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## A revision of *Othius* STEPHENS (Coleoptera, Staphylinidae). VIII. Further records, new species, and a new synonym.

V. ASSING

**A b s t r a c t :** A study of previously unrevised material yielded numerous additional data regarding the distribution and bionomics of 37 species of *Othius*, a genus which is here argued to represent a Palaearctic taxon and which now comprises approximately 100 species. The previously unknown male primary and secondary sexual characters of *O. turcmenus* FAUVEL, *O. loeffleri* SCHEERPELTZ, and *O. opacipennis* CAMERON are described and illustrated for the first time. Three species are described and distinguished from their respective closest relatives: *O. jumlaensis* sp. n. from Nepal, *O. svaneticus* sp. n. from the Caucasus region, and *O. bhutanensis* sp. n. from Bhutan. Their primary and secondary sexual characters are illustrated. An examination of the previously unavailable holotype of *O. loeffleri* SCHEERPELTZ resulted in the following synonymy: *Othius loeffleri* SCHEERPELTZ 1976 = *Othiogeiton nepalensis* SCHEERPELTZ 1976, syn. n.

**K e y w o r d s :** Coleoptera, Staphylinidae, Staphylininae, Othiini, *Othius*, Palaearctic region, distribution, ecology, taxonomy, revision, new species, new synonym.

### Introduction

The *Othizrs* species of the Palaearctic region have recently been revised in several steps (ASSING 1997a, 1997b, 1998a, 1998b, 1999; ASSING & SOLODOVNIKOV 1998; ASSING & WUNDERLE 1995). Four species of *Othius* have been described from New Zealand, but a study of types and additional material revealed that they are not congeneric with the species from the Palaearctic region (ASSING in prep.). Therefore, the distribution of the genus may be considered Palaearctic. Strictly speaking, *Othizrs* is also present in the Oriental region (China, Taiwan), but here the species exclusively occur at higher altitudes, and, phylogenetically, they are of Palaearctic affiliations (ASSING 1999).

Since the previous revisions, abundant material has become available for study, which provided additional biogeographical and bonomic data. For the first time, it was possible to examine the males of *O. turcmenus* FAUVEL and *O. opacipennis* CAMERON, and to reconsider their phylogenetic relationships; three species are new to science. Moreover, based on an examination of the previously unavailable holotype of *O. loeffleri* SCHEERPELTZ, a new synonymy is established. Before the present paper, 95 Palaearctic species (with four subspecies) were known, not counting three species of uncertain status from China; for details see ASSING (1999). Including a species currently being described by SOLODOVNIKOV (in press) and the new taxa and synonymy established below, the figure now stands at 98.

## Material and measurements

**Material from the following public institutions and private collections was examined:**

- BMNH ..... The Natural History Museum, London (M. Brendell)
- DEI ..... Deutsches Entomologisches Institut, Eberswalde (L. Zerche)
- LMNH ..... Niedersächsisches Landesmuseum Hannover (L. Schmidt)
- MAKB ..... Museum Alexander Koenig, Bonn (T. Wagner)
- MIING ..... Muséum d'Histoire Naturelle, Genève (J. Löbl)
- NIIMH ..... Naturhistorisches Museum Basel, main collection and coll. Frey (D. Ilurckliardi, E. Sprecher)
- NIHMW ..... Naturhistorisches Museum Wien (H. Schillhammer)
- NME ..... Naturkundemuseum Erlfurt (M. Hartmann)
- NMSG ..... Naturmuseum St. Gallen (T. Bürgin)
- SMNS ..... Staatliches Museum für Naturkunde in Stuttgart (W. Schwaller)
- ZIN ..... Zoological Institute, St.-Petersburg (V.I. Gusarov, A. Solodovnikov)
- ZSM ..... Zoologische Staatsammlung München (M. Bachr)
- cAss ..... author's private collection
- cBli ..... Private collection S. Illišicic, Dortmund
- cDro ..... Privaic collection U. Drovnik, Ljubljana
- cFel ..... Privaic collection U. Iclidiataii. Münster
- cGar ..... Privaic collection R. García Illecerre, La Palma
- cHol ..... Private collection E. Holzer, Anger
- cKap ..... Privaic collection A. Kapp, Rankweil
- cMac ..... Private collection A. Machado, La Laguna
- cPoo ..... Privaic collection P. Poot, Maastricht
- cRou ..... Privaic collection G. de Rougemont, London
- cSch ..... Privaic collection M. Schliitke, Berlin
- cSme ..... Private collection A. Smetana, Ottawa
- cWun ..... Private collection F. Wuiiderle, Mönchengladbach

The measurements in the descriptions are indicated in mm and abbreviated as follows:

- HW: maximal head width
- HL: head length from front margin of clypeus 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 metathibiae (external aspect, from knee to insertion of first metatarsomere)
- Tal: length of metatarsi (claws not included)
- Tl: total length from apex of mandibles to hind margin of tergum VIII.

## New species of *Othius*: new data on biogeography, biology and taxonomy

Below, previously unrevised material is listed; new data on biology and distribution are commented on. German records of *O. punctulatus* (GOEZE), *O. angustus* STEPHENS, and *O. subuliformis* STEPHENS are not indicated, as these species are common everywhere in Germany, and their biology have been studied in detail (see ASSIN 1993, 1997b).

### *Othius lapidicola* MÄRKEL & KIESENWETTER

- Finland: Id, Kittilä, leg. J. Sahlberg (NIHMW); 1♂, 'Karislojo', leg. J. Sahlberg (NIHMW).
- Russian Federation: 1♀, Murmanskaia Oblast', Umba, leg. Levander (NIHMW); Id, 1♂, Murmanskaia Oblast', Chavang'a, leg. Edgren (NIHMW); 1♂, Murmanskaia Oblast', Chapom leg. Edgren (NIHMW); 1♂, Karel'skaya Resp., Solovetskiy Ostrava, leg. Levander (NIHMW).
- France: 3♂♂, 2♀♀, Hautes Alpes de Provençal, Lac Allos, 2100-2250m, 4.VI.1974, leg. Lo (MINING); 1♀, Hautes Alpes, Col de Vars, 27.VII.1968 (MINING); Id, 1♀, Hautes Alpes, Ft. Boscodon, 27.VII.1968 (MINING); 2♂♂, 29♀♀, Haute Savoie, S Lac Roi, 1700m, 30.VII.1971 leg. Löbl (MINING, cAss); 4♂♂, 1♀, Haute Savoie, Mi Semnoz, Crêt de Châtillon, 1650m, 26.VI.1980, leg. Löbl (MINING, cAss); Id, 1♀, Haute Savoie, Roc d'Infer, 1800-1850m, 23.VIII.1978, leg. Löbl (MINING); 2♂♂, 29♀♀, Haute Savoie, Lac d'Anterne, 2600m, 6.VIII.1981, leg. Löbl (MINING); Id, Haute Savoie, Cornet d'Arêches, 1900m, 15.X.1981, leg. Löbl (MINING); 29♀♀, Alpes Maritimes, Le Boron, 22.VII.1956, leg. Tempère (MINING).
- Czechoslovakia: 3♂♂, 4♀♀, Ihyni, LKr, Berchtesgaden, Roßfeld, 1640m, 28.VI.1997, leg. Wolf (cSc cAss); 4♂♂, 4♀♀, same locality, 17.VIII.1998, leg. Wolf (cSc, cAss); 1♀, Sachsen, Zwicker (MAKB).
- Switzerland: 1♂, Graubünden: Splügenpass, Rätznscher-Alpe, 1840m, Rhododendron litt. 23.VI.1997, leg. Brandstetter (cKap).
- Austria: 1♂, 1♀, Großglockner (NIHMW); 1♂, Vorarlberg, Riezlern, VI.-VII.1921, leg. Wagn (NIHMW); 1♀, Tirol, Wagrain, Steinplatte, ca. 1450m, 6.VI.1996, leg. Wolf (cSc); 2♂♂, 1♀, Tirol, Wolkenstein, leg. Ganglbauer (NIHMW); 1♂, Tirol, Ötz-Umhausen, 8.X.1908, leg. Kna (NIHMW); id, 1♀, Salzburg, Schafberg, 1902, leg. Ganglbauer (NIHMW); 1♀, Oberösterreich, Hallstätter See, 1908, leg. Stücklein (NIHMW); 3♂♂, Niederösterreich, Reisalpe, leg. Winkl (NIHMU); Id, Steiermark, Niedere Tauern, 3.VII.1923, leg. Stücklein (NIHMU); 1♀, Karnic Kamischki Alpen, Rattendorfer Alm, leg. Strupi (NIHMW); 1♀, Karnische Alpen, Angerbacht, leg. Strupi (NIHMW).
- Italy: 3♂♂, Piemonte, Val di Susa, Colle di Finestre, 850m, 10.IX.1997, leg. Wolf (cSc); 5♂♂, 5♀♀, V. d'Alberian, 1908, leg. Ganglbauer (NIHMW); Id, Fenestrelle, 1908, leg. Ganglbauer (NIHMW); 9♂♂, 2♀♀, Lombardia, Mt. Grigna, leg. Ganglbauer (NIHMW); 2♂♂, Lombardia, Mt. Legnone, 20.VI.1904, leg. Pinker (NIHMW); 1♂, Trentino, Moià Pasubio, Rif. Pari 2.VII.1968 (NIHMW); 1♀, Passo di Rolle, 1898, leg. Ganglbauer (NIHMW); 1♀, Mt. Stelvio VIII.1872 (NIHMW); 1♀, Mt. Stelvio (NIHMW); 2♀♀, Trentino, Carezza al Lago, leg. Ganglbauer (NIHMW); 14♂♂, 10♀♀, 18 second-instar and 7 first-instar larvae, Trentino Trento, Mi. Uuidiude, Cima Palon, 2050m, peak region, 11.VIII.1998, leg. Assing (cAss); 2♀♀, 2 first-instar larvae, Trentino, Madonna di Campiglio, NW Rif. Pradalago, 2200-2300m, litter *Alnus viridis*, 10.VIII.1998, leg. Assing (cAss); 6♂♂, 3♀♀, 1 second-instar larva, Trentino, V. di Non, NE Coredo, Val di Verdes, 1000m, 12.VIII.1998, leg. Assing (cAss); 1♀, Monte Baldo, leg. Lokay (MAKB); 7♂♂, 12♀♀, Mt. Pari (NIHMW); 3♂♂, 3♀♀, Mt. Pari, 23.VI.1905, leg. Pinker (NIHMW); 1♀, Mt. Pari, leg. Franz (NIHMW); 2♂♂, Campogrosso, leg. Holdha (NIHMW); Id, Cima Tomba, leg. Ganglbauer (NIHMW); 2♀♀, Friuli Venezia Giulia, S Tarvisio, Mangart, 2100m, sifted from grass and *Dryas*, 3.VIII.1998, leg. Zerche (DEI); 1♂, A Camonica, Tarvisio, 1899, leg. Pinker (NIHMW); Id, Toscana, Alpi Apuane, W M. Sagru, i Borla, 1450m, Faguetum, 6.IX.1998, leg. Assing (cAss); 1♀, Alpi Apuane, M. Sagru, 1740m, peak region, 6.IX.1998, leg. Assing (cAss); Id, 1♀, Lucania, Pollino, Vaquarro (PZ), 1500m, 7.VI.1982, leg. Angelini (cRou); 1♂, 1♀, Lucania, Pollino, Coppola di Paola, 1500m, 19.VII.1979, leg. Angelini (cRou); 1♀, Calabria, Aspromonte, leg. Paganetti (NIHMW). Localities identified: 1♂, Boscolungo, Pistoiese, VII-VIII.1891, leg. Dodero (NIHMW); 3♂♂, 1♀, Pso, Moncenedolo, 22.VI.1904, 26.VI.1907, leg. Pinker (NIHMW).

**Czech Republic:** 2♂♂, 2♀♀, Praděd [Altvater], leg. Bernhäuser, Wanka (MAKB, NIIMW).  
**Slovakia:** Id. Vtáčnik, 1300-1346m, 12.VI.1983, leg. Moravec (eMor); 1♂, Trenčín, leg. Brancsik (MAKB); Id; 1♀, Malá Fatra, 'Kl. Kriyan', 1892, leg. Brancsik (NIIMW); 2♂♂, Trenčín, leg. Brancsik (NIIMW); 1♂, 'Tatra', Reitter (MAKB); 1♂, 'Hohe Tatra' (NIIMW); 1♂, 'Tatra, Gríner See', leg. Stolz (NIIMB).

**Romania:** 1♂, 3♀♀, Munții Retezat, Cabana Bută, 1600-1800m, 29.VII.1980, leg. Janák, Moravec (cJan, eMor, cAss); 1♂, Munții Retezat, Gura Bucureci, 1650-1750m, 22.VII.1988, leg. Janák (cJan); 1♀, Munții Retezat, Custura, 2200-2400m, 29.VII.1980, leg. Janák (cJan); Id. Munții Retezat, Valea Galeș, 1750-1850m, 26.VII.1989, leg. Janák (cAss); 1♂, Domogled, Baile Herculane, Ch. Prolaz, 500-600m, 16.VII.1982, leg. Janák (cJan); 2♂♂, 4♀♀, 'Carpathen', leg. Brancsik, Roshr (NIIMW); 1♀, 'Süd-Ungarn', leg. Merkl (NIIMW).

**Croatia:** Id. Dalmatia, Sv. Jure, Blokovo, 28.V.1991, leg. Janák (cJan); 4♂♂, 1♀, Mt. Biokovo, leg. Besuchet (MIING).

**Bosnia-Herzegovina:** 2♀♀, Mostar, 1879, leg. Reitter (NIIMW); 1♀, [locality not indicated] leg. Apselbeck (NIIMW); 1♂, 'Zaglavik', leg. Weirather (NIIMB).

**Bulgaria:** 1♂, Arkutino, 11.VI.1976 (cJan); 3♂♂, 2♀♀, Stara Planina, Petrokhanski, leg. Breit (NIIMW, cAss); 1♂, Stara Planina, Sliven, 1000m, 21.VIII.1986, leg. Arndt (eSch); 1♂, Kameno, leg. Paganetti (cAss); 1♂, 1♀, Rodopi Planina, Persenk, 28.VIII.1989, leg. Hartmann (NME); 1♂, Borovets, 6.VII.1993, leg. Čuoler (cRou).

**Greece: Continental:** 2♀♀, Notia Pindos, Katara pass, 1700-1800m, 23.VI.1997, leg. Winkelmann (eSch); 2♀♀, Katara pass, 1200m, 28.VI.1997, leg. Winkelmann, Bayer & Mess (eSch); 3♂♂, 1♀, Makedhonija, Olympos, NW Hütte Stavros, 1500m, *Fagus* wood, 7.IV.1998, leg. Assing (eAss); Wunderle (cAss, eWun); 2♂♂, 1♀, Makedhonija, Pieria Ori, Katafygi, 1450m, *Pinus* wood, 9.IV.1998, leg. Assing, Schillke; Wunderle (cAss, eSch, eWun); Id. 1♀, Makedhonija, Drama, Sklatoi, Kentrikiki-Rodopi, 1500m, 3.VI.1986, leg. Wolf (eSch); Id [macropterous], Makedhonija, NW Kavála, Pangéa, below skiing centre, 1650m, beechwood, 24.V.1999, leg. Assing (eAss); 16♂♂, 16♀♀, third-instar larvae, Makedhonija, N Sérus, Vrontous, 1750m, beechwood, 25.V.1999, leg. Assing (eAss); 1♀, Thessalia, Kato Olympus, E Kalipefki, Metamorphosi, 1500-1580, 12.IV.1998, leg. Wunderle (eWun); 2♂♂, 5♀♀, Thessalia, Kalambaka, Meteora, 14.V.1997, leg. Wolf (eSch); 3♂♂, 1♀, Thessalia, Pelion Oros, E Vólos, 1000m, 3.IV.1998, leg. Assing, Wunderle (cAss, eWun); 1♀, Zagora, Pelion Oros, 400m, 15.V.1997, leg. Wolf (eSch).

**Pelopónisos:** 2♂♂, Kalavrita, leg. Breit (NIIMW); 1♂, 2♀♀, Korinthia, Killini, S Tríkala, 1250m, *Pinus-Abies* wood, 11.IV.1998, leg. Zerche (DEI, cAss); 1♂, Lakonia, Parnon, S Agios Pétrios, 1150m, *Pinus-Abies* wood, 18.IV.1998, leg. Zerche (DEI); 1♂, Ahaia, Chelmos, 1465m, *Abies* wood, 12.IV.1998, leg. Zerche (DEI); Rodhós: 4♂♂, 7♀♀, Kattavia, 12.IV.1977, leg. Besuchet (MNIG, cAss); 1♀, Psinithos, 8.IV.1977, leg. Besuchet (cAss); 1♀, Ebonas, 15.IV.1977, leg. Besuchet (MNIG); 1♀, Profitis Ilias, 650m, 11.IV.1977, leg. Besuchet (MNIG); 1♀, Salakos, Prof. Ilias, 500m, 9.IV.1999, leg. Meybohm (cAss); 1♂, between Psinithos and Arikopoli, 100m, 12.IV.1999, leg. Meybohm (cAss); Kárpathos: Id. 1♀, Aperi, 200m, 20.IV.1999, leg. Meybohm (cAss); 1♀, Kali Limni, 1000m, 21.IV.1999, leg. Meybohm (cAss); 6♂♂, 7♀♀, Lastos, Oros Kolla, northern slope, 600m, 16.IV.1999, leg. Meybohm (cAss); 2♀♀, Menetes, Oros Chomali, northern slope, 500m, 19.IV.1999, leg. Meybohm (cAss). Zákynthos: 1♀, Kambi, 13.V.1996, leg. Erhard & Schaufuss (SMNS).

**Turkey: northern and northeastern Anatolia:** 5♂♂, 6♀♀, SW Artvin, 1900m, 9.VI.1986, leg. Besuchet, Löbl & Burckhardt (MIING); 6♂♂, 2♀♀, Arivili, 'Col entre Savçat-Ardahan', 2650m, 12.VI.1986, leg. Ilesicelici, Löbl & Burckhardt (MIING); 1♀, Artvin, Pirnalli, massif du Karkal dağı, 1600m, 11.VI.1986, leg. Besuchet, Löbl & Burckhardt (MIING); Id. Artvin, Col entre Boreka-Hopla, 700m, 8.VI.1986, leg. Ilesicelici, Löbl & Burckhardt (MIING); 3♂♂, 6♀♀, Bolu, leg. Schubert (NIIMW, cAss); 2♂♂, 6♀♀, Tunçeli, Tunçeli-Ovacık, 1100m, 5.VI.1986, leg. Besuchet, Löbl & Burckhardt (MIING); 9♂♂, 16♀♀, Kars, 'Col entre Damal + Posof', 2400-2500m, 13.VI.1986, leg. Besuchet, Löbl & Burckhardt (MIING, cAss); 2♂♂, 1♀, Kars, Digor, 1650m, 15.VI.1986, leg. Besuchet, Löbl & Burckhardt (MIING); Id. Gümrüşahne dağı, Erzincan-Kelkit, 2100m, 4.VI.1986, leg. Ilesicelici, Löbl & Burckhardt (cAss). Locality not specified: 2♂♂, 'Turcia', leg. Merkl (NIIMW). **Southern Anatolia:** Id. Antalya, Termessos, 3.IV.1997, leg. Brachat (eSch).

**Georgia:** Maly Kavkaz: 1♀, Trialetskiy Khrebet, Bakuriani, 1800-2200m, 4.-7.VII.1986, leg. W. & Schütke (eSch); 2♂♂, 3♀♀, same data, 15.-20.VI.1987 (eSch, cAss).

**Caucasus:** 1♀, Tbilisi, 'Gomareli' [present name not identified], leg. Leder (NIIMW).

**Locality ambiguous or not identified:** 1♂, 1♀, 'Schneeberg', leg. Bodemeyer (NIIMW); 'Konosero', leg. Levander (NIIMW); 1♂, 'Sesenke', VII.1892 (NIIMW).

Most of the records are within the range of distribution of *O. lapidicola*. The presence of this species in the Caucasus region, however, which was previously considered doubtful (ASSING 1997b), is now confirmed. According to SOLODOVNIKOV (postscriptum), the locality is in the Tbilisi area between 44.07 and 44.22E, and between 44 and 42.00N. *O. lapidicola* is now also known from the Greek island Karpathos. Interestingly, all the specimens from this island were relatively dark, macropterous and had comparatively long elytra; the same is usually also true for the terrestrial forms from the Greek mainland, in contrast, are usually brachypterous and of light colour, and fully winged beetles are relatively rare.

In order to assess the vertical distribution in various parts of the area of distribution, data in ASSING (1997b) and those listed above were pooled (Table 1). The known upper limit of *O. lapidicola* is now at an altitude of 2650m (northeastern Anatolia). The history of this species still requires clarification. In the Italian Alps, a large number of first- and second-instar larvae were collected in August; several third-instar larvae were collected in Greece in May. Previously, larvae had been observed in March (Greek May (Greece, Anatolia), and in July (Bulgaria)) (ASSING 1997).

**Table 1:** Collection data of adults of *O. lapidicola* (only material examined) in relation to altitude in the southern area of distribution: number of specimens (above) and of samples (in brackets below)

altitude (in m above sea level; classes in 200m steps)	-400	-600	-800	-1000	-1200	-1400	-1600	-1800	-2000	-2200	-2400
Alps				12 (2)	1 (1)	19 (3)	23 (8)	57 (14)	65 (17)	63 (11)	3 (2)
Appennines						3 (2)	9 (4)	1 (1)			
Polish, Czech and Slovakian mountains				8 (4)	3 (2)	13 (4)		1 (1)			
Romania, Croatia, Bosnia-Herzegovina, Bulgaria	5 (1)	1 (1)		1 (1)	2 (2)	56 (3)	33 (5)	172 (13)	56 (13)	38 (11)	17 (5)
Greece	8 (5)	18 (5)	18 (8)	12 (4)	18 (3)	7 (2)	11 (5)	39 (4)			
Anatolia				1 (1)	5 (1)	17 (5)	11 (4)	7 (4)	21 (6)	52 (5)	2 (2)

#### *Othius piceus* SCRIBA

**Spain:** 2♀♀, Andalucia, Málaga, Ronda, 28.III.1998, leg. Esser (cAss); 2♂♂, Andalucia, Sierra Nevada, 23.-26.IV.1997, leg. Poot (cPoo, eWun); Id, Escorial, V.1943, leg. Frey & K. (NIIMU).

**Morocco:** 2♂♂, Muyci Atlas, Azrou, Mischlissen, 1600m, 21.IX.1998, leg. Reuter (cFel, cAss).

*O. piceus* is known from the Iberian Peninsula, Morocco, and Algeria. In Morocco, this species had been recorded only from Tetuan (ASSING 1997b).

#### *Othius angustus angustus* STEPHENS

**Norway:** 1♂, W Årdal, 'Nystrøen' (NIIMW).

Finland: 1♀, Avasaksa, leg. J. Sahlberg (NIIMW).

**Denmark:** Id., 2♂, 2♀, 'Førøyar', 1907, leg. Cornu (NIIMW); 6♂, 1♀, Førøyar, northern islands, 1907, leg. Cornu (NIIMW, cAss).

**Russian Federation:** 1♂, Murmanskaya Oblast', Chavang'a, leg. Edgren (NIIMW); 1♂, Murmanskaya Oblast', Kuzreka, leg. Levander (NIIMW).

Poland: 29♂, N I Poznań, Murowana Goślina (NIIMW); 1♀, 'Ponumerm', leg. Schmidt (NIIMW).

**Spain:** 3♂, 1♀, Lerida, Bohí, 10.VII.1968 (MIING).

**Andorra:** Id. Illescas, 25.VII.1968 (MIING); 1♀, Encamp, 25.VII.1968 (MIING).

**France:** Id. Hautes Pyrénées, Cirque de Troumouse, 25.VIII.1976, leg. Aubry (cAss); 36♂, 1♀, Hautes Pyrénées, Barèges, 1600m, 12.VIII.1966, leg. Tempère (MIING); 2♂, 1♀, Hautes Pyrénées, Tournala [?], 7.VIII.1931, leg. Tempère (MIING); 1♂, Pyrénées-Orientales, Quillan, 25.VIII.1970, leg. Rougemont (cRou); **Id.**, 1♀, Hautes Alpes de Provence, Lac Allos, 2100-2250m, 4.VI.1974, leg. Löbl (MIING); 4♂, 1♀, Hautes Alpes de Provence, Col d'Allos, 2150m, leg. Löbl, 12.IX.1982, leg. Löbl (MIING); 1♀, Hautes Alpes. Col du Lautaret, 2050m, 21.VII.1952, leg. Tempère (MIING); 1♂, Haute Savoie, Rue d'Enfer, 1800-1850m, 23.VIII.1978, leg. Löbl (cAss); **Id.**, Haute Savoie, le Tour, Col de Balme, 2200m, 19.IX.1993, leg. Zerche (DEI); 2♂, 4♀, Alpes Maritimes, Col de la Ceyolle, 2320m, 10.VII.1964, leg. Tempère (MIING).

Switzerland: Graubünden: 1♂, Prättigau, Si. Antoennien Partnunsee, 1850m, 25.X.1996, leg. Kapp (cKap); **Id.**, 2♀, Graubünden, St. Moritz (NIIMW); **Id.**, Uri, St.-Gotthard (MAKU); 1♀, Valais, Sidero [?], leg. Simon (NIIMW).

**SWISS or Austrian territory:** 2♂, 1♀, Rätikon, leg. Ganglbauer (NIIMW); **Id.**, Silvretta (NIIMW).

**Austria:** Vorarlberg: 1♂, 1♀, Laterns, Gerenfälben, 1938m, *Calluna* litter, 12.IV.1997, leg. Kapp (cKap); 1♀, Gaschum, Silvretta-Stausee, 2050m, 12.X.1996, leg. Kapp (cKap); 1♂, Lechtaler Alpen, Menninger Hütte, 4.VII.1921, leg. Stöcklein (NIIMB); 1♀, Gargellen, Untere Röbi-Alpe, 1640m, 18.IX.1997, leg. Kapp (cKap); **Id.**, 1♀, Kiltikon, Liner-See (NIIMW); **Id.**, 1♀, Stuben, leg. Breit (NIIMW). **Tirol:** 1♀, Zillertaler Alpen, leg. Stöcklein (NIIMB); 2♂, 1♀, Stubaiher Alpen, leg. Breit (NIIMB). **Steiermark:** **Id.**, 1♀, Turnau (NIIMB); 1♀, Wartberg, 600m, 3.V.1967, leg. Huss (NIIMW); 1♂, 'Nord-Tirol', leg. Breit (NIIMW).

Italy: 1♀, Lombardia, Mle. Guglielmo, leg. Franz (NIIMW); 1♀, Trentino, Lago di Garda, Cima Tomba, 1900m, 4.VII.1986, leg. Kippenberg (DEI); 2♂, 1♀, Trentino, Stélvio, VIII.1872 (NIIMW); 2♂, Stélvio, 20.VII.1872 (NIIMW); 3♂, Mte. Stélvio, Sta. María, 11.VIII.1872 (NIIMW); 2♂, 1♀, Santa Marin (NIIMW); **Id.**, 1♀, Trentino, Passo di Rolle, leg. Ganglbauer (NIIMW); 2♂, 1♀, Val di Solda, 8.VIII.1872 (NIIMW); 1♂, Valli Giudéarie, Val di Leno, leg. Ganglbauer (NIIMW); 1♀, Trentino, Madonna di Campiglio, NW Rif. Pradalago, 2400-2500m, peak region, 10.VIII.1998, leg. Assing (cAss); 1♀, same data, 2200-2300m, litter of *Alnus viridis* (cAss); 1♀, Piemonte, Lago d'Orta, X.1960 (MIING); 3♂, 1♀, 'Cinque Valli', 1894, leg. Haberfelsner (NIIMW); 3♀, Emilia [locality illegible], 24.VIII.1902, leg. Fiori (NIIMW).

**Czech Republic:** 1♂, Prádlo [Altavater], 11.VI.1899 (MAKB); **Id.**, 1♀, Prádlo, leg. v. Bodemeyer (NIIMW).

**Slovakia:** 1♀, Mala Fatra, 25.VII.1973, leg. Moravec (cMor).

**Polish, Czech or Slovakian territory:** 1♂, 2♀, Krkonosze [Riesengebirge], leg. Varendorf (NIIMW); 1♂, Beskidy Zachodnie, leg. Koltze (NIIMW); **Id.**, 'Beskid.' (NIIMU).

**Bosnia-Herzegovina:** 1♀, Cvrsnica, leg. Hoffmann (cAss).

Based on previously revised material, the southeastern limit of the distribution of *angustus angustus* was assumed to be Slovakia and the Romanian Carpathians (Ass 1997b). Against this background, the record from Bosnia-Herzegovina is remarkable especially since safe records from the extreme southeast of Austria, from Slove Hungary, and from Croatia are still unknown.

The ovaries of one female collected by pitfall trapping the Lüneburger Heide (Germany in January 1999) contained a mature egg. This observation is somewhat remarkable, as oviposition activity was previously believed to be confined to late summer and autumn (ASSING 1993).

#### *Othius angustus stenocephalus* EPPELSBHEIM

**Turkey:** northern and northeastern Anatolia: 7d♂, 13♀, Kars, 'Colentre Damal - Posof', 2500m, 13.VI.1986, leg. Besuchet, Löbl & Burckhardt (MIING, cAss); 1♀, Artvin, Pirin massif du Karkal dagl., 1600m, 11.VI.1986, leg. Ucsuclici, Löbl & Burckhardt (MIING).

**Georgia:** Maly Kavkaz: 1♀, Trialetski Khrebet, Bakuriani, 1800-2200m, 4.-7.VII.1986, leg. W & Schülke (cSch); 2♂, 3♀, same data, 15.-20.VI.1987 (cSch, cAss).

**Caucasus: Central:** **Id.**, 'Sever. Prjut', VI.1974, leg. Gottwald (NIIMB); **Id.**, 2♀, Musat Khrebet, 3000m, 11.VI.1974, leg. Gottwald (NIIMU, cAss); **Id.**, Ty. Ossetia, Kasbegi, Orz glacier, 2500-3600m, 1.-8.VII.1988, leg. Wräse (cSch, cAss).

#### *Othius laeviusculus* STEPHENS

**Morocco:** 3♂, Rif, Kitamah, 21.V.1933 (NIIMB); 3♀, Oujda, leg. Breit (NIIMW); 2♀, Ai Timhadit, leg. Breit (NIIMW); 2♂, 6♀, Azrou, leg. Breit (NIIMW, cAss); 1♂, Ai Azrou, 17.IV.1933 (NIIMU); 1♀, M. Atlas, S'Azrou, 1700m, 4.V.1960, leg. Ucsuclici (MIIN 1♀, II. Atlas, 4 km E Agni, 1400m, 26.-27.X.1990, leg. Arndt (DEI)).

**Algeria:** 1♀, Djurdjura, Col de Tizi-N'Koutial, 1700-1800m, 7.V.1988, leg. Ucsuclici, Löb Burckhardt (MIING); **Id.**, 2♀, Atlas de Blida, Chréa, Les Glacières, 1100m, 3.V.1988, Besuchet, Löbl & Burckhardt (MIING); 1♀, Chréa near Blida, 10.V.1987, leg. Kuban (NIIM 1♀, Oran, leg. Breit (NIIMW); 1♂, 1♀, Saida, 6.V.1988, leg. Kubáň (NIIMU); **Id.**, Bi (MAKB); 1♀, Ain Beida, leg. Thery (MAKB); 1♀, Frenda, leg. Tondu (MAKU); 1♀, II R'ira' (NIHMW); 1♀, locality not indicated (MAKB).

**Spain:** 1♂, 1♀, Prov. Jaén, Sierra de Cazorla, 800-2000m, V.1943, leg. Frey & Koch (NIIMU); **Andalucia:** Sierra Nevada, Veleta, 3130m, 23.VII., leg. Steiner (NIIMW); **Id.**, Sierra Nevada, 1300m, 28.V.1980, leg. Rougemont (cRou); **Id.**, E Sierra Nevada. Puerto de la Ragua, V.19 leg. Frey & Koch (NIIMU); **Id.**, SE Salalaiica, Sierra de Gredos, Candeleda, 9.X.19 V.1970, leg. Curti (MIING); **Id.**, Sierra Guadarrama, P. Navacerrada, V.1943, leg. Frey & K (NIIMB); 3♂, 2♀, Mallorca, Palma, VIII.1880 (NIIMW), 2♂, 'Hisp.' (NIIMW).

**France:** 1♀, Bordeaux, Gradignan, V.1976, leg. Tempère (MIING); 2♀, W Paris, Dreux, Achard (MAKB).

**Gemeinwe:** Rheinland-Pfalz: 1♀, Ahrweiler, leg. Fuss (MAKB); 7♀, Wohnrothertal, 30.V.19 7.VII.1956, 1./15.VI.1957, 1.VI.1967, leg. Schmaus (MAKU); 1♀, Kastellaun, 8.VII.1971, Schmaus (MAKU); **Id.**, Behrens Knipp, 8.IX.1956, leg. Schmaus (MAKB). **Bayern:**

München, Eichinger Lohe, 1930 (NIIMB); 6♂, 4♀, Pfarrkirchen, leg. Stöcklein (NIIMB) 1♀, Bayrischer Wald, Rachel, 22.VI.1919, leg. Stöcklein (NIIMB); 1♀, Vilshofen, 3.V.19 leg. Stöcklein (NIIMU); 1♀, Schloss Schönburg, 7.V.1919, leg. Stöcklein (NIIMB); 2♀, Oberbayern, Altwasser des Inn, 29.IX.1915, leg. Stöcklein (NIIMB).

**Italy:** 2♂♂, Lombardia, Domodossola (NIIMW); **Id.**, 5♀♀, Roma, 20.XI.1897, leg. Luigioni (MÄKB, NIIMW); 2♂♂, Campania, Vesuvio, leg. Krauss (NIIMW), 2♂♂, Lazio, Lago di Vico, Monti Cimino, San Martino al Cimino, 700m, 23.V.1998, leg. Wolf (cSch); 2♂♂, 6♀♀, Gargano, **Id.**, S. Angelo, leg. Holdhaus (NIIMW); 4♂♂, 6♀♀, Gargano, L. S. Giovanni, leg. Holdhaus (NIIMW); Tex., Pollino, Piani Ruggio (PZ), 1500m, 11.VI.1977, leg. Angelini (cRou); 1♀, Sardegna, Mte. Chiesa (NIIMW); 1♂, Isola d'Elba, leg. Holdhaus (NIIMW); 1♀, 'Sicilia', leg. Füge (LMH); 1♂, Sicilia, Favatia, leg. Füge (LMH); 3♂♂, 4♀♀, 'Ital. med.' (NIIMW).

**Austria:** 1♀, 'Steyermark' (MAKB); **Id.**, 2♀♀, 'Styria', leg. Pipitz, (NIIMW); 1♀, 'Kranichberg', 1887, leg. Ganglbauer (NIIMW); 1♀, 'Umgebung Wiens' (NIIMW).

**Czech Republic:** **Id.**, 2♀♀, Silesia, Český Těšín, leg. Wanka (NIIMU).

**Bosnia-Herzegovina:** 1♀, 'Igbar-Thal', leg. Zoufal (BMNH); 1♀, Sarajevo, 'Pasin brdo', VI.1933, leg. Stöcklein (NIIMU).

**Yugoslavia:** **Id.**, Serbia, Tara Planina S Perućac, 500m, 22.V.1984, leg. Besuchet (cAss).

**Macdonia:** 1ex., Prisep, X.1989, leg. Pittino (cRou).

**Greece:** 5♂♂, 1♀, N Larissa, Kato Olympos, E Kallipefki, 1500-1580m, 6.IV.1998, leg. Assiig, Wunderle (cAss, cWun); 29♂♂, 37♀♀, same data, 12.IV.1998 (cAss, cWun); 2♂♂, 2♀♀, Parnassós, leg. Eppelsheim (NIIMW); 1♀, Makedonia, NW Kavála, Pangéa, 1650m, 24.V.1999, leg. Assiig (cAss); **Id.**, 1♀, Makedonia, N Sérés, Vrólliótis, peak above Lailias, 1800m, 25.V.1999, leg. Assing (cAss); 1ex., Pelopónnisos, Taygetos, 2.XI.1981, leg. Pittino (cRou); 1♀, Pelopónnisos, Taygetos, 36°57'N, 22°22'E, 1630m, 20.IV.1998, leg. Behne (DEI); **Id.**, 'Græcia' (NIIMW).

**Cyprus:** 1♂, [locality illegible] (NIIMW).

**Turkey:** **Anatolia:** 1♂, Samsun, 20.V.1967, leg. Wittmer (MIING); 2♂♂, 1♀, Izmir (NIIMW); 1♂, 2♀♀, Namrun, 2000m, 11.-26.V.1960, leg. Schubert (NIIMW, cAss); 1♀, Namrun, 10.V.-3.VI.1963, leg. Schubert; 1♂, 1♀, Namrun, 1800m, V.1963, leg. Schubert.

**Iran:** 1♂, 1♀, Assalam-Hero-abad, 1800-2350m, I.IV.1970, leg. Wittmer & v. Bothmer (NIIMB, cAss).

The known southeastern limit of distribution of *O. laeviusculus*, based on revised records, had been the Caucasus region, Anatolia, and Syria (ASSING 1997b). This species is here for the first time confirmed from Iran.

#### *Othius volans* J. SAHLBERG

**Switzerland:** 1♂, Molard (VO), X.1978, leg. Toumayeff, coll. Lohse (MIING).

**Italy: Sicilia:** 1♀, Femmina Morte, 7.XII.1976, leg. Curti (MIING).

The literature record from Molard, Switzerland (UTHLIG et al. 1986), is here confirmed.

#### *Othius brachypterus* WOLLASTON

**Canary Islands:** La Gomera: 2♂♂, NW Garajonay, La Laguna Alta, 1300m, Fayal-Brezal, 28.XII.1998, leg. Assing (cAss); 3♂♂, 2♀♀, S La Laguna Graiide, 1200m, barranco, Fayal-Brezal, 28.XII.1998, leg. Assiig (cAss); 1♀, Merida, 9.I.1983, leg. Machado (cMac); 1♀, Mora de Gaspar, 4.VII.1977, leg. Bacallado (cMac).

This distribution of La Gomera is apparently widely distributed, though rather local and rare, in the central part of the island. Adult beetles seem to be present throughout the year, although records from February, March, and November are still unknown.

#### *Othius microphthalmus* COIFFAIT

**Canary Islands:** La Gomera: 2d♂, Nat. Park Garajonay, La Laguna Graiide, 1000m, 15.VII.1998, leg. Pütz (cAss); **Id.**, 2♀♀, El Cedro, E Ermitá N. S. de Lourdes, 1000m, Laurisilva 24.XII.1998, leg. Assing (cAss); 2♂♂, El Cedro, near Ermitá N. S. de Lourdes, 900-1000m, Laurisilva, 24.XII.1998, leg. Assiig (cAss).

*O. microphthalmus*, like the preceding species an endemic of La Gomera, but occurs in more local, has been known only from the surroundings of La Laguna Graiide from the vicinity of the Cedro strata (ASSING 1997a, 1998a).

#### *Othius neglectus* PALM

**Canary Islands:** Gran Canaria: 1♂, 1♀, Los Marteles, 1500m, 29.I.1989, leg. Becerra (cGar, cAs); 2♂♂, 1♀, S El Cortijo, S Fontanales, 28°03'19N, 15°36'44W, 1120m, 31.I.1998, leg. Zere (DEI, cAss); **Id.**, 1♀, S Fontanales, 1250m, Pinus wood, 5.II.1998, leg. Zere (DEI); 1♂, Andin, 1200m, 21.VI.1984, leg. Machado (cMac).

This distribution of Gran Canaria had previously been known only from four localities in the northern and southern central part of the island (ASSING 1997a, 1998a).

#### *Othius solodovnikovi* ASSING

**Central Caucasus:** 1♀, Kabardino Balkarskaya, Golugbye [?] Ozioria, 850m, 9.VI.-19.VII.1992, leg. Shchurov (NIIMB); 1♀, Kabardino Balkarskaya, Mizhirgi Valley, 2900m, 12.VI.-21.VII.1992, leg. Shchurov (cAss).

The records indicated above are within the known area of distribution of this recently described species (ASSING 1997b), but exceed both the lower and the upper altitude limits to 850 and 2900m, respectively.

#### *Othius deharvengi* COIFFAIT

1♂, Nepal, Mustang District, Thaksang, 3400m, 26.-29.IV.1980, leg. Marten & Ausobsky (cMartens).

*O. deharvengi* has been collected at Thaksang before (ASSING 1998b), but the upper altitude limit is now extended to 3400m.

#### *Othius jumlaensis* sp. n. (Figs 1 a - e)

**Holotype** ♂: 579 Nepal: Jumla Distr., Ghurchi-Lagna Pass, 3500m, 14.VI.1998, leg. Schiawaller / Holotype *Othius jumlaensis* sp. n., det. V. Assing 1998 (SMNS). **Paratypes:** 1 same data as holotype (cAss); ♂, 1♀, 581 Nepal: Jumla Distr., Khali-Lagna Pass, 3500m, 17.VI. 1998, leg. W. Schiawaller (SMNS, cAss).

**Description:** Measurements (mm) and ratios (range; n = 4): HL: 0.88 - 0.92; HW: 0.85 - 0.94; PW: 0.91 - 1.00; PL: 1.13 - 1.21; EL: 0.66 - 0.71; TL: 0.79 - 0.83; TaL: 0.66 - 0.76; TL: 7.1 - 7.7; HL/HW: 1.02 - 1.13; HW/PW: 0.88 - 0.95; PL/PW: 1. - 1.25; EL/PL: 0.58 - 0.61; TL/TaL: 1.08 - 1.23.

In external morphology most similar to *O. jaegeri* ASSING, from which *O. jumlaensis* may be distinguished as follows:

Size on average larger. Posterior pair of frontal punctures slightly finer. Microsculpture of head composed of either predominantly transverse striae or of a mixture of ± slightly transverse meshes and transverse striae.

Pronotum wiili transverse iiiicrosculpture. Elytra as **iii** *O. jaegeri* wiili ± uneven surface, but without iiiicrosculpture; interstices shining.

**O**: protarsi as **iii** *O. jaegeri* strongly dilated; sternum VII unmodified; sternum VIII posteriorly weakly convex to weakly concave; sternum IX broader **aiid** relatively shorter than **iii** *O. jaegeri* (Fig. 1c); lateral tergal sclerite IX as **iii** Fig. 1d; aedeagus large, but relatively smaller than in *O. jaegeri*; ventral process apically broader **iii** ventral view; parameral setae very long; apical membranous structure of internal sac of characteristic shape aiid darker than in the related species; flagellum as **iii** *O. jaegeri* (Figs 1a, b).

**♀**: protarsi weakly dilated, sexual diiiorpliisii proiouuced; tergum X of similar shape as in *O. jaegeri*, posteriorly in ilic two X paratypes with 5 aiid 10 modified setae, respectively (Fig. 1c).

**Phylogenetics and comparative notes:** The new species is the first representative of the *O. kashmirica* subgroup from Western Nepal. It is most similar to *O. jaegeri* ASSING from the Annapurna mountain range in Central Nepal (see diagnosis aiid ASSING 1998b).

From all the species of ilic *O. kashmirica* subgroup, *O. jumlaensis* is distinguished by the broad **aiid** relatively short ♂ sternum IX, **aiid** by ilic shape **aiid** dark colour of the apical iiiiciibraious structure of the internal sac. In addition, it differs from *O. schwalleri* ASSING (Central Nepal) in the lighter body colour, ilic shorter antennae, and the more shining elytra, **aiid** from *O. deharvengi* COIFFAIT (Central Nepal) in larger body size, more uneven surface of ilic elytra, **nid** **iii** the distinctly more proiouuced sexual diiiorpliisii of the protarsi. *O. kashmirica* CAMERON, *O. yusmargensis* COIFFAIT, **aiid** *O. cachemiricus* COIFFAIT from Kashmir are smaller, **aiid** their aedeagi are apically more acute (see ASSING 1998b).

#### *Othius punctulatus* (GOEZE)

Morocco: 2♂, 29♀, Rif, Kitāmah, 21.V.1933 (NIIMD); 19, Ifrane, 2000m, 14.X.1974, leg. Curti (MIING); **Id.**, Ifrane, 2, 1.V.1979, leg. Curti (MIING, cAss); 1♀, Ketama, 1.V.1979, leg. Curti (MIING); 1♂, 30 km W Ketama, 1500m, 19.IX.1998, leg. Reuter (cFel); 1♀, Azrou, Mischliffen, 1600m, 21.IX.1998, leg. Reuter (cAss); 1♂, Grand Atlas, 3000m, 25.X.1974, leg. Curti (MIING).

Algeria: 3♂, 4♀, Djurdjura, Tikjda, 1430m, 6.V.1988, leg. Besuchet, Löbl & Burckhardt (MIING, cAss); 2♀, Djurdjura, rte. de Tala Guilef, 950-1100m/1300m, 10.-11.V.1988, leg. Besuchet, Löbl & Burckhardt (MIING); 3♂, 39♀, Djurdjura, Col de Tizi-N'Kouilal, 1700-1800m, 7.V.1988, leg. Besuchet, Löbl & Burckhardt (MI INC, cAss); 1♀, Grande Kabylie, Forêt d'Akfadou, 7 km W Adkar, 1300m, 11.V.1998, leg. Ilescielci, Ithūl & Burckhardt (MIING); 1♀, Grande Kabylie, Forêt d'Akfadou, 22 km E Yakouren, 1050m, 16.V.1998, leg. Ilescielci, Löbl & Burckhardt (MIING).

Spain: mainland: 2♂, 1♀, Prov. Barcelona, Sierra de Montseny, Col Formic, 1150m, *Fagus* wood, 14.X.1997, leg. Zerche (DEI, cAss); 1♀, Sierra de Montseny, S les Agudes, 1625m, *Fagus* wood, 7.X.1997, leg. Zerche (DEI); 1♂, Prov. Girona, N Puerto Toses, between Puigcerda and Ribes, 1660m, *Abies* and *Picea* wood, 9.X.1997, leg. Zerche (DEI); 1♀, Picos de Europa, 14.V.1965, leg. Curti (MIING); 1♀, Asturias, Puerto de Ventana, 1200m, beechwood, 2.VI.1998, leg. Lompe (cAss); 1♀, Puerto de Ventana, 1400m, 2.VI.1998, leg. Lompe (cAss); Id. Zaragoza, Sierra de Moncayo, 2X.S.1975 (MIING); 1♀, Seo d'Urgel, VI.1971, leg. Curti (MIING).

**Canary Islands: La Palma:** 1♂, Gramia, 4.I.1989, leg. Garcia (cGar); 2 third-instar larva, Cuiibbre Nueva, E Refugio El Pilar, 1350m, Fayal-Brezal, 4.IV.1999, leg. Assing (cAss); 2♀, 9♂, third-instar, 1 second-instar, 1 first-instar larvae, Cuiibbre Nueva, E Refugio El Pilar, 1450m *Pinus canariensis* wood with *Myrica faya*, 4.IV.1999, leg. Assing (cAss); 1 third-instar larva, Cuiibbre Nieve, E Refugio El Pilar, 1400m, Fayal-Brezal, 4.IV.1999, leg. Assing (cAss); 4 third-instar, 3 second-instar, 2 first-instar larvae, Cuiibbre Nueva, 0.4 km S Lomo de Mestres, 1080m, Fayal-Brezal, 5.IV.1999, leg. Assing (cAss); 1♀, same data, but 3 km S Loma de los Mestres, leg. Wunderle (cWun); 2♀, 8♂, 3 third-instar, 4 second-instar, 16 first-instar larva, Cuiibbre Vieja, NW Roque Niquiomo, 1350m, Fayal-Brezal, 8.IV.1999, leg. Assing, Wunderle (cAss, cWun); 1 first-instar larva, Cuiibbre Vieja, NW Roque Niquiomo, 1400m, Fayal-Brezal, 8.IV.1999, leg. Assing (cAss); **Id.**, 6 first-instar larvae, Cuiibbre Vieja, near Roque Niquiomo 1350m, Fayal-Brezal, 8.IV.1999, leg. Assing, Wunderle (cAss, cWun).

**France:** **Id.**, Pyrénées Orientales, Parcigoule, 15.IV.1977, leg. Löbl (MIING); 1♀, Pyrénées a Forêt des Arbailles, Grotte d'Istaury, 880m, 7.VI.1998, leg. Lompe (cAss); 2♂, Calvados, de Corisy, 2.XI.1973, leg. Curti (MIING); 1♀, Gironde, La Verdon, IX.1981, leg. Tempé (MIING), 1♀, Seine-Maritime, Londinières, IV.1983, leg. de Rougemont (cRou); 1♀, Haute Garonne, Luchon, 1300-1400m, 1.VI.1952, leg. Tempère (MIINO); 1♂, 29♀, Gard, La Baume 5.IV.1980, leg. Löbl (MIING); 1♂, Gard, MI. Aigonal, 1000m, 7.IV.1980, leg. Löbl (MIING); 1♀, Vaucluse, Avene de la Savoy, IX.1989, leg. Curti (MIING); 1♀, Vaucluse, Mont Ventoux Bédoin, 1300m, leg. Besuchet (MIING); 1♂, Var, Fayence, VII.1977, leg. Curti (MIING); 1♂, Ain, Chartreuse, 24.VI.1969, leg. Curti (MIING); 1♂, Savoie, Col du Chat, 24.IV.1975, leg. Li (MIING); Id. Haute-Alpes de Provence, Morier, 4.VI.1974, leg. Löbl (MIING); 2♀, Hautes Alpes de Provence, Les aiguilles, 1700m, 4.VI.1974, leg. Löbl (MIING); 4♂, 1♀, Alpes Maritimes, La Bollène, Colle de Turino, 1000m, 16.X.1997, leg. Stüben (cSch); 1♂, Corse, Cervione, 150m, 19.VII.1994, leg. Zerche (DEI); 1♀, Corsica, Miirm, 17.VII.1974, leg. Li (MIING); 1♀, Corse, Abeo, 750m, 10.VII.1974, leg. Löbl (MIING); 2♂, 2♀, Corse, Si. France au dessous Oletta, leg. Ithūl, 6.VII.1974 (MIING, cAss); 1♂, Corse, Canaghia, 14.VII.1974, leg. Löbl (MIING); 1♀, Corse, Restonica, 2.XI.1972, leg. Curti (MIING).

Austria: 1♂, Steiermark, Bezirk Hartberg, Tierpark, Herberstein, 10.IV.1998, leg. Holzer (cellol).

**Italy:** **Id.**, 3♂, 9♀, Piemonte, Valle di Susa, Colle di Pinestre, 850m, 23.-24.IX.1997, leg. Wolf (cSci); 1♀, Colle di Pinestre, 1000m, 28.VII.1996, leg. Wolf (cSch); 2♀, Trentino, Lago di Led 30.VIII.1969, leg. Löbl (MIING); 1♀ [temporal], 6 third-instar larvae, Trentino, Val di Non, Fondo, Val di Verdes, 1000m, 12.VIII.1998, leg. Assing (cAss); 1♂, 1♀, Monte Baldo, Ferla 880m, 31.V.1977, leg. Löbl (MIING); 1♀, Moiile Baldo, Prada, 1300m, 16.11.1998, leg. Meybohm (cAss); Id, 2♀, Cornò d'Aquila, Fosse, 19.VI.1968 (MIING); 1♂, Abruzzo, La di Barrea, 4 km W Barrea, 1000m, 16.V.1998, leg. Wolf (cSch); Id, 1♀, Sardegna, III.1979, leg. Curti (MIING); 1♂, 1♀, Sardegna, III.1977, leg. Curgi (MIING); 1♂, 1♀, Sardegna, Gaddo 111.1979, leg. Curti (MIING).

Poland: 1♀, Bialowiecza, VI.1966, leg. Jaeschke (cSch).

Slovenia: 2♂, 1♀, Police, Gor. Radgona, 14.II.1998, leg. Drovenik (cAss, cDrov).

Croatia: **Id.**, 1♀, Mt. Biokovo, leg. Besuchet (MIING); Id. 'Croatia', leg. Reiter (MAKB).

Greece: **Continental:** 1♀, Makedonia, Olympos, NW Hütte Stavros, 1400m, 7.IV.1998, leg. Assing (cAss); 2♂, 2♀, Makedonia, Pieria Ori, Katafygi, 1450m, *Pinus* wood, 9.IV.1998, leg. Assing (cAss); 1♂, 2♀, Pieria Ori, above Skotina, 900-1000m, *Fagus* wood, 9.IV.1998, leg. Assing, Wunderle (cAss, cWun); 1♂, Makedonia, Vrionou Onis, above Kastania, 1300m, 11.IV.1998, leg. Assing (cAss); 1♂, 1♀, Makedonia, NW Kavála, Pangéo, 1700m, beechwood 24.V.1999, leg. Assing (cAss); 2♀, same data, hui 1650m, 24. & 28.V.1999 (cAss); 1 Pangéo, 1200m, beechwood, 28.V.1999, leg. Assing (cAss); **Id.**, Makedonia, Falakró, 1000m beechwood, 26.V.1999, leg. Assing (cAss); 1♀, Thessalia, Mt. Ossa, 1000m, 18.V.1997, leg. Wolf (cSch); 1♂, 1♀, Kataras pass, 1500m, 13.V.1997, leg. Wolf (cSch).

Anatolia: 6♂, 1♀, Gümrüçane dağı, Erzincan-Kelkit, 2100m, 4.VI.1986, leg. Besuchet, Löbl Burckhardt (MIING, cAss); S Artvin, 1500m, 9.VI.1986, leg. Besuchet, Ithūl & Burckhardt (MIING); 1♀, Artvin, Pınarlı, massif du Karkal dağı, 1600m, 11.VI.1986, leg. Besuchet, Löbl Burckhardt (MIING).

Moldavia: 1♀, Kapriyana, oakwood, 3.V.1969, leg. Blinstein (cBl).

Ukraine: Id. Krym, 120 km NW Sudak, Partisanskaja mountain, 980m, 9.VIII.1992, leg. Blinstein (cBli); 2♂♂, Krym, Iala mts., Demerdski [?], beechwood, 2.V.1968, leg. Blinstein (cBli, cAss); 1♀, Krym, Karabi-laila mts., [locality illegible], 900m, 13.VII.1994, leg. Blinstein (cBli); 1♀, Krym, Tschatir Dag., Sacharnaja Golovka, 30.IV.1970, leg. Blinstein (cBli); 1♂, Odessa, 23.IV.1983, leg. Blinstein (cBli).

**Locality not identified:** 2♂♂, Roquebilliere, A. M., 23.VII.1983, leg. Curti (MIING); 1♀, Bevil, A. M., VII.1950 (MIING); 1♂, Mi. Telion, Si. Auban, A. M. (MIING); 1♀, Col de Platet, Annat, B. A., leg. Curti (MIING); 1♂, Lorge, c. d. N., 12.XI.1972, leg. Curti (MIING).

Previously, *O. punctulatus* had oily once beccii recorded from the Canary Islands. The few records of adults and larvae from several localities both at lower (La Gramma) and higher altitudes indicate that this species has become widespread at least in La Palma, where it was observed primarily in Fayal-Brezal and *Pinus* woodland. According to SOLODOVNIKOV (pers. coiili), *O. punctulatus* also occurs in Kazakhstan, where 10 and 3♂♀ were collected on 28.IV-3.V.1998 near Djanybek at its western border. This species is here for the first time recorded from Moldavia. The few records extend the range of altitudes inhabited by this species especially for North Africa (ca. 1000-3000m) and for the Alps (maximum: 1700m).

#### *Othius grandis* HOCHMUTH

Caucasus: West and North: 2♂♂, Krasnodar pruv., Mi. Schessi, 1400m, 20.V.-8.VIII.1992, leg. Shchurov (NIIMW); Id. North Ossetia, Urukh Valley, 1.VII.1993 (NIIMW); 1♀, 'Circassien', leg. Leder, Reitter (NIIMW). Central: 2♂♂, 1♀, Musalceri khibet, 3000m, 10.VI.1974, leg. Gottwald (NIIMW, cAss); 1♂, 1♀, Svanietskiy khibet, leg. Leder, Reitter (NIIMW); 1♂, 1♀, Georgia, Gilola, Gora Geske, 1910 (NIIMW). Italy Kavkaz: 1♂, Kirovabad, VI.1876, leg. Leder (NIIMW). Locality not indicated or illegible: Id. 1♀, 'Kaukas, Psdzaven [?]', leg. Leder (NIIMW); 1♀, 'Kaukas', leg. Leder (NIIMW).

#### *Othius paralleiceps* QUEDENFELDT

Mauritania: 2♀♀, Rabat, XI.1985, leg. Rougemont (cRou, cAss); 2♀♀, Port Lyautey, 9.IV.1933 & 7.IV.1935 (NIIMW).

*O. paralleiceps*, whose distribution seems to be confined to the extreme south of Spain and to Morocco, is apparently of utmost rarity. Previously, only old records had been known (ASSING 1997b).

#### *Othius strigulosus* WOLLASTON

Madeira: 3♂♂, 1♀, Paul da Serra, 1 km SE Rabaçal, Rib. Lajeado, Rib. Alecrim, 1250m, 14.IX.1998, leg. Schulz (NIIMW, cAss).

#### *Othius jansoni* WOLLASTON

Madeira: Id, 3♀♀, NW Pico do Arieiro, Pico do Cidrão, 1550-1700m, 3.IX.1998, leg. Schulz (NIIMW, cAss).

*O. jansoni*, like the preceding species a relatively widespread, though somewhat rarer Madeiran endemic, had previously not been recorded from the Pico do Cidrão.

#### *Othius subuliformis* STEPHENS

Finland: 1♂, Pihlajavesi, leg. J. Sahlberg (NIIMW).

Russian Federation: 1♀, I ex., Karel'skaya Resp., Solovetskiy Ostrava, leg. Levander (NIIMW); 1♀, NW St. Petersburg, Roščino, leg. J. Sahlberg (NIIMW).

Denmark: 2♀♀, Faroe, northern islands, 1907, leg. Cornu (NIIMW).

Portugal: 3♀♀, Vila Real, Arrabida, 600m, 27.VII.1981, leg. Löbl (MIING).

Spain: 36♂♂, 1♀♀, Prov. Barcelona, Sierra de Montseny, Col. Formic, 1150m, beechwood, 14.X.1999 leg. Zerche (DEI); 7♂♂, 29♀♀, Sierra de Montseny, S Turó de l'Home, 1480m, beechwood, 7.X.1997, leg. Zerche (DEI); 5♂♂, 4♀♀, 9, Sierra de Montseny, S Ics Agudes, 1625m beechwood, 7.X.1997, leg. Zerche (DEI); Id. 1♀♀, Asturias, Genestoso, Sierra de Serranía 1000m, 16.V.1997, leg. Starke (coll. Starke); 2♂♂, 1♀, Asturias, leg. Koltze (NIIMW); 2♂♂, 1♀♀, Asturias, Puerto de Ventana, 1200m, beechwood, 2.VI.1998, leg. Lompe (cAss); 2♂♂, 1, Galicia, Sierra de Ancares, Degrada Monte da Varg, below Ilex, 29.V.1998, leg. Lompe (cAss); 1♂, 1♀, Galicia, Liliarcos, 1000m, beechwood, 29.V.1998, leg. Lompe (cAss); Id. 1, Cantabria, Peña Labra (NIIMB); Id. Navarra, Ibaneta, 13.V.1997, leg. Abmann (coll. Starke); 1♀, Lugo, Sierra de Ancares, Degrada, Tres Obispos, 1100m, 17.V.1997, leg. Starke (co Starke); Id. 1♀♀, Logrono, Sierra de la Demand, 1650m, 23.VII.1996, leg. Zaballos & Weira (cSch); 1♂, 1♀, Palencia, leg. Paganetti (NIIMW).

Germany: 1♂ [macropterous, apparently caught flying], Rheinland-Pfalz, Wachenheim, malaise trap 12.IX.1995, leg. Köhler (cAss).

France: 1♀, Haute Pyrénées, Barèges, 1600m, 12.VIII.1966, leg. Tempère (MIING); 2♂♂, Pyrénées Orientales, Grotte Sic. Marie L Preste, 25.X.1974, leg. Curri (MIING); 3♂♂, 39♀♀, Pyrénées Orientales, Parcoulou, IS.IV.1977, leg. Löbl (MIING); 2♂♂, 8♀♀, Pyrénées Orientales, Montferrer-Corsavy, 14.IV.1977, leg. Löbl (MIING); 46♂♂, 1♀, Pyrénées Orientales, Le Tec 15.IV.1977, leg. Löbl (MIING); 5♂♂, 1♀, Pyrénées Orientales, Forêt d'Iraty, 21.IV.1977, leg. Tempère (MIING); Id. Pyrénées Orientales, Larrau, 900m, 22.V.1979, leg. Tempère (MIING); 1♀♀, Pyrénées atl., Forêt des Arbailles, Grotte d'Istaurdy, 7.VI.1998, leg. Lompe (cAss); 1♂, Bédeaux, Gradignan, II.VII.1955, leg. Tempère (MIING); Id. Finistère, Camaret, 1.IX.1962, leg. Tempère (MIING); 4♂♂, 4♀♀, Ariège, 2 km S de Puyvalador, 1400m, 24.VII.1975, leg. Löbl (MIING), 1♂, Arriège, Forêt de Carcanet, 29.VI.1969, leg. Tempère (MIING); 2♂♂, 39♀♀, Aude, Axat, 1300m, 10.VIII.1982 (MIING); 1♂, Vaucluse, Muuii Ventoux, S Bédoin 1300m, leg. Besuchet (MIING); 3♂♂, 1♀, Vur. Si. Martin-Vesubie, W Vaiaisnii, 1300m, 15.X.1997, leg. Wolf (cSch); 2♂♂, 2♀♀, Hautes Alpes de Provence, Morier, 4.VI.1974, leg. Löbl (MIING); 2♂♂, Hautes Alpes de Provence, Braux, leg. Löbl, 6.VI.1974 (MIING); Id. 1 Savoie, Col Coche, Moutiers, 1400m, 15.X.1981, leg. Löbl (MIING); 1♂, 1♀♀, Savoie, Bourget du Lac, 24.VI.1975, leg. Löbl (MIING); 1♂, 29♀♀, Haute Savoie, Salève, 1 km W de Croisette, beechwood, 1250m, 11.IX.1993, leg. Zerche (DEI); 8♂♂, 39♀♀, Haute Savoie, Crêt de Châtillon, 1650m, 26.VI.1980, leg. Löbl (MIING); 1♂, 1♀♀, Jura, Gr. Semmoz, 26.IV.1997, leg. Cooter (cRou); Id. Alpes Maritimes, Si. Jean, 5.VI.1974, leg. Löbl (MIING); Id. Alpes Maritimes, La Bollène, Colle de Turino, 1000m, 16.X.1997, leg. Stüben (cSch); 2♂♂, 2♀♀, Gard, Mi. Auguel, Col de Serreyrede, 1300m, 6.IV.1980, leg. Löbl (MIING); 2♂♂, 7♀♀, Gard, Mt. Aigonal, 1450m, 6.V.1980, leg. Löbl (MIING). Locality not indicated: 1♀♀, Mi. Telion, Si. Auban, A. M. (MIING); Id. Col du Fa, B. A., 5.V.1974, leg. Curti (MIING). Local illegible: 6♀♀ (MIING).

Switzerland: 1♀, St. Gallen, Guggenwald, 14.III.1960, leg. Gentina, 'Othius brevipennis' [Id. Hugentobler], coll. Hugentobler (NMSG).

Swiss or Austrian territory: 1♀, Rätikon, leg. Ganglbauer (NIIMW).

**Austria:** Vorarlberg: 1♂, Silbertal, Galgenzüge, 1500m, 10.V.1997, leg. Kapp (eKap); 1♀, Laterns, Gerenfallen, 1938m, *Calluna* litter, 12.IV.1997, leg. Kapp (eKap); 1♀, Laterns, Agtenwaldalpe, Sacktobel, 1450m, 25.I.1997, leg. Kapp (eKap); Id. 2♀, Damüls, Portler Horn, 1950m, 11.X.1996, leg. Kapp (eKap); 2♂, 1♀, Damüls, Blauer See, Felskopf, 1940m, 11.X.1996, leg. Kapp (eKap); 1♂, 1♀, Damüls, Blauer See, Felskopf, 1940m, 10.V.1997, leg. Brandstetter (eKap); 5♂, 2♀, 2♂, 1♀, Silbertal, Gaißalm-Alpe, 1370m, 7.VI.1997, leg. Brandstetter (eKap); 3♂, 3♀, Gargellen, Untere Röbi-Alpe, 1750m, spruce litter, 18.IX.1997, leg. Kapp (eKap); Tirol: 1♂, Innsbruck-Land, Gnadenwald ob. Walderalm, 1600m, 13.VII.1996, leg. Wolf (eAss).

**Czech Republic:** 1♀, Moravia, Beskydy, Velký Potok, 500-550m, XV.1994, leg. Moravec (eMor); 2♂, 5♀, Bohemia, Nová Ves (MAKU); 1♀, Praděd, leg. Wcis (NIIMW); 1♂, Bohemia, Bouřin, VII.1934, leg. Prock (NIIMW); Id. Bohemia (NIIMW); 3♂, 2♀, Moravia, leg. Rautenberg, Wingelmüller (NIIMW).

**Poland:** Id, Wadowice, 1911, leg. Natterer (NIIMB).

**Czech or Polish territory:** 2♂, 1♀, Silesia, 'Ung. Teschen', leg. Prock (NIIMW).

**Italy:** Piemonte: 3♂, 3♀ [1♀ macropterus], Cuneo, Brondello-W. Saluzzo, 750m, 28.VI.1997, leg. Brandstetter, Kapp (eKap, eAss); 2♂, 1♀, Val Varaita, Sampyre, Beccetto, 1140-1180m, 28.VI.1997, leg. Kapp (eKap, eAss); 1♂, 1♀, 'Sardaigne' (MIING, eAss).

**Locality ambiguous:** 1♀ [macropterus], 'Hungaria', leg. Brancisik (NIIMW).

*O. subuliformis* is here for the first time reported from Austria; the specimen corresponding to the record from southeastern Austria; the specimen corresponding to the record from Anger, Steiermark (HOLZER 1995), was examined and proved to be *O. brevipennis* KRAATZ (see below that species). The macropterus ♂ was apparently caught flying with a Malaise trap in September, which suggests that dispersal by flight takes place shortly after ecdisis from the puparium.

### *Othius wunderlei* ASSING

**Spain:** 1♂, Andalucia, Algeciras (NIIMW); 1♀, Algeciras, leg. Quedenfeldt (NIIMW); 1♂, 2♀, Andalucia, Sierra de Córdoba, leg. Ehlers (NIIMW); 1♀, Andalucia, Marbella, 1964, leg. Frey (NIIMII).

### *Othius crassus* MOTSCHULSKY

**Austria:** southern Niederösterreich/Steiermark/Kärnten: 1♂, Niederösterreich, Baden, leg. Stoltz (NIIMII); 7♂, 5♀, Gesäuse-Alpen, 14.VII.1901, 6.VII.1902, leg. Pinker (NIIMW, eAss); 2♀, Kirchberg am Wechsel, 1886, leg. Bayer (NIIMW); 4♂, 6♀, Wechsel, 1889, leg. Ganglbauer (NIIMW); 7♀, Wechsel, leg. Hauser (NIIMW); Id. Nied. Wechsel, 1500m, under *Pinus mugo*, leg. Kaiser (MIING); 2♂, 1♀, Hochlantsch, 24.VII.1903 (MAKB, eAss); 1♂, 1♀, Hochlantsch, 1891, leg. Ganglbauer (NIIMW); 1♀, Teichalpe, 23.VII.1903 (MAKII); 1♀, Gesäusealpen, leg. Pinker (MIING); 1♂, Rottenmann-Tauern, Tröben, Hauseck, 1980m, 14.VII.1997, leg. Siede (eAss); 1♀, Rottenmann-Tauern, Tröben, Großer Bösenstein, 2200m, 14.VII.1997, leg. Siede (eAss); 1♂, 1♀ [♂ teneral], Hochschwabgebiet, Sackwiesensee, 1440m, 30.VII.1997, leg. Kapp (eKap); 1♂, Raixalpe, leg. Reimoser (MIING); Id. Stuhleck, leg. Spacili (MAKB); 1♂, Stuhleck, leg. Hauser (NIIMW); 1♂, Eimilci, Gurktaler Alpen, St. Lorenzen, Hochmoor, leg. Strupi (NIIMW); 1♂, Kärnten, Wölflaner Nock, 46°46'36N, 13°49'41E, northern slope, 2115m, 10.VII.1998, leg. Zerche (DEI); 1♀, Kärnten, SW Spittal, Hoher Stall, 46°44'04N, 13°25'58E, northern slope, 2100m, sifted from grass and *Dryas*, 12.VII.1998, leg. Zerche (DEI); Id. Kärnten, NE Villach, Gerlitzen, 46°41'48N, 13°54'48E, 1860m, 13.VII.1998, leg. Zerche (eAss); 2♂, Kärnten, Dobratsch, leg. Holdhaus, Strupi (NIIMW); 2♂, Dobratsch, 10.VII.1914, leg. Stöcklein (NIIMII); 3♂, 2♀, Kärnten, Villacher Alpe, 1190m, litter in mixed woodland, 18.IX.1998, leg. Schülke (eSch, eAss); Id. 2♀, 9, Kärnten, Gailtaler Alpen, Götz, leg. Strupi (NIIMW, eAss); 2♂, 1♀, Gailtaler Alpen, Tschekeleck, leg. Strupi (NIIMW, eAss); Id. Stubalpe (NIIMW); Id. Hochobir (MIING); 2♂, Karawanken, Bodental,

'Cr.' (eAss); Id. Seetaler Alpen, Zirbitzkogel, leg. Winkler (NIIMW); 1♂, 3♀, Saualp Wolfsberg, Seetalerhütte, leg. Sinipi (NIIMW); Id. Saualpe, leg. Sinipi (NIIMW); 1♂, 2♀, Koralpe, Koglercreek, 14.-17.VII.1973, leg. Meybohm (MIING, eAss); 1♂, Koralpe, VII.192 leg. Schubert (NIIMW); 5♂, 1♀, Koralpe, 1890, 1891, leg. Ganglbauer (NIIMW); 10♂, 5♀, Koralpe, leg. Holdhaus, Spaeth, Wingelmüller (NIIMW, eAss); 2♂, Koralpe (NIIMW); 1♂, 1♀, 'Styria', leg. Birnbacher, Stöckel (NIIMW).

**Slovenia:** 7♂, 6♀, Pohorje ['Bachergebg.'], 1892, leg. Ganglbauer (NIIMW); 7♂, 2♀, Pohorje (NIIMB, NIIMW).

The records listed above are within the known range of distribution (Assing 1997b). Other specimens collected in July were teneral.

### *Othius transsilvanicus* GANGLBAUER

**Paratypes (previously unexamined):** 2♂, 2♀, same data as lectotype (NIIMW): 1♂, Ganglb., 95, Buceses Tr. (NIIMW).

**Poland:** 1♀, Bieszczady mountain range, Wielka Rowka, 1270m, litter of *Abies viridis*, 10.VI.190 leg. Szucecki (MIING).

**Romania:** 1♂, Munții Rodna (MIING); 3♂, 1♀, Munții Rodna, 1896, leg. Ganglbauer (NIIMW, eAss); 2♂, 2♀, Munții Rodna, Koronj, 1896, leg. Holdhaus (NIIMW); 1♂, 2♀, Sibiu ['Nagyszeben'], Ormai Sándor (NIIMW); 2♂, 1♀, Sibiu, Cibin, leg. Ormai (NIIMW); 1♀, Munții Făgărăș, leg. Deubel (NIIMW); 2♂, 1♀, Schuler, 1896, leg. Spac (NIIMW); 1♀, Schuler, leg. Bodemeyer (NIIMW); 1♂, 3♀, Schuler, 4.VI.1910, leg. Pintă (NIIMW, eAss); 5♂, 4♀, Azuga (NIIMW, eAss); 1♀, 'Praesba, Siebbg.', leg. Ormai (NIIMW); 1♂, 2♀, 'Siebbg.', leg. Ormai (NIIMW); 4♂, 2♀, Negoiu, 1899, leg. Ganglbauer (NIIMB, NIIMW, eAss); 4♂, 2♀, N. Munții Ciucului, Hăgymás, leg. Holdha (NIIMB, NIIMW, eAss); 1♂, 1♀, Hăgymás [N. Hagymás] (NIIMB, eAss); 4♂, 6♀, 'Carpates or., Foreszzenka' (MAKB, eAss); 1♂, Munții Bucegi (MAKB); 1♂, Brașov, leg. Deubel, v. Hopfengarten (NIIMW); 3♂, 5♀, Brașov, leg. Deubel, v. Hopfengarten (NIIMW); 3♂, 2♀, Brașov (NIIMW, eAss); 1♂, Munții Parang, 1899, leg. Ganglbauer (NIIMB); 2♂, [local illegible] (NIIMW).

**Ukraine:** Id, W L'vov, 'Janów' (MAKII).

### *Othius permutteratus* ASSING

**Poland:** Id. Bieszczady, Khemien, 1300m, *Abies viridis*, 11.VI.1964, leg. Szucecki (MIING).

**Slovakia:** 1♀, Polon. Karpaty Mts., Stužica, 22.VI.1971, leg. Nohel (MIING); Id, Vihorlát, Chyzer (NIIMW).

**Ukraine:** 2♂, 2♀, W L'vov, 'Janów' (MAKII, eAss).

**Romania:** 3♂, 3♀, Munții Rodna, cii. 30 km E Rodna, Rareu ['Rareul'], leg. Holdhaus (NIIMW, eAss); 1♂, 4♀, 2♀, Munții Rodna, 1896, leg. Ganglbauer (NIIMW, eAss); 2♂, 2♀, Gorgány ['Marmarosch'], 20.V.1879, leg. Reitter (NIIMW, eAss); 2♀, Borcec, leg. Ormai (NIIMW); Id, 2♀, N. Munții Ciucului, Hăgymás, leg. Holdhaus (MIING, NIIMW); 4♂, 1♀, 'Carpates or., Foreszzenka' (MAKB, eAss); 1♀, S Brașov, Schuler (MAKII); 2♂, 1♀, Munții Bucegi (MAKB); 3♂, 2♀, S Brașov, Azuga (NIIMW, eAss); Id, 'Bukare (NIIMW).

**Locality not identified or not specified:** Id. 'Hungar. bor., Szinnaikö.' (NIIMW); 1♂, 1♀, 'nordöstl. ungar. Carpathen', leg. Reitter (NIIMW); 1♂, 1876, leg. Reitter (NIIMW).

*Othius corpulentus* COIFFAIT

Romania: 1♂, Muntii Paringu, 1899, leg. Ganglbauer (NIIMW); Id, 1♀, Munții Bihor, Baita, piatra Munceșului, 15.VII.1926, leg. Stöcklein (NIIMB), cAss; 1♀, Munții Bihor, Padis, 19.VII.1926, leg. Stöcklein (NIIMB); Id, Munții Bihor, Stina de Vale ['Biharfüred'], VI.1912, leg. Stoltz (NIIMB); 1♀, 'Serbien', leg. Merkl (NIIMW).

The record from Serbia is based only on a ♀ and therefore not absolutely certain.

*Othius svaneticus* sp. n. (Figs 2 a - f)

**Holotype** ♂: Caucasus, Swanetien, Leder, Reitter / *Othius crassus* dei. P. Heymes / Sammlung P. Rüschkamp, Eing. Nr. 1, 1964 / Holotypus ♂ *Othius svaneticus* sp. n., det. V. Assing 1998 (MARI).

**Paratype** ♀: same data as holotype, biii with identification label '*Othius pallidus*' (cAss).

**Description:** Measurements (mm) and ratios (HT, PT): **TIL: 0.95, 1.00; HW: 0.88, 0.92; PW: 0.98, 0.98; PL: 1.25, 1.19; EL: 0.70, 0.71; TiL: 0.80, 0.79; TaL: 0.69, 0.60; TL: 6.3, 7.0; TI/L/TW: 1.09, 1.08; HW/PW: 0.89, 0.94; PL/PW: 1.28, 1.22; EL/PL: 0.56, 0.60; TiL/TaL: 1.15, 1.30.**

Size (apart from the slightly larger head), proportions, colour, punctuation, and micro-sculpture as in the closely related *O. serratus* ASSING.

**♂:** secondary sexual characters similar to *O. serratus*, but sternum IX less distinctly serrate posteriorly (Fig. 2c), and lateral tergal sclerites IX apically slightly more obscure (Fig. 2d); tergum VIII as in *O. serratus* posteriorly convex (Fig. 2e); aedeagus of similar morphology as in *O. serratus*, but parameres relatively longer, ventral process subapically less strongly constricted in ventral view, and lateral carinae more distinct in lateral view; sclerotized internal structures more strongly bent, hook-shaped (Figs 2a, b).

**♀:** tergum VIII of similar shape as in *O. serratus*, but posteriorly with several distinctively modified stout setae (Fig. 2f).

**Phylogenetics and comparative notes:** The new species is most closely related to *O. serratus*, quite obviously its sister species, with which it shares a similar external appearance and similar 6 primary and secondary sexual characters. A sister species relationship is supported not only by the synapomorphic morphology of the sclerotized internal structures of the aedeagus, the subapically distinctly constricted ventral process (ventral view), and the shape of the lateral margin of the ♂ sternum IX, but also by biogeographical evidence. The distribution pattern of *O. serratus* and *O. svaneticus* is remarkably similar to that of the adelphotaxa *O. hebes* ASSING & SOLODOVNIKOV and *O. fastigatus* ASSING & SOLODOVNIKOV (ASSING & SOLODOVNIKOV 1998).

The monophylum *O. svaneticus* + *O. serratus* is apparently the sister group of *O. ponticus* COIFFAIT + *O. ushakovi* ASSING & SOLODOVNIKOV (see ASSING & SOLODOVNIKOV 1998), as can be inferred from the following synapomorphic character states: sclerotized internal structures of the aedeagus basally with pronounced dilatation, which is less distinctly sclerotized than the apex; outline of the lateral margin of the ♂ sternum IX ± irregular, dentate or serrate; lateral margin of the ♂ sternum IX anteriorly not distinctly bisid (also in *O. hebes* and related species); posteriorly convex (also in *O. permutteratus* ASSING); ventral process subapically narrow and ± distinctly constricted (also in *O. corpulentus* COIFFAIT).

This new species provides strong evidence that the previously tentatively hypothesized closer relationship of *O. serratus* and *O. crassus* was mainly based on homoplastic characters and must consequently be rejected. The absence of modified setae near the lateral margin of the ♂ sternum IX, in particular, again proves to be an (auto-)apomorphic reduction, which occurs in various species groups of *Othius* (see also ASSING 1998a).

From other Caucasian congeners of the *O. crassus* subgroup, *O. svaneticus* is most readily distinguished by the morphology of the aedeagus and the shape of the lateral sclerotized internal structures. From *O. hebes* and *O. fastigatus* it is separated by its larger size alone. For distinction from *O. serratus* see diagnosis above.

**Distribution:** Like *O. fastigatus*, *O. svaneticus* is apparently endemic in the Svanetskiy khrebet in the Central Caucasus.

*Othius brevipennis* KRAATZ

Austria: 1♂, Großglockner, VI.1937 (NIIMB); 1♂, 1♀, Oberösterreich, 'Jufen bei Alm', 24.IV.1914, leg. Pinker (NIIMW); 1♂, Salzburg, Gastein, Nassfeld, VI.1932, leg. Kaiser (MIING); 1♂, 1♀, Salzburg, Hohe Tauern, Fusch, 1892, leg. Sturany (NIIMW, cAss); 4♂, 2♀, Niederösterreich, leg. Reitter (LMH, MARI); 1♂, Niederösterreich, Lunz a. S., VI.1928, leg. Stöcklein (NIIMB); 1♂, 2♀, 2♂, Niederösterreich, 'Hole Wand', X.1928, leg. Kaiser (MIING); 1♂, Niederösterreich, Pitten, 1886, leg. Ganglbauer (NIIMW); 2♂, 2♀, Niederösterreich, Kirchberg a. W., 1895, leg. Ganglbauer, Schuster (MARI), NIIMW; 2♀, Kirchberg a. W., 1886, leg. Ganglbauer (NIIMW); 30♂, 26♀, Kranichberg, 1887, leg. Ganglbauer (NIIMW, cAss); 2♂, 2♀, Wechsel, 1889, leg. Ganglbauer (NIIMW); 2♂, 2♀, 29♀, Wechsel (NIIMW); 1♂, Niedere Tauern, Schladming (NIIMW); 2♂, 2♀ [all general], Steiermark, Mariatz, XI.1906, leg. Natterer (NIIMB); 2♂, Steiermark, Bez. Weiz, Rabenwaldgebiet, nördl. An Reith - Petz, ca. 600m, schimmernde Heuhaufen, I.XI.1982, leg. Mauerhofer (elol); 1♂, Steiermark, Bez. Weiz, Anger, Zetz, Wrede Weg, 1000-1200m, 6.V.1989, leg. Holzer (elol); 2♂, Sizientiinik, Hochschwabgebiet, Graßnitz bei Aflenz, Schießlingalm, 1300m, spruce forest, 18.II.1997, leg. Kapp (elol); 1♂, Hochschwabgebiet, Seewiesen (NIIMW); 3♂, 4♀, Steiermark, Turnau, VII.1931, leg. Frock (NIIMW, cAss); Id, Turnau (NIIMB); 1♂, Steiermark, Wartberg/Mürz, 600m (NIIMW); 1♂, Steiermark, Pleschkogel near Rein, 590m, 20.VI.1995, leg. Zerche & Behne (elol); Id, Raxalpe, leg. Holdhaus (NIIMW); 1♀, Steiermark, Teichalpe, 23.VII.1903 (MAKB); 1♂, Stuhleck, 29.VII.1894 (cAss); 1♂, Stuhleck (NIHM); 3♂, 2♀, Koralpe, leg. Holdhaus, Wingelmüller (NIIMW); 2♂, 1♀, Steiermark, Kanker-Sattel, leg. Pinker (NIIMW, cAss); 1♂, 1♀, Kärnten, Gurktaler Alpen, Si. Lorenz, Hochmoor, leg. Strupi ('Othius myrmecophilus' Kiesw.'), (NIIMW); 5♂, 1♀, Kärntn. Mallnitz, Dössener Tal, Konrad-Hütte, 1500m, VI.1932, leg. Kaiser (MIING, cAss); 4♂, 3♀, Kärnten, Villacher Alpe, 1190m, litter in mixed woodland, 18.IX.1998, leg. Schüller (elol); 1♂, Kärnten, Gaistaler Alpen, leg. Sinipi (NIIMW); 26♂, Gaistaler Alpen, Golz, 1♂, Strupi (NIIMW, cAss); 2♂, 1♀, Gaistaler Alpen, Wiederschwing, leg. Strupi (NIIMW, cAss); 1♂, Gaistaler Alpen, Tschekelhock, leg. Strupi (NIIMW); 1♂, Kärnten, Karnische Alp, Wolayer See, 3.-11.VIII.1949, leg. Schubert (NIIMW); 3♂, 2♀, Kärnten, Teufelsgraben in Villach, leg. Strupi (NIIMW); 1♂, Eichholzgraben near Villach, leg. Sinipi (NIIMW); 1♂, Karawanken, Hochobir (MIING); 1♂, 3♀, Karawanken, Bodental, 'Cr.', (MIING); 3♂, 3♀, Karawanken, Koschuta, leg. Strupi (NIIMW); 1♂, Karawanken, Loibl, leg. Schubert (NIIMW); 1♂, Karawanken, 'Illisch', leg. Strupi (NIIMW); 1♂, 1♀, Karawanken, Bärenkopf, 1940m, 4.VII.1938, leg. Heberdey (NIIMW); Id, Karawanken, locality illegible, 14.VII.1914, leg. Stöcklein (NIIMB); 1♀, 'Kärnten' (MARI).

Slovakia: Id, 'Úlhorná, SI. Rudohorí', 5.VI.1983 (elol); 2♀, Tatry, leg. Brenske, Polins (NIIMM); 1♂, Tatry, 'Höhleinhain' (NIIMI).

**Slovenia:** 1♀, W Postojna, Nanos, leg. Lokay (MAKB); 1♂, 1♀, Nanos, 1894, leg. Ganglbauer (NIIMW); 2♂♂, 2♀♀, Pohorje, 1892, leg. Ganglbauer (NIIMW); 2♂♂, 2♀♀, Pohorje (NIIMW, cAss); 4♂♂, 2♀♀, 'Volcza Jama' [=Volče] (MAKB); 2d♂, 1♀, 'Ursulaberg', leg. Strupi (NIIMW); 4♂♂, Crna prst, Wochein, VII.1908, leg. Stöcklein (NIIMII); 1♀, Crna prst, leg. Ganglbauer (NIIMW); 2♂♂, 2♀♀, Šmihel, Moirje, 850m, 30.IV.1995, leg. Drovnik (cAss, cDro).

**Italy:** 1y, Trentino, Renon (BZ), 1800m, 24.IX.1993, leg. Meyer (cZan); 4♂♂, Trecciuu, Val Pusteria, San Cándido ['Innichen'], leg. Ludy (NIIMW); 1♂, Trentino, Dobbiano ['Toblach'], 1894, leg. Koelbel (NIIMW); 1♀, Dobbiano, leg. Reitter (NIIMW); 1♀, Bolzano, 1879, leg. Reitter (NIIMW).

**Bosnia-Herzegovina:** 1♂, Gacko, leg. Hoffmann (cAss).

**Locality ambiguous, not specified, or not identified:** Id. 1♀, 'Schneeberg', leg. Koltze (NIIMU); 3♂♂, 'Styria', leg. Pipitz (NIIMW); 2♂♂, 'Vertatscha', leg. Holdhaus (NIIMW, cAss); 1♂, 'Rosten, Alp. Car.', leg. Strupi (NIIMW); Id, 'Umg. Ledentzen, Car.', leg. Strupi (NIIMW); Id, 'Hung. sept., Höhle b. Szilice', leg. Stoltz (NIIMB).

The single record of *O. brevipennis* froissi Switzerland (HUGENTOBLER 1966) was revised. The specimen proved to be a ♀ of *O. subuliformis* (see below that species). Four specimens collected in October were teneral. Previously, teneral beetles had been observed in August and September (ASSING 1997b).

#### *Othius korgei* COIFFAIT

**Northern Anatolia:** 1♂, 1♀, Çaldere ['Akkus'], 3.-5.VI.1961, leg. Schubert (NIIMW, cAss).

Only few specimens of this apparently rare endemic have been collected in May, June, and August.

#### *Othius hebes* ASSING & SOLODOVNIKOV

1y, Caucasus, Likhskiy Khrebet ['Meskisch. Gb.'], leg. Leder & Reitter (NIIMII).

#### *Othius philonthoides* WOLLASTON

**Canary Islands: Hierro:** 2♂♂, 1♀, El Gredine, 8 km W Frontera, 800m, Fayal-Brezal, 21.I.1998, leg. Behne (DEI, cAss); Zdd. 1♀, Lomo Blanco, 6 km W Frontera, 550m, Fayal-Brezal, 25.I.1998, leg. Behne (DEI, cAss); 1♂, 3♀♀, El Brezal near Tabano, northern slope, 800-900m, Fayal-Brezal, 22.I.1998, leg. Behne (DEI); 6♂♂, 2♀♀, same data, but 850m, 17.I.1998 (DEI, cAss); 2♂♂, 3♀♀, Raya la Liana near Hoya de Fileba, 1350m, Fayal-Brezal, 19.I.1998, leg. Behne (DEI, cAss); 2♀♀, Mia de la Casila, 900m, *Pinus canariensis* forest, 19.I.1998, leg. Iklia (DEI); 3♂♂, Camino de San Salvador near Tabano, 1325m, Fayal-Brezal, 17.I.1998, leg. Iklia (DEI, cAss); Id, 3♀♀, San Andrés, 1100m, 5.II.1982, leg. Machado (cMac, cAss); Id, Timor, 1120m, 5.II.1982, leg. Machado (cMac).

Wing development in this species is dimorphic: 6 out of 28 specimens examined from Hierro were macropterous and the remainder brachypterous. 22 specimens recently collected in Gran Canaria (ASSING 1998a), in contrast, were macropterous.

#### *Othius palmaensis* ASSING

**Canary Islands: La Palma:** 2♂♂, Llano los Caños, 28.VI.1996, leg. R. García (cGar, cAss); 10♂♂, 14♀♀, 1 second-instar, 1 third-instar larva, SW Franceses, Bco. de Los Hombres, 800m, little *Castanea* and *Erica*, 1.IV.1999, leg. Assing, Wunderle (cAss, cWun); 13♂♂, 10♀♀, 1 first-instar, 1 second-instar larva, Roque Faro, 1000m, *Pinus canariensis* wood with *Myrica* Jf. L.IV.1999, leg. Assing, Wunderle (cAss, cWun); 1d, 2♀♀, 1 second-instar, 2 third-instar larva, S Gallegos, 500m, Laurisilva with *Castanea*, L.IV.1999, leg. Assing, Wunderle (cAss, cWun); 16♂♂, 24♀♀, 2 first-instar larvae, Cumbre Nueva, E Refugio El Pilar, 1350m, Fayal-Brezal 4.IV.1999, leg. Assing, Wunderle (cAss, cWun); 3♂♂, 1 first-instar, 1 second-instar, 1 third-instar larva, Cumbre Vieja, near Roque Niquiono, 1400m, Fayal-Brezal, 8.IV.1999, leg. Assing, Wunderle (cAss, cWun); 6♂♂, 7♀♀, 7 first-instar, 4 second-instar larvae, Cumbre Vieja, Roque Niquiono, 1300m, Fayal-Brezal, 8.IV.1999, leg. Assing, Wunderle (cAss, cWun); 26♂♂, 23♀♀, 15 first-instar, 13 second-instar, 3 third-instar larvae, N Llano Negro, 650m, Fayal-Brezal, 12.IV.1999, leg. Assing, Wunderle (cAss, cWun); 1♀, 1 second-instar larva, same site but 800m (cAss).

Previously, only the type specimen had been known (ASSING 1997a). *O. palmaensis* apparently widespread in La Palma from the north of the island to the south of Cumbre Vieja; the south was observed at altitudes from 500 to 1500m, both in Fayal-Brezal and *Pinus* woodland. Larvae of all instars were taken on various occasions in March - April. In the collected material, intraspecific variation in body size was found to be remarkable.

#### *Othius chrysurus* REITTER

**Tajikistan:** Id, Ramit V., 2200-2900m, 28.-29.VII.1992, leg. Kasantsev (NIIMII); 2d♂, 4♀♀, kiiii S Nurek, 1000-1300m, 14.-17.IV.1992, leg. Kasantsev (NIIMU, cAss); 1♀, Hissar & Anzob-Pass, 3373m, 15.-19.VII.1992, leg. Kasantsev (NIIMID); 1♀, 40 km N Dushanbe, Ch. Obicarn, 10.V.1988, leg. Majer (NIIMB); 1♀, Peter I. chrebet, N Severno, Ganuscho Rodnichka, 2000-2100m, 26.VII.1969, leg. Michailov (NIIMI); 1♀, Pamir, Milksei, 'Suk Schlucht', 2800m, VII.1990, leg. Schmidt (MIING).

**Uzbekistan:** 1♀, 70 km NE Tashkent, Ak-Tash, Ugam Mts., 28.IV.1988, leg. Majer (NIIMB); 'Buchara, Hissar Geb.' (NIIMU).

**Kirghizia:** Id, 1♀, N-Kirghizia, Kara-Balta reg., Aksu river, 23.V.1995 (NIIMW, cAss).

The upper altitude limit of this species is now extended to 3373m. Specimens indicated above were collected in April. Previously, only records from May through July had been known (ASSING 1997b).

#### *Othius turcmenus* FAUVEL (Figs 3 a - d)

**Kazakhstan:** 1♀, Charyn val, W Chundza, 800m, 10.-13.VI.1993, leg. Schwaller (cAss).

**Kirghizia:** Id, 'Talass Thal', VI.1908, leg. Fischer (ZIN); 1♀, Przheval'sk, VI.-VII.1905, Pedashenko (ZIN).

Previously, only the two type specimens from Alma-Ata in southern Kazakhstan had been known. The species is here for the first time recorded from Kirghizia. The ♀ specimen from Kazakhstan indicated above differs from the lectotype in slightly smaller size, relatively shorter head and relatively larger eyes; in addition, the setae on tergum X are somewhat stouter. Since a ♂ of this species has been available for the first time, the primary secondary sexual characters are described:

♂: protarsomeres I - IV strongly dilated, distinctly more so than in ♀; sternum VII

modified; sternum VIII weakly concave posteriorly, withioui modified pubescence; Iiiid margin of tergum VIII truncate; sternum IX with loig aid thin pubescence, its posterior iiiiargiii deeply concave, Iiiid angles with short spine-like terminal setae (Fig. 3c); lateral tergal sclerites IX in lateral view scider, apically rounded and with one loig terminal seta (Fig. 3d); aedeagus of siiiiilar siapc as in *O. chrysurus* RETTTER aid *O. sinuosus* ASSING; internal sac of iiediaii lobe with 6 sclerotized structures: a loig aid in ventral view apically dilated iicdialai basal, a loig iiediaii apical and two pairs of loig aid slender laical structures (Figs. 3a, b).

Based on ilic external iiii ilic d sexual characters, *O. turmenus* is most siiiiilar aid apparently also most closely related to *O. sinuosus* ASSING from ilic western Himalayas, withi which it shares the presumed apomorphic micropunctuation of ilic elytra, ilic (also apomorphic) ± isodiametric microsculpture of the abdomen, ilic siiiiilar morphology of the aedeagus, aid a similar shape and arrangement of internal structures. *O. turmenus* is distinguished from *O. sinuosus*, however, by numerous characters such as ilic preseiice of a posterior pair of frontal piiiciires, the more scider head, ilic much denser aid more rugose elytral micropunctuation, the shallower transverse impression on the abdominal terga III - Vi, the different shape and chaetotaxy of the ♂ sternum IX, ilic shorter parameres, and by the loiger lateral and ilic differently shaped iiediaii siuciures of ilic iiterial sac of the iiediaii lobe (see ASSING 1998b). For illustrations of the ♂ sexual characters of *O. chrysurus* RETTTER see ASSING (1997b).

#### *Othius loeffleri* SCHEERPELTZ 1976 (Figs 4 a-d)

*Othius loeffleri* SCHEERPELTZ 1976b: 124f.

*Othiogeton nepalensis* SCHEERPELTZ 1976a: 32ff., syn. n.

Type examined: Holotype ♂: ♀ [sic] / Nepal, Prov. Nr. 2 East, Beding/ Rolwaling, 18.VIII.1964, 3940m, leg. Löffler/ Staatslsg. München/ Othius Löffleri Scheerp./ Holotypus/ Typus *Othius Löffleri* O. Scheerpeltz/ *Othius loeffleri* nov. spec., Jci. Scheerpeltz, 1966 (ZSM).

In the course of ilic recent revision of Himalayan *Othius* (ASSING 1998b), ilic holotype was looked for, but not found, in the collections of ilic ZSM. It was only some time after the publication of the revision that the specimen, which had in fact been out on loan, was made available to me for examination. The holotype, according to ilic original description and to ilic labels attached to ilic pin a ♀, fortunately proved to be a ♂. A comparative diagnosis of the species is presented below.

**D i a g n o s i s :** Measiireiiciis(mm) and ratios (HT): HL: 1.31; HW: 1.24; PW: 1.33; PL: 1.54; EL: 0.87; TiL: 1.04; TaL: 0.85; TL: 8.5; HL/HW: 1.06; HW/PW: 0.93; PL/PW: 1.16; EL/PL: 0.56; TiL/TaL: 1.21.

Colour of body including elytra aid appendages blackish brown to black.

Externally highly siiiiilar aid most closely related to *O. longicuneatus* ASSING of ilic *O. infestus* species group.

Colour somewhat darker than in *O. longicuneatus*, whole body ± uniformly dark brown; antennae slightly sloriier with the penultimate antennomeres iioro sloriigly transverse aid the apical antennomere sloriier. Elytra with less well-defined aid less evenly distributed macropunctuation, and with distinct, though less homogeneous micropunctuation than in *O. longicuneatus*.

♂: sternum VII weakly concave posteriorly, in central posicior area depressed and with

slightly condensed, loig aid suberect pubescence (in *O. longicuneatus* unmodified sternum VIII withi weakly concave Iiiid margin, pubescence rather dark, long and moderately dciisc; Iiiid iiiiargiii of sternum IX weakly concave aid with weakly pronounced Iiiid angles, posterior iiediaii area withi dciisc aid slori yellowish pubescence (Fig. 4 lateral tergal sclerites IX with two terminal setae, in lateral view broader and apica more abruptly tapering than in *O. longicuneatus* (Fig. 3d); aedeagus with broad parameres, median lobe withi disiiici carinae; iiterial sac withi withi 4 distinctly sclerotized structures: a very long iicdialai basal, a shorter, apically sloriigly bent median apical, a pair of very loig lateral siuciures; flagellum thin aid withi ca. 10 coils (Figs 4a, b).

♀: scc diagnosis of *O. nepalensis* in ASSING (1998b).

**C o m p a r a t i v e n o t e s :** **Ailiolig** the closely related Himalayan species of the *infestus* group, *O. loeffleri* shares a very long iiediaii basal structure in ilic iiterial sac the aedeagus oily with *O. longicuneatus* from central Nepal, from which this species distinguished particularly by ilic differencii siapc aid pubescence of ilic ♂ sternum V aid VIII, the broader parameres, aid the iiterial siuciures of the aedeagus: the distinct fewer coils of ilic flagellum, the more massive aid much more sloriigly bent median apical structure, ilic loiger median basal and ilic loiger lateral structures (see diagno above aid ASSING 1998b).

**C o n c l u s i o n s :** Apart from the slightly larger size of the holotype of *O. loeffleri*, I have been unable to find any characters distinguishing it from ilic ♀ holotype of *O. nepalen* (SCHEERPELTZ). Since size is subject to considerable intraspecific variation in ilic genus aid as the type localities of both species are only some 40 km apart, ilic two holotypes are here hypothesized to represent ilic same species. Both *O. loeffleri* aid *O. nepalen* were described in the same year, journal, and volume. *O. loeffleri* is here chosen as the type species, because its holotype is a male aid in much better condition. Thus, ilic following synonymy is established: *O. loeffleri* SCHEERPELTZ 1976 = *O. nepalen* (SCHEERPELTZ 1976), syn. n.

**D i s t r i b u t i o n a n d b i o n o m i c s :** *O. loeffleri* is known only from two localities in ilic north of eastern Nepal (Khumbu Himal, Rolwaling Himal), where it was collected at an altitude of 3900 - 4500m in May aid August.

#### *Othius bhutanensis* sp. n. (Figs 5 a-e)

**Holotype ♂:** Bhutan: Paro District, Chiley-La, 3000-3500m, 10.-13.7.1990, leg. Holzschuh (001) Holotypus ♂ *Othius bhutanensis* sp. n., det. V. Assing 1999 (NMW).

**D e s c r i p t i o n :** Measurements (HT; iii mm): HL: 1.62; IIW: 1.56; PW: 1.65; P: 1.95; EL: 0.98; TiL: 1.37; TaL: 1.01; TL: 10.8.

Externally siiiiilar to *O. ruficornis* CAMERON. Colour blackish brown, with ilic legs a ilic antennae reddish to brown.

Head slightly loiger than wide (HL/HW: 1.04), almost as wide as pronotum (HW/PW: 0.94); eyes relatively small, 0.30x ilic length of postgenae in lateral view; temples behind eyes dilated in dorsal view; dorsal surface with distinct fine microsculpture predominantly composed of isodiametric aid short transverse meshes; micropunctuation visible; macropunctuation moderately dciisc in lateral aid in posterior area, central dorsal region free of punctures; frons withi posterior pair of punctures, anterior punctures situated in ± roundish impressions, each with 2 - 3 additional punctures; frontal furrow shallow, but distinct.

Pronotum wiili subparallel lateral iiiargiiis, weakly oblong (PL/PW: 1.19); dorsal surface somewhat shiiiiy, wiili weak microsculpture predominantly composed of transverse striae, iii aiicior region also of transverse meshes; discal punctation pattern similar to *O. infestus* ASSING (cf. Fig. 8f in ASSING 1998b).

Elytra relatively short (EL/PL: 0.50); punctures rather sparse, separated by interstices 2 - 4s wider than iiiie punctures; dorsal surface weakly shining, with distinct, but rather shallow isodiametric microsculpture; hind wings reduced; scutellum wiili shallow microsculpture and some punctures; TiL/Tal: 1.36.

Abdomen with fine and sparse punctation; iiiicroscilpiure near aiicior margins of terga relatively weak and ± isodiametric, on remainder of tergal surfaces barely noticeable; tergum VII without palisade fringe.

♂: protarsi siroigly dilated; sterna III - VII unmodified; iiiiid iiiargiii of sieriuuiii VIII iruicale; sternum IX broad, distinctly dilated in anterior half; aiiciorly siroigly bifid, with weakly concave iiiiid margin, aiid iii central posterior area wiili deciise aiid short yellowish pubescence (Fig. 5d); lateral tergal sclerites IX iii lateral view mrtlier short (Fig. 5e); median lobe of similar shape as in *O. ruficornis* and related species, ventral process without noticeable basal median carina; parameres apically distinctly dilated; internal sac with a rather large median basal, a iiiicli slorier median apical, a pair longer wide-based, aiid a pair or slorier aiid thinner lateral structures; flagellum iiiii aiid with >20 coils (Figs 5a-c).

♀: unknown.

**Comparative notes and phylogenetics:** *O. bhutanensis* is closely related to *O. ruficornis* CAMERON, *O. infestus* ASSING aiid related species froii the eastern Himalayas, wiili wlieli it shares ilie synapomorphic microreticulation of ilic elytra, a similar pronotal punctation pattern, and the general morphology of ilie ♂ sexual characters. It is the easternmost representative of this species group and currently ilie oily species of *Othius* known from Bhutan. From *O. ruficornis* (Sikkim), it is readily distinguished by siialler size, iiiicli weaker microsculpture of the forebody, ilic broader, shorter, and aiiciorly more siroigly bifid stsruiiiii IX, ilic slorier and deciise pubescceiice of sieriuuiii IX, aiid the different shape and number of internal structures of ilic aedcagus, especially ilie presence of a large median basal structure. The oily species of the *O. infestus* group, in which ilic basal iiiediaii structure is larger than ilic apical iiiediaii siriicie, are ilic distinctly siialler. *O. loeffleri* SCHEERPELTZ aiid *O. longicuncatus* ASSING from eastern and central Nepal, respectively, biii their internal structures are of different shape, and oily one pair of lateral structures is present.

#### *Othius medius* SHARP

Japan: 1♀, Osaka pref., 8.V.1958, leg. Hayashi (ZIN).

#### *Othius rosti* BERNHAUER

Russian Federation: 1♂, Primorskiy Kray, Natural Reserve Sichote-Alin, Blagodatno lake, 17.-22.VI.1998, leg. Sundukov (cSch); 2♂♂, 1♀, Amur territory, Korsakovo (100 km froii Svobodnij), in litter near Amur river, 6.&7.VIII.1959, leg. I. Kerzhner (ZIN).

#### *Othius rufipennis* SHARP

Japan: 1♂, 'Japonia' (ZIN).

China: 1♀, 'China' (NIIMB).

#### *Othius maculativentris* ZHENG

China: 28♂♂, 24♀♀ [3 ex. teneral], Sichuan, Gongga Shan, Hailuogou, in front of Glacier 2850m, 29°35'N 102°00'E, 7.VII.1998, leg. A. Smelana (cSmc, cAss); Id. Gongga Shan n Muxi, surroundings of Camp III, 3000-3300m, 25./27.VII.1994, leg. Heinz (cAss).

#### *Othius sculptipennis* ASSING

China: 4♀♀, S Sichuan, pass 20 km S Muli (Bowa), 27°45'N, 101°13'E, ca. 3500m, mixed for 28.-29.VI.1998, leg. Turna (NIIMW, cAss).

Previously, only iiiicli ♀ holotype had beccii kiiowii.

#### *Othius fribulifer* ASSING

China: 2♀♀, W Sichuan, road Qianning-Danba, pass 15 km NE: Qieliiliig, 30°35'N, 101°41'E, alpine meadows, 11.VII.1998, leg. Turna (NIIMW, cAss).

#### *Othius opacipennis* CAMERON (Figs 6 a-d)

China: Id. S Sichuan, road Meigu-Leibo, Daliang Shan mts., pass 15 km NE: Meigu, 28°25'N 103°17'E, 26.VII.1998, leg. Turna (NIIMW).

*O. opacipennis*, wlieli was kiiowii oily lroiii two localities in Yunnan, biii was expect to have a wider disiribuition (ASSING 1999), is here for the first time recorded fr Sichuan. It is now possible to describe the previously uiikiuwii ♂ sexual characters:

♂: protarsomeres I-IV moderately dilated, sexual dimorphism noticeable, bui not p nounced; abdominal sterna III - VII unmodified; sieriuuiii VIII siroigly tapering pos riorly, iiiiid iiiargiii convex, oily iii ilic iiiiddle ± truncate; lateral tergal sclerites IX le aiid narrow, apically wiili loiig aiid acic process (Fig. 6d); sieriuuiii IX loiig aiid narr with dark, loiig aiid dense pubescceiice; iiiiid margin of sieriuuiii IX of highly distinct shape, iiiid aiigles very loiig and acute, between hind aiigles aiid iiiiddlc dentate (F 6c); aedeagus of reiiarkable aiid highly distinctive iiiorpipiology: iiicdian lobe very lc aiid slender, lateral parts of ventral process dorsally fused over considerable distan internal sac with a pair of stout and a pair of iiiii lateral siruciures, apical med struciure apparently present, bui very weakly sclerotized, barely iioicable; flagell wiili ca. 15 coils, distal coil widened; paraiicrcs very long and slender, wiili 5 apical a some additional subapical setae (Figs 6a, b).

**Comparative notes and phylogenetics:** The 6 sexual cl racters reveal that, without doubt, *O. opacipennis* is most closely related to *O. atav* ASSING, with which it shares the following synapomorphies: a reiiarkabiy loiig and slender (*Arecus*-type) iiiediaii lobe, very long paraiicrcs, small aiid weakly sclerotized intal structures, the absceiice of a basal iiiediaii structure, apically very acute lateral ter scleriics IX, a loiig aiid narrow sieriuuiii IX, aiid ilie iiiicropipiatioii of ilic elytra. *opacipennis* is, however, readily distinguished froii *O. atavus* by its larger size, ilic m

broader and relatively shorter head, the black elytra, the much more distinct and denser elytral micropunctation, the apically more acute lateral tergal sclerites IX, the anteriorly only weakly bifid and posteriorly differently shaped ♂ sternum IX, and the slightly different shape of the aedeagus.

### Errata

In two previous studies (ASSING 1997b, 1998b), some of the measurements for TiL and TaL were calculated using an incorrect factor. The figures given for TiL and TaL are to be corrected by the factor 1.54 for *O. zolotarevi* and *O. jadwigae*, and by the factor 2.02 for the following species (in alphabetical order): *O. acifer*, *O. apicalis*, *O. chrysurus*, *O. clavifer*, *O. conifer*, *O. corniger*, *O. extraordinarius*, *O. flavicaudatus*, *O. grandis*, *O. infestus*, *O. longicuneatus*, *O. monticola*, *O. nepalensis*, *O. paralleliceps*, *O. perreaui*, *O. pokharenensis*, *O. punctulatus*, *O. ruficornis*, *O. sinuosus*, *O. truncatus*, *O. turcmenus*, *O. virgifer*.

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I am indebted to all the colleagues indicated in the material section for the kind loan or gift of material. Alexey Solodovnikov, St. Petersburg, provided me with information on localities and records from the Caucasus region and from Kazakhstan.

### Zusammenfassung

Eine Bearbeitung bisher unrevidierter Materials ergab weitere Daten zur Verbreitung und Bionomie von 37 Arten der paläarktischen Gattung *Othius*, die nunmehr annähernd 100 Arten umfaßt. Die zuvor unbekannten primären und sekundären Sexualmerkmale der Männchen von *O. turcmenus* FAUVEL, *O. loeffleri* SCHEERPELTZ und *O. opacipennis* CAMERON werden erstmals beschrieben und abgebildet. Drei Arten werden beschrieben und von den jeweils nächstverwandten Arten unterschieden: *O. jumtienensis* sp. n. aus Nepal, *O. svaneticus* sp. n. aus dem Kaukasus und *O. bhutanensis* sp. n. aus Bhutan. Ihre Geschlechtsmerkmale werden abgebildet. Eine Untersuchung des Holotypus von *O. loeffleri* SCHEERPELTZ ergab die folgende Synonymie: *Othius loeffleri* SCHEERPELTZ 1976 = *Othiogeton nepalensis* SCHEERPELTZ 1976, syn. n.

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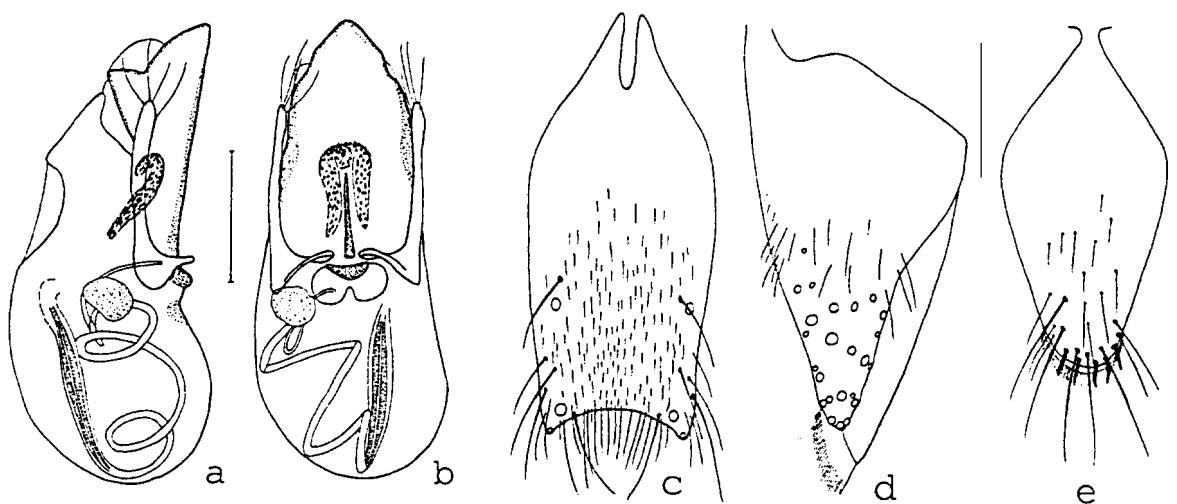


Fig. 1: *U. jumilaensis* sp. n. (a - d: HT): aedeagus in lateral (a) and in ventral view (b); ♂ sternum IX (c); ♂ lateral tergal sclerite IX and tergum X in lateral view (d); ♀ tergum X (e); long setae partly omitted in c-d. Scales: 0.25 mm.

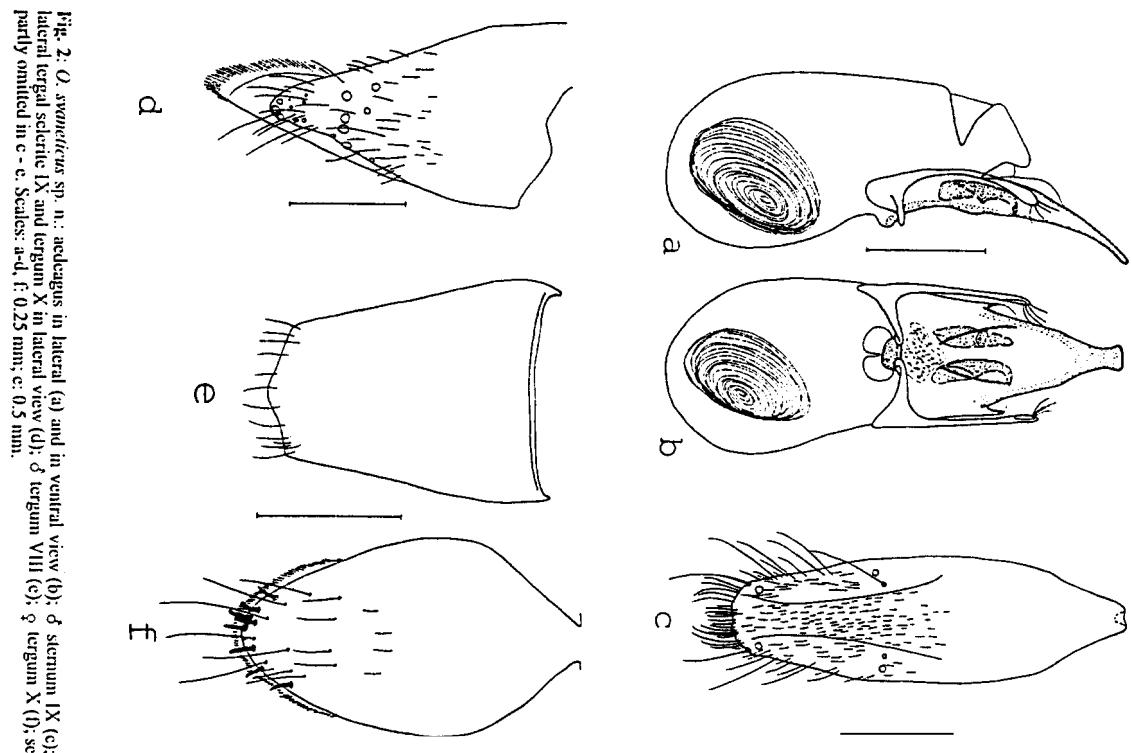


Fig. 2: *O. axandrenus* sp. n.: aedeagus in lateral (a) and in ventral view (b); ♂ sternum IX (c); lateral tergal sclerite IX and tergum X in lateral view (d); ♂ tergum VIII (e); ♀ tergum X (f); sc partly omitted in c - e. Scales: a-d, f: 0.25 mm; c: 0.5 mm.

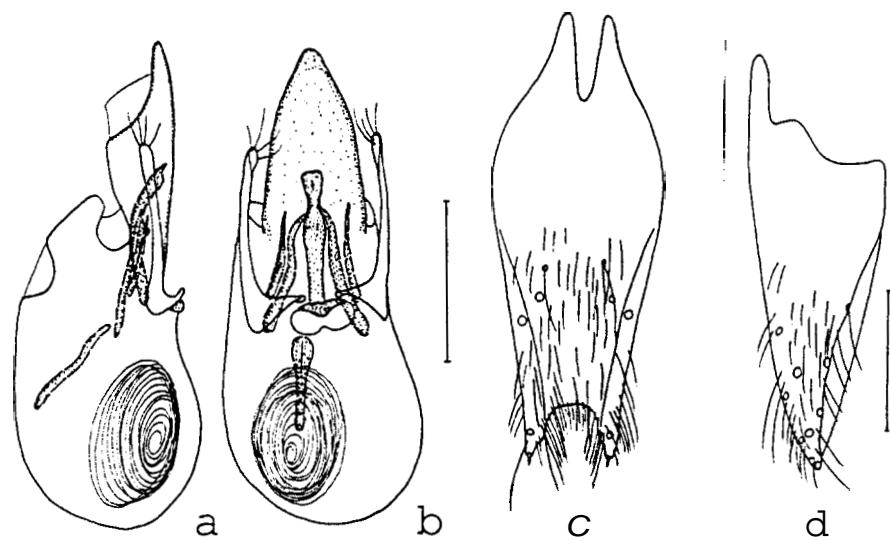


Fig. 3: *O. turcmenus* FAUVEL ♂: aedeagus in lateral (a) and in ventral view (b); sternum IX (c); lateral tergal sclerite IX and tergum X in lateral view (d); setae partly omitted in c-d. Scale: 0.5 mm.

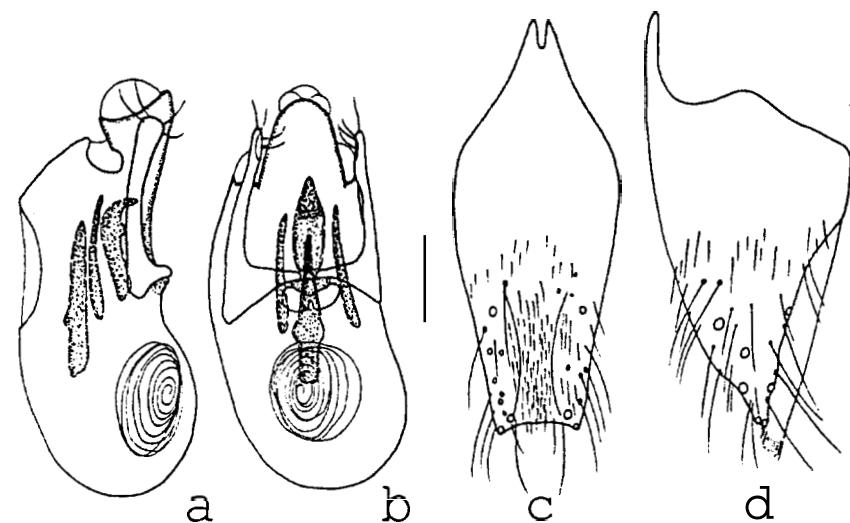


Fig. 3: *O. turcmenus* FAUVEL ♂: aedeagus in lateral (a) and in ventral view (b); ♂ sternum IX (c); ♂ lateral tergal sclerite IX and tergum X in

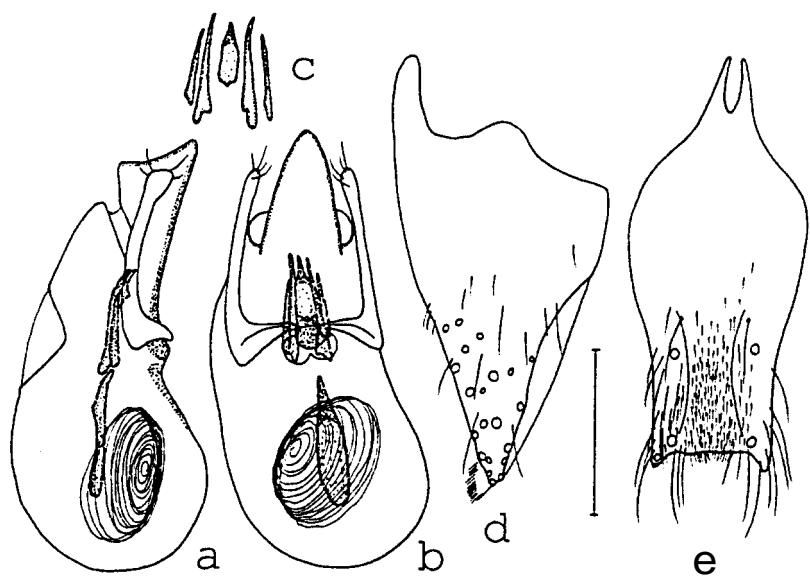
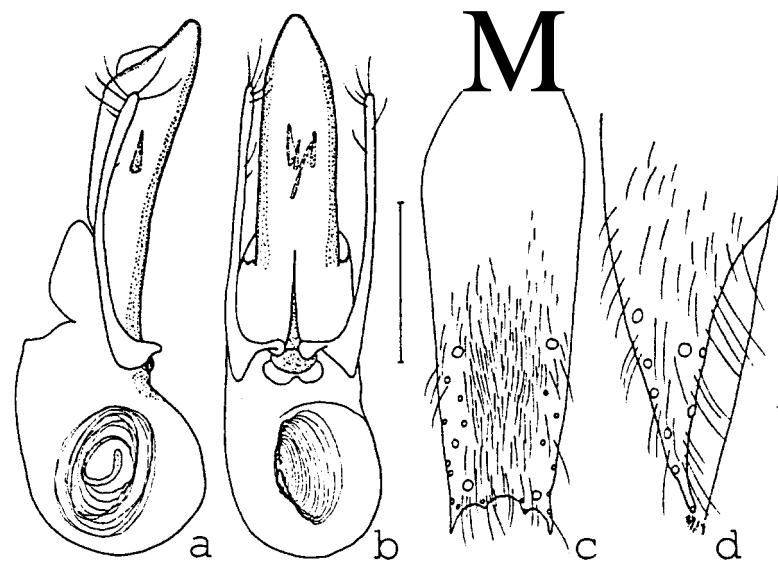


Fig. 5: *O. bhutanensis* sp. n. (HT): aedeagus in lateral (a) and in ventral view (b); apical internal structures of median lobe in ventral view (c); sternum IX (d); lateral tergal sclerite IX and tergum X in lateral view (e); long setae omitted in d-e. Scale: 0.5 mm.

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Fig. 6: *O. opacipennis* CAMERON ♂: aedeagus in lateral (a) and in ventral view (b); sternum IX (c); lateral tergal sclerite IX and tergum X in lateral