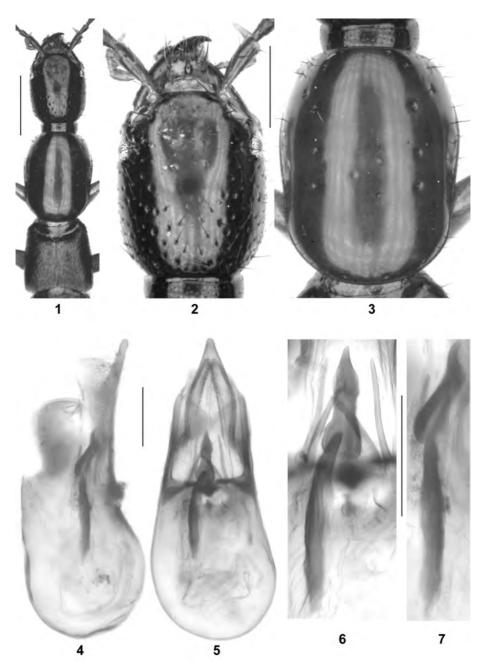
**Map 3**: Distribution of *Othius grandis* (black circles) in the Caucasus region, based on examined records. White circle: doubtful locality "Kirovabad" (= Gandza).

#### Othius arater nov.sp. (Figs 8-14, 24-26)

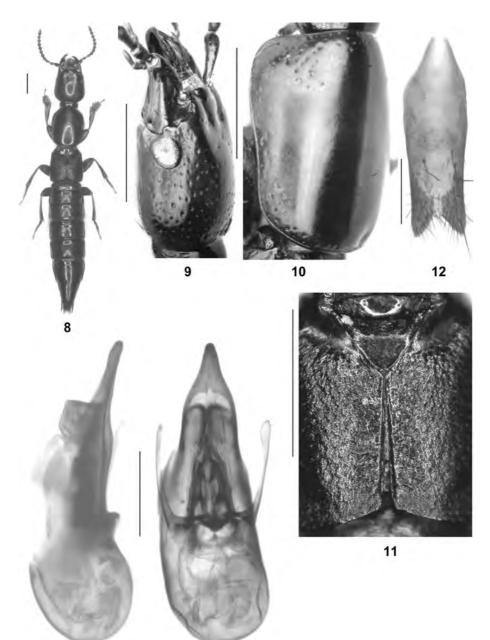
T y p e m a t e r i a l : <u>Holotype</u>  $\mathcal{A}$ : "CHINA, S-Sichuan, road 56 km E Xichang-Zhaojue, Mt. WenLin pass, 3200 m, ~ 27°52'N, 102°30'E, 5.-20.VI.2017, leg. Reuter / Holotypus  $\mathcal{A}$  Othius arater sp. n. det. V. Assing 2017" (cAss). <u>Paratypes</u>:  $6\mathcal{A}\mathcal{A}$ ,  $4\varphi\varphi$ : same data as holotype (cFel, cAss).

E t y m o l o g y : The specific epithet (Latin, noun: plow) alludes to the distinctive shapes of the internal lateral structures of the aedeagus.

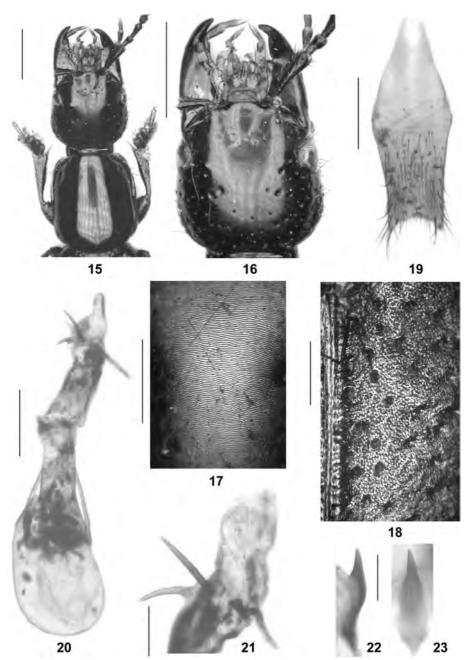
D e s c r i p t i o n : Measurements (mm) and ratios (range, arithmetic mean; n = 11): HL: 1.59-1.86, 1.70; HW: 1.49-1.83, 1.60; PW: 1.59-1.86, 1.70; PL: 1.95-2.29, 2.08; EL: 0.95-1.07, 1.00; TiL: 1.31-1.46, 1.39; TaL: 1.07-1.16, 1.11; TL: 10.4-13.1, 12.2; HL/HW: 1.02-1.10, 1.06; HW/PW: 0.89-0.98, 0.94; PL/PW: 1.17-1.28, 1.22; EL/PL: 0.44-0.51, 0.48; TaL/TiL: 0.77-0.84, 0.80.



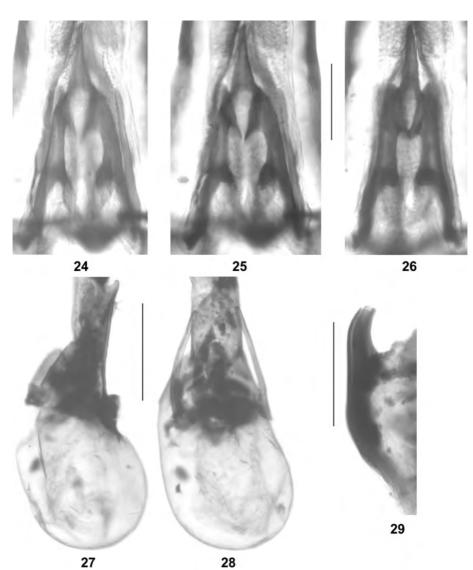
**Figs 1-7**: *Othius discrepans*: (1) forebody; (2) head; (3) pronotum; (4-5) aedeagus in lateral and in ventral view; (6-7) internal structures of aedeagus in ventral and in lateral view. Scale bars: 1: 1.0 mm; 2-3: 0.5 mm; 4-7: 0.2 mm.



Figs 8-14: Othius arater: (8) male habitus; (9) head in lateral view; (10) pronotum in dorso-lateral view; (11) elytra; (12) male sternite IX; (13-14) aedeagus in lateral and in ventral view. Scale bars: 8-10: 1.0 mm; 11-14: 0.5 mm.



Figs 15-23: Othius burmensis: (15) head and pronotum; (16) head; (17) median portion of head; (18) sutural portion of right elytron; (19) male sternite IX; (20) aedeagus in ventral view (internal sac fully extruded); (21) lateral internal structures of aedeagus; (22-23) basal internal structure. Scale bars: 15-16: 1.0 mm; 19-20: 0.5 mm; 17-18, 21: 0.2 mm; 22-23: 0.1 mm.



**Figs 24-29**: *Othius arater* (24-26) and *O. burmensis* (27-29): (24-26) internal structures of aedeagus in ventral view; (27-28) aedeagus in lateral *and* in ventral view (without extruded internal sac); (29) apical median internal structure of the aedeagus. Scale bars: 27-28: 0.5 mm; 24-26, 29: 0.2 mm.

Moderately large species (see measurements). Habitus as in Fig. 8. Coloration: body black; legs brown to dark-brown; antennae dark-brown to blackish, sometimes with the basal antennomeres slightly paler.

Head weakly oblong, more or less distinctly wedge-shaped, i.e., more or less distinctly widened posteriorly, and somewhat narrower than pronotum (see ratios HL/HW and HW/PW); anterior pair of frontal punctures distinct, with additional smaller punctures; posterior pair of frontal punctures usually present, but often indistinct or indistin-

guishable from other punctures, rarely completely absent; median dorsal portion impunctate; remaining punctation variable, usually rather fine, moderately dense to sparse, very sparse or partly absent in median dorsal portion; integument with distinct and fine isodiametric microreticulation. Eyes (Fig. 9) small, approximately one-third as long as postocular region in dorsal view. Antenna 2.8-3.1 mm long; antennomeres V-X transverse.

Pronotum (Fig. 10) moderately oblong (see ratio PL/PW), broadest near anterior angles, and distinctly tapering posteriorly; punctation pattern similar to that of most other East Palaearctic congeners, except for the presence of clusters of more or less numerous punctures in the antero-lateral portions and near the posterior angles; posterior discal puncture (i. e., puncture near posterior angle) distinctly separated from posterior angle by a distance of often more than three times its diameter and usually accompanied by additional punctures; microsculpture fine and predominantly composed of transverse meshes of variable length.

Elytra (Fig. 11) barely half as long as pronotum (see ratio EL/PL); punctation rather sparse and shallow; interstices on average approximately twice as broad as diameter of punctures, with pronounced, but glossy microsculpture. Hind wings absent.

Abdomen slightly broader than elytra; punctation fine and rather dense; interstices with fine microsculpture predominantly composed of long transverse meshes; posterior margin of tergite VII without palisade fringe.

 $\delta$ : protarsomeres I-IV strongly dilated; sternites V-VI unmodified; sternite VII shallowly impressed in postero-median portion; sternite VIII with shallow median impression posteriorly and with truncate posterior margin; posterior processes of hemitergites IX short, just reaching posterior margin of tergite X, apically without tooth-like processes; sternite IX (Fig. 12) anteriorly deeply bifid, posterior margin with V-shaped excision, postero-lateral angles without spine-like processes; aedeagus (Figs 13-14) 1.70-1.85 mm long; parameres apically dilated, each with 4 apical setae; internal sac (Figs 24-26) with five sclerotized internal structures (basal median structure absent): a rather short and apically acute apical median and two pairs of lateral structures, the internal pair stout and of highly distinctive shape and the external pair slender and of similar length as the internal pair.

 $\mathcal{Q}$ : protarsomeres I-IV distinctly dilated, but less so than in male.

C o m p a r a t i v e n o t e s : *Othius arater* is distinguished from all its congeners by the internal structures of the aedeagus, particularly the shapes of the stout lateral structures. It additionally differs from other micropterous species (without a palisade fringe at the posterior margin of tergite VII) recorded from South Sichuan as follows:

from *O. excisus* ASSING, 1999 (Luoji Shan to the south of Xichang) by darker coloration of the elytra and the antennae (*O. excisus*: elytra dark reddish-brown; antennae reddish), a less oblong and distinctly wedge-shaped head, smaller head and pronotum, a less distinct posterior pair of frontal punctures, the microsculpture of the pronotum (*O. excisus*: predominantly composed of isodiametric meshes), shorter elytra with distinct microsculpture and with much sparser and much less distinct punctation, finer punctation on the abdomen, shorter and apically less acute posterior processes of the male sternite IX, and a more slender aedeagus with internal structures of different shapes; from *O.* 

*sculptipennis* ASSING, 1999 (environs of Muli/Bowa) by smaller body size, the coloration (*O. sculptipennis*: elytra reddish), much shorter antennae (*O. sculptipennis*: antenna approximately 4 mm long; antennomeres V and VI not transverse), a much more oblong and distinctly wedge-shaped head, the microsculpture of the pronotum (*O. sculptipennis*: composed of isodiametric meshes), slightly shorter elytra with less dense punctation and with different microsculpture (*O. sculptipennis*: microsculpture predominantly composed of very dense micropunctures), and a smaller, apically less acute aedeagus (*O. sculptipennis*: aedeagus approximately 2.1 mm long) without a basal median structure and with apical and lateral structures of different shapes.

For illustrations of O. excisus and O. sculptipennis see ASSING (1999a, 2003a).

D is tribution and natural his tory: The type locality is situated to the east of Xichang in the south of the Chinese province Sichuan at an altitude of 3200 m. The specimens were collected with pitfall traps in subalpine bushland with rho-dodendron, small pine, and moist meadows (REUTER pers. comm.).

#### Othius burmensis nov.sp. (Figs 15-23, 27-29)

T y p e m a t e r i a l : <u>Holotype 3</u>: "MYANMAR (Burma), Provinz Kachin State, ca. 30 km N von Pangwa, 29.-30.IX. + 6.X.2010, N 25°43'52.4" E 098°24'06.0" (H = 2.255 m; TF - under wood, stones), leg. Michael Langer, S. Naumann & S. Löffler / Holotypus 3 Othius burmensis sp. n. det. V. Assing 2015" (NHMW).

E t y m o l o g y : The specific epithet is an adjective derived from Burma, where this species is currently the sole representative of the genus.

D e s c r i p t i o n : Measurements (mm) and ratios: HL: 1.59; HW: 1.53; PW: 1.65; PL: 1.95; EL: 1.37; TiL: 1.40; TaL: 1.16; TL: 11.4; HL/HW: 1.04; HW/PW: 0.93; PL/PW: 1.19; EL/PL: 0.70; TaL/TiL: 0.83.

Moderately large species (see measurements). Coloration: head, pronotum, and abdomen black; elytra blackish-brown with a dark-reddish hue; legs dark-brown with reddish tarsi; antennae dark-reddish, with antennomeres I, III, and the apical portion of II blackish.

Head (Figs 15-16) weakly oblong, weakly widened posteriorly, and somewhat narrower than pronotum (see ratios HL/HW and HW/PW); anterior pair of frontal punctures distinct, with additional smaller punctures; posterior pair of frontal punctures absent; median dorsal portion impunctate; lateral and posterior dorsal portions with rather sparse and coarse punctures of somewhat variable size; integument with distinct and fine transverse microsculpture (Fig. 17). Eyes of moderate size, approximately half as long as postocular region in dorsal view. Antenna 2.9 mm long; antennomeres V-X weakly transverse.

Pronotum (Fig. 15) moderately oblong (see ratio PL/PW) and with subparallel lateral margins in dorsal view; discal punctation pattern similar to that of most other East Palaearctic congeners; posterior discal puncture (i. e., puncture near posterior angle) separated from posterior angle by a distance less than its diameter; microsculpture finely transverse.

Elytra (Fig. 18) shorter than pronotum (see ratio EL/PL); macropunctation rather sparse and shallow; interstices on average several times as broad as diameter of punctures, with very dense micropunctation rendering the surface nearly matt. Hind wings present.

Abdomen slightly narrower than elytra; punctation fine and moderately dense; interstices with fine transverse microsculpture; posterior margin of tergite VII with palisade fringe.

 $\circ$ : protarsomeres I-IV strongly dilated; sternites V-VII unmodified; sternite VIII posteriorly triangularly depressed, posterior margin weakly concave; posterior processes of hemitergites IX short, apically without tooth-like processes, not reaching posterior margin of tergite X; sternite IX (Fig. 19) broad, anteriorly deeply bifid, posterior margin strongly concave, postero-lateral angles without spine-like processes; aedeagus (Figs 20, 27-28) 1.4 mm long; parameres apically not distinctly dilated, each with 4 apical setae; internal sac (extruded in holotype) with six sclerotized internal structures: a short and apically weakly curved median basal structure (Figs 22-23), a distinctly longer median apical structure with a hook-shaped apex (pointing ventrad) (Fig. 29), and two pairs of long and slender lateral structures (Fig. 21).

C o m p a r a t i v e n o t e s : The similarly modified sculpture of the elytra (dense micropunctation) and the shared absence of a pair of posterior frontal punctures on the head suggests that *O. burmensis* is closely related to *O. opacipennis* CAMERON, 1939 and allied species (*O. sericipennis* ASSING, 2003; *O. spoliatus* ASSING, 2008), all of which are distributed in southwestern China (Yunnan, Sichuan). *Othius burmensis* is distinguished from all of them by a less derived morphology of the aedeagus (less elongate and with the full set of internal structures). In addition, it differs from them as follows:

from *O. opacipennis* (Yunnan, Sichuan) by distinctly bicoloured antennae (*O. opacipennis*: antennae blackish-brown to black), a posteriorly dilated and less oblong head, subparallel lateral margins of the pronotum (*O. opacipennis*: pronotum tapering posteriorly), and the shape of the male sternite IX (*O. opacipennis*: sternite IX much longer and more slender, anteriorly less deeply bifid, and posteriorly bisinuate);

from *O. sericipennis* (Yunnan, Sichuan) by a posteriorly dilated, much broader, and less oblong head, subparallel lateral margins of the pronotum (*O. sericipennis*: pronotum tapering posteriorly), and the shape of the male sternite IX (*O. sericipennis*: sternite IX much longer, more slender, anteriorly not bifid, and posteriorly weakly concave);

from *O. spoliatus* (Yunnan) by distinctly bicoloured antennae (*O. spoliatus*: antennomeres IV-X dark-brown), less transverse preapical antennomeres, a less broad and posteriorly less strongly dilated head, much longer elytra, the presence of hind wings (reduced in *O. spoliatus*), the presence of a palisade fringe at the posterior margin of tergite VII (absent in *O. spoliatus*), and the shape of the male sternite IX (*O. spoliatus*: sternite IX much longer, more slender, and posteriorly nearly truncate with median excision).

For illustrations of *O. opacipennis*, *O. sericipennis*, and *O. spoliatus* see ASSING (1999b, 2003b, 2008).

D is tribution and natural history: *Othius burmensis* is the first representative of the genus to be recorded from Myanmar. The type locality is situated in the northeast of the country, not far from the border with the Chinese province Yunnan, at an altitude of 2255 m.

# Acknowledgements

I am indebted to the colleagues listed in the material section for the loan of material from the collections under their care, in particular to Benedikt Feldmann (Münster) for the generous gift of the holotype of *O. arater* and for proof-reading the manuscript.

#### Zusammenfassung

*Othius arater* nov.sp. (China: Süd-Sichuan) und *O. burmensis* nov.sp. (Nordost-Myanmar), der erste Nachweis der Gattung aus Myanmar, werden beschrieben und abgebildet. Für *Othius discrepans* ASSING, 1999 werden neue Abbildungen erstellt. Von zehn Arten werden weitere Nachweise gemeldet. Die derzeit bekannten Verbreitungsgebiete von drei kaukasischen Arten werden anhand von Karten illustriert. *Othius* STEPHENS, 1829 und die Tribus Othiini enthalten nunmehr insgesamt 130 bzw. 147 Arten und Unterarten.

#### References

- ASSING V. (1997): A revision of *Othius* STEPHENS, 1829. III. The species of the Western Palaearctic region exclusive of the Atlantic Islands (Coleoptera, Staphylinidae: Xantholininae). Nova Supplementa Entomologica, Berlin **10**: 3-130.
- ASSING V. (1999a): A revision of *Othius* STEPHENS, 1829. VII. The species of the Eastern Palaearctic region east of the Himalayas (Coleoptera: Staphylinidae). — Beiträge zur Entomologie, Berlin 49 (1): 3-96.
- ASSING V. (1999b): A revision of *Othius* STEPHENS (Coleoptera, Staphylinidae). VIII. Further records, new species, and a new synonym. Linzer Biologische Beiträge **31** (2): 661-691.
- ASSING V. (2003a): A revision of *Othius* STEPHENS. IX. New taxa, new synonyms, additional records, and a checklist of species (Coleoptera, Staphylinidae, Staphylininae, Othiini), pp. 727-752. In: CUCCODORO G. & R.A.B. LESCHEN (eds), Systematics of Coleoptera: Papers celebrating the retirement of Ivan Löbl. Memoirs on Entomology International Vol. 17, Associated Publishers, Gainesville, Florida.
- ASSING V. (2003b): A revision of Othiini. XIII. Horizontal and vertical distribution of *Othius*, new species, and additional records (Coleoptera: Staphylinidae: Staphylininae). Entomological Problems **33** (1-2): 69-88.
- ASSING V. (2005): A revision of Othiini. XIV. New species, new synonyms, and new records (Insecta: Coleoptera: Staphylinidae). Entomological Problems **35** (1): 51-67.
- ASSING V. (2008): A revision of Othiini. XVI. Four new species of *Othius* from the Himalaya and China, and additional records (Coleoptera: Staphylinidae, Staphylininae). Koleopterologische Rundschau **78**: 245-263.
- ASSING V. (2010): A revision of Othiini. XVII. A new species from China and additional records (Coleoptera: Staphylinidae: Staphylininae). Linzer biologische Beiträge **42** (2): 1077-1091.
- ASSING V. (2013): A revision of Othiini XVIII. Two new species from China and additional records (Coleoptera: Staphylinidae: Staphylininae). — Koleopterologische Rundschau 83: 73-82.
- ASSING V. (2015): A revision of Othiini. XIX. Two new species of *Othius*, the first record of the genus from Vietnam, and additional records (Coleoptera: Staphylinidae: Staphylininae). — Linzer Biologische Beiträge 47 (2): 1235-1250.
- ASSING V. & M. SCHÜLKE (2017): On the *Ischnosoma* fauna of Georgia (Coleoptera: Staphylinidae: Tachyporinae). Contributions to Entomology **67** (2): 195-206.

ASSING V. & A. SOLODOVNIKOV (1998): Three new species of *Othius* STEPHENS from the Caucasus (Coleoptera, Staphylinidae: Xantholininae). — Zoosystematica Rossica 7: 299-305.

SMETANA A. (2004): Staphylinidae, subfamilies Omaliinae-Dasycerinae, Phloecharinae-Apaticinae, Piestinae-Staphylininae, pp. 237-272, 329-495, 505-698. — In: LÖBL I. & A. SMETANA (eds), Catalogue of Palaearctic Coleoptera. II. Hydrophiloidea–Histeroidea– Staphylinoidea. — Stenstrup, Apollo Books: 942 pp.

Author's address:

Dr. Volker ASSING Gabelsbergerstr. 2 D-30163 Hannover, Germany E-mail: vassing.hann@t-online.de

# **ZOBODAT - www.zobodat.at**

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Linzer biologische Beiträge

Jahr/Year: 2018

Band/Volume: 0050\_1

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

Artikel/Article: <u>A revision of Othiini. XX. Two new species of Othius, the first record of the genus from Myanmar, and additional records (Coleoptera: Staphylinidae:</u> <u>Staphylininae) 25-40</u>