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BRACONIDAE (HYMENOPTERA) FROM MONGOLIA, XVI. SUBFAMILIES GNAMPTODONTINAE, BRACHISTINAE, EUPHORINAE, ALYSIINAE*

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Hundred seventy-six braconid specimens have been elaborated, they belong to four subfamilies representing a total of 61 species; the four subfamilies with their respective species number are: Gnamptodontinae 1 species, Brachistinae 13 species, Euphorinae 5 species and Alysiinae 42 species. Eight alysiine species are new to science: *Dinotrema* 1 species, *Chorebus* 5 species, *Protodacnusa* 2 species, they are described and related to their nearest allies. The majority of the braconid species are new to the fauna of Mongolia. With 107 original figures.

Key words: Mongolia, Braconidae, subfamilies, new species, known species, faunistics

INTRODUCTION

Besides the three subfamilies (Gnamptodontinae, Brachistinae, Euphorinae) this is the second report on the dacnusine braconids (Alysiinae: Dacnusini) of Mongolia collected by the late Dr. Z. KASZAB (1915–1986) during his six zoological trips to this Asiatic country (1963–1968). A total of 176 braconid specimens served for the present elaboration. The four subfamilies proved to represent 61 species, each subfamily one by one covers the following species numbers (the respective specimen numbers are added in brackets): Gnamptodontinae 1 species (1), Brachistinae 13 species (28), Euphorinae 5 species (9) and Alysiinae 42 species (138) (Alysiini: 8 species, Dacnusini: 34 species). Eight species are established as new to science: (Alysiini:) *Dinotrema interjactum* sp. n.; (Dacnusini:) *Chorebus (Stiphrocera) badius* sp. n., *Ch. (S.) detorqus* sp. n., *Ch. (S.) monfreya* sp. n. and *P. effunda* sp. n. The majority of the known species are new to the fauna of Mongolia.

The elaborated braconid material herewith discussed and published is deposited in the Department of Zoology, Hungarian Natural History Museum, Budapest (Hungary).

* Results of the Zoological Explorations by Dr. Z. KASZAB in Mongolia, No. 513.

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LIST OF THE COLLECTING DATA

Every collecting site in Mongolia was numbered by Z. KASZAB, see his six reports in *Folia Entomologica Hungarica* 1963–1968 vols 16–21. In my previous five papers (PAPP 1991, 1992, 1999, 2000, 2004*a*) on the braconids of Mongolia I published a long list of these localities following the original publications by KASZAB. Below those locality numbers with their detailed data are listed which were not included in my previous papers (KASZAB's locality data were reported in German language hence they are cited accordingly):

No. 94. Central aimak: Ganz modni dava, 66 km OSO von Ulan-Baator, 1700 m, 5. VIII. 1963. – Steiler Nordhang nach dem Bergpass mit Kieferwald und üppigem Strauchbestand. Am Waldrand gekötschert.

No. 170. Uburchangaj aimak: Arc Bogd ul, ung. 20 km S von Somon Chovd, 1760 m, 21. VI. 1964. – Nach Norden öffnendes Tal, am Fusse ausserordentlich steiniger Wasserriss, öde Vegetation, *Caragana*, wilde Mandel, *Artemisia*. Unter Steinen und vom Boden.

No. 231. Uburchangaj aimak: Changaj Gebirge, 8 km S von Charchorin, 1600 m, 30. VI. 1964. – Steppe mit Blumen, von der Pflanzen gekötschert.

No. 251. Bulgan aimak: 5 km O von Somon Abzaga, 1400 m, 2. VII. 1964. – Steile Bergseiten, in den sich nach dem Norden öffnenden Tälern üppige Vegetation. Steppe mit Blumen. Von den Pflanzen gekötschert.

No. 278. Central aimak: 126 km N von Ulan-Baator, am Wege, 1100 m, 7. VII. 1964. – Von den Pflanzen gekötschert.

No. 292. Central aimak: 58 km NW von Ulan-Baator, 1200 m, 9. VII. 1964. – Von den Pflanzen gekötschert.

No. 312. Chentej aimak: zwischen Somon Zenchermandal und Somon Žargaltchaan, 10 km O von Zenchermandal, 1400 m, 27. VII. 1965. – 10 Bodenfallen mit Ethylenglycol aufgenommen am 22. VIII. 1965.

No. 381. Suchebaator aimak: 45 km N von Somon Erdenezagan, 900 m, 9. VIII. 1965. – Blumenreiche Steppe (*Cirsium, Allium, Artemisia*, etc.), gekötschert.

No. 395. Čojbalsan aimak: SW Ecke des Sees Bujr nur, 585 m, 11. VIII. 1965. – Aus Regenwasser-Ansammlungen mit Wassernetz geeinzelt.

No. 535. Archangaj aimak: 20 km W von Somon Ögijnuur, 1500 m, 18. VI. 1966. – An einer grasreichen Bergsteppe gekötschert.

No. 547. Archangaj aimak: Changaj Gebirge, zwischen Somon Ichtamir und Somon Čuluut, cca 20 km W von Somon Ichtamir, 3 km S vom Tal des Flusses Chanuj gol, 2150 m, 20. VI. 1966. – Von den Steppenpflazen und vom Gestreuch (Erlen, Weiden, etc.) gekötschert.

No. 552. Bajanchongoor aimak: Changaj Gebirge, Ulaan čolon, 18 km S von dem Pass Egijn davaa, 2300 m, 21. VI. 1966. – 8 Bodenfallen mit Ethylenglycol (aufgenommen am 18. VII. 1966) an dem steinigen Talgrund neben dem Bach.

No. 900. Südgobi aimak: Tachilga ul Gebirge, zwischen Somon Zogt-Ovoo und Dalanzadgad, 68 km S von Zogt-Ovoo, 1550 m, 8. VII. 1967. – Gekötschert, vorwiegend von *Artemisia*, *Lasiagrostis* und von blühenden Cruciferen.

No. 963. Bulgan aimak: zwischen Somon Chischig-Öndör und Somon Orchon, 23 km NNO von Chischig-Öndör, 1390 m, 15. VI. 1968. – Mit Hilfe von Malaise–Falle gesammelt. Aufgestellt am Nadelholzwaldrand.

No. 1000. Chövsgöl aimak: 7 km WSW von Somon Cerceleg am Fluss Tesijn gol, 1820 m, 22. VI. 1968. – Am Flussufer geschwemmt.

No. 1018. Uvs aimak: 22 km WSW von Somon Zuungobi, 980 m, 26. VI. 1968. – Breit ausgehnte Flachland mit *Artemisia*- und Grassteppe (eintönige Vegetation), gekötschert.

No. 1020. Uvs aimak: Senke des Sees Uvs nuur am SW-Rand des Sees, 84 km W von Somon Zuungobi und 63 km O von der Stadt Ulaangom, 790 m, 26. VI. 1968. – Gekötschert am Seeufer, an der Nehrung, von *Caragana* und Gräser, usw.

No. 1119. Chövsgöl aimak: 8 km N von Somon Alag-erdene, am Fluss Egijn gol, 1600 m, 17. VII. 1968. – Breit ausgehnte Tal mit Terrasse, kurzrasige Steppe, am Talgrund viele Pfützen. Am Flussufer geeinzelt.

No. 1133. Chövsgöl aimak: zwischen Somon Tosoncengel und Somon Ich-ul, 22 km O von Tosoncengel, 1150 m, 21. VII. 1968. – Tal des Flusses Selenge-mörön, an einem Südhang mit üppiger Steppenvegetation, und im Schutz einer Felswand mit alten *Ulmus*-Bäumen. Gekötschert.

No. 1145. Bulgan aimak: 11 km von Somon Bajannuur, am Südrand des Sees Bajan nuur, 1000 m, 24. VII. 1968. – Gekötschert an zwischen den Sandhügeln wachsenden Gräsern.

FAUNISTIC LIST

In the subsequent list the genera and species names are arranged alphabetically; distributional and taxonomic comments are added where necesary. The locality data are presented for every species, they are given in abbreviated form citing only the collecting numbers, the resolution of the respective numbers see in the previous chapter entitled "List of the collecting data" and in my papers PAPP 1991–2004*a*.

Gnamptodontinae

Gnamptodon georginae VAN ACHTERBERG, 1983 - 1 \bigcirc : No. 519. – Widely distributed in the Palaearctic Region. In Asiatic Russia reported from the Far East Maritime Territory, Magadan Region and Kamchatka (BELOKOBYLSKIJ 1998: 162). New to the fauna of Mongolia.

Brachistinae

Eubazus robustus (RATZEBURG, 1844) – 1 \bigcirc : No. 961. 1 \bigcirc : 1104. – Listed its localities in Europe (several countries) and Russia (European part, Far East Maritime Territory). New to the fauna of Mongolia.

Eubazus tibialis (HALIDAY, 1835) – 3 \Im \Im : No. 926. 2 \Im \Im : No. 926a. – Distributed and frequent in the Palaearctic Region. New to the fauna of Mongolia.

Schizoprymnus acataphractus (ŠNOFLÁK, 1953) – 1 \mathcal{J} (in PAPP 1967: 204 as *S. opacus*, rectified): No. 251. – In the eastern Palaearctic Region reported only from Korea (PAPP 1989: 82); in Europe a fairly frequent species. New to the fauna of Mongolia.

Schizoprymnus angustatus (HERRICH–SCHAEFFER, 1838) – 1 \bigcirc : No. 732. 1 \checkmark : No. 1020. – Widely distributed in the Asiatic Russia (BELOKOBYLSKIJ 1998: 479). First reported from Mongolia by me (PAPP 1967: 204).

Schizoprymnus elongatus (SZÉPLIGETI, 1898) – 1 \bigcirc : No. 1135. – Described from Hungary, in this country a rare species; reported from Azerbaidjan, Kazakhstan (TOBIAS 1986: 174). New to the fauna of Mongolia.

Schizoprymnus nigripes (THOMSON, 1892) – 1 \bigcirc : No. 732. 1 \bigcirc : No. 1146. – A Palaearctic species, in Asiatic Russia reported from the Far East Maritime Territory and from Korea (BELOKOBYLSKIJ 1998: 481). New to the fauna of Mongolia.

Schizoprymnus obscurus (NEES, 1816) – 1 3: No. 316. 1 3: No. 918. 1 9: 926a. 2 33: No. 1133. – Frequent to common in the Palaearctic Region. First reported from Mongolia by me (PAPP 1967: 204).

Schizoprymnus pallidipennis (HERRICH–SCHAEFFER, 1838) – 1 \Diamond (in PAPP 1967: 204 as *S. crassiceps*, rectified): No. 231. 1 \Diamond (in PAPP 1967: 204 as *S. crassiceps*, rectified): No. 311. 1 \Diamond : No. 724. – A frequent species in the Palaearctic Region, in Asiatic Russia widely distributed (BELOKO-BYLSKIJ 1998: 475). New to the fauna of Mongolia.

Schizoprymnus parvus (THOMSON, 1892) – 2 $\bigcirc \bigcirc$: No. 918. 2 $\bigcirc \bigcirc$: No. 1133. 1 \bigcirc : No. 1145. – In the western Palaearctic Region widely distributed and a fairly frequent species; in Asiatic Russia reported from western Siberia (TOBIAS 1986: 180); in Mongolia listed by me (PAPP 1971: 65) under the name "*Triaspis obscurus* var. *curtiradialis* var. n.", syn. n. (this name is herewith rectified and identical with *S. parvus*) from several localities (Nos 327, 338, 349, 353, 377, 380, 381, 383, 416, 421).

Schizoprymnus stenopygus (ŠNOFLÁK, 1953) – 1 \bigcirc : No. 519. – Hithero known only in Bohemia (ŠNOFLÁK 1953: 376, TOBIAS 1986: 180) and Hungary (PAPP 1998: 169). New to the fauna of Mongolia.

Schizoprymnus terebralis (ŠNOFLÁK, 1953) – 1 \bigcirc : No. 499. 1 \bigcirc : No. 938. 1 \bigcirc : No. 939. – Distributed in the Palaearctic Region; nearest to Mongolia reported from the Asiatic Russia (Far East Maritime Territory, Chita Region) (BELOKOBYLSKIJ 1998: 486). New to the fauna of Mongolia.

Triaspis lugubris ŠNOFLÁK, 1953 – 1 $\stackrel{\circ}{\circ}$ (in PAPP 1967: 204 as *T. obscurellus*, rectified): No. 278. 1 \bigcirc : 926a. – In Asiatic Russia widely distributed (BELOKOBYLSKIJ 1998: 468); reported from Korea (PAPP 1989: 83). New to the fauna of Mongolia.

Euphorinae

Leiophron heterocordyli RICHARDS, $1967 - 1 \bigcirc$ (det. BELOKOBYLSKIJ 2000; in PAPP 2000: 38 as *L. frater*, rectified): No. 934. – Its area seems to be disjunct: England – Asiatic Russia (Far East Maritime Territory, Tuva) (BELOKOBYLSKIJ 2000: 343). New to the fauna of Mongolia.

Myiocephalus boops (WESMAEL, 1835) – 1 3: No. 486. 1 2: No. 963. 1 3: No. 1115. – A Holarctic species. In the eastern Palaearctic Region reported from the Asiatic Russia (Baykal Territory, Far East Maritime Territory, Buryatiya, Kamchatka), Japan, Korea, China. New to the fauna of Mongolia. – The validity of the generic name *Myiocephalus* MARSHALL, 1897 over *Loxocephalus* FOERSTER, 1862 was recently confirmed (FOISSNER & VAN ACHTERBERG 1997).

Perilitus (Microctonus) aethiopoides LOAN, 1975 – 1 \bigcirc (det. BELOKOBYLSKIJ 2000; in PAPP 1967: 195 as *M. melanopus*, rectified): No. 170. 1 \Im : No. 383. – A Palaearctic and fairly frequent species (BELOKOBYLSKIJ 2000: 302). New to the fauna of Mongolia.

Perilitus (Microctonus) stelleri LOAN 1972 – 1 \checkmark (det. BELOKOBYLSKIJ 2000; in PAPP 1967: 195 as *Microctonus aethiops*, rectified): No. 90. 1 \bigcirc (det. BELOKOBYLSKIJ 2000; in PAPP 1967: 195 as *M. aethiops*, rectified): No. 292. – Distributed albeit sporadically in the Palaearctic Region (BELO-KOBYLSKIJ 2000: 301). New to the fauna of Mongolia.

Peristenus shikotanicus BELOKOBYLSKIJ, 2000 – 1 \bigcirc : No. 938. – Described from the Kuril Islands (Asiatic Russia) (BELOKOBYLSKIJ 2000b: 338). New to the fauna of Mongolia.

Alysiinae: Alysiini

Alloea contracta HALIDAY, 1833 – 1 \bigcirc : No. 295. 2 \bigcirc \bigcirc : No. 297. – Distributed in Europe, a less frequent species; not reported from Asiatic Russia (cf. BELOKOBYLSKIJ 1998). First listed from Mongolia by me (PAPP 1999: 223).

Dinotrema amoenidens (FISCHER, 1973) $-2 \bigcirc \bigcirc$ (in PAPP 1999: 223 as *D. catharinae*, rectified): No. 926a. – Very near to *D. varipes* (TOBIAS), the only distinctive difference between the two species is the length of 3–SR of fore wing: in *D. amoenidens* 2.5 times and in *D. varipes* 2–2.2 times as long as 2–SR, i.e. second submarginal cell is long (*D. amoenidens*) and less long (*D. varipes*). Supposedly this difference will prove to be but an infraspecific variation. The taxonomic status of *D. catharinae* see at *D. varipes*. Known from Austria and Hungary. New to the fauna of Mongolia.

Dinotrema cratocera (THOMSON, 1895) – 1 3: No. 749. – Known in Sweden, Austria and Hungary. New to the fauna of Mongolia.

Dinotrema incongruens (FISCHER, 1973) – 1 \mathcal{E} : No. 926. 1 \mathcal{E} : No. 926a. – Described from Austria (Tirol), reported from Hungary (PAPP 2004b: 123). New to the fauna of Mongolia.

Dinotrema interjactum sp. n.: for its description see the chapter "Descriptions of the new species".

Dinotrema varipes (TOBIAS, 1962) – 1 \bigcirc : No. 926a. 1 \bigcirc : No. 961. 1 \bigcirc : No. 973. 1 \bigcirc : No. 1150 (formerly every specimen was named by me as *D. catharinae* cf. PAPP 1999: 223, rectified). – On the basis of the examination of the female holotype of *D. catharinae* (FISCHER, 1973c) it proved to be conspecific with *D. paucicrenis* (FISCHER, 1973b) representing the *subcubicus* species-group. The name of the Mongolian specimens (3 $\bigcirc \bigcirc + 1 \bigcirc$) of *D. catharinae* is herewith rectified as *D. varipes*. Reported from Russia (Leningrad district), Austria and Hungary. New to the fauna of Mongolia.

Dinotrema vesparum (STELFOX, 1943) – 1 \bigcirc : No. 273. – My female specimen was compared to the female + male specimens of "Aspilota nervosa: Marshall, 1895" emendated by STELFOX (1943: 209) as *A. vesparum*. The specimens in question are housed in the Hungarian Natural History Museum. Hitherto known from Ireland, Scotland and England. New to the fauna of Mongolia.

Pentapleura angustula (HALIDAY, 1838) – 1 \bigcirc : No. 281. – A Palaearctic species, in Europe widely distributed. New to the fauna of Mongolia.

Alysiinae: Dacnusini

Chorebus (Chorebus) affinis (NEES, 1814) -1 \bigcirc : No. 967. 1 \bigcirc : No. 1000. – In Europe frequent to common (SHENEFELT 1974: 1035), in Asiatic Russia reported from Far East (TOBIAS 1998: 410). New to the fauna of Mongolia.

Chorebus (Stiphrocera) andizhanica (TOBIAS, 1966) -1 \bigcirc : No. 1046. – Described and hiherto known only in Uzbeghistan (TOBIAS 1966: 129). New to the fauna of Mongolia.

Chorebus (Stiphrocera) badius sp. n: for its description see the chapter "Description of the new species".

Chorebus (Phaenolexis) brevifemur (TOBIAS, 1962) – 1 ♂: No. 771. – Described from the European Russia (Leningrad district), reported from Hungary (PAPP 2004b: 135). New to the fauna of Mongolia.

Chorebus (Phaenolexis) brunnipes TOBIAS, 1998 – 1 \bigcirc : No. 1126. – Antenna with 23 antennomeres, hind femur 3.3 (and not 3.5 times) as long as broad distally; hind pair of legs and metasoma (except black first tergite) brown. Described from the Maritime Territory of Asiatic Russia (Spassk) (TOBIAS 1998: 400). New to the fauna of Mongolia.

Chorebus (Stiphrocera) canace TOBIAS, 1998 – 1 \bigcirc : No. 514. 1 \bigcirc : No. 771. 1 \bigcirc : No. 855. 1 \bigcirc : Yellow Gobi, I. IX. 1977, leg. G. MOLNÁR. – Deviating features of the Mongolian females from the description (TOBIAS 1998: 357): (1) first tergite 1.3–1.6 times as long as broad helind, broadening posteriorly; (2) pterostigma 1.6 times to almost twice as long as 1–R1; (3) hind femur 4.1–4.5 times as long as broad distally. Metasoma (except dark coloured first tergite) testaceous, apically more or less brown to dark brown; antenna with 21–22 (3 \bigcirc 2) and 23 (1 \bigcirc) antennomeres. Described by four females from the Maritime Territory of Asiatic Russia. New to the fauna of Mongolia.

Chorebus (Phaenolexis) compressiventris (TELENGA, 1934) – 1 3: No. 939. 1 3: No. 1069. 1 3: No. 1071. 2 9: No. 1072. – Described from Ukraine (Lugansk) by TELENGA (1934: 119), reported from Azerbaidjan by TOBIAS (1986: 200). New to the fauna of Mongolia.

Chorebus (Stiphrocera) detorqus sp. n.: for its description see the chapter "Descriptions of the new species".

Chorebus (Stiphrocera) diremtus (NEES, 1834) -1 3° : No. 1150. – Known in several countries of Europe (SHENEFELT 1974: 1045), Azerbaidjan and Asiatic Russia: Maritime Territory, Sakhalin (TOBIAS 1998: 358). New to the fauna of Mongolia.

Chorebus (Stiphrocera) flavipes (GOUREAU, 1851) (=*Dacnusa raissa* NIXON, 1937) – 1 \mathcal{E} : No. 973. – In Europe known in seven countries (SHENEFELT 1974: 1047), in the eastern Palaearctic Region reported from Kazakhstan and Far East of Asiatic Russia (TOBIAS 1998: 373). New to the fauna of Mongolia.

Chorebus (Phaenolexis) fumimembris TOBIAS, 1998 – 1 3: No. 961. – My female is identical with the female paratype housed in Budapest Museum by exchange of braconids. Described on the basis of 13 99 + 233 specimens from several localities in the Maritime Territory of Asiatic Russia (TOBIAS 1998: 392). New to the fauna of Mongolia.

Chorebus (Phaenolexis) gedanensis (RATZEBURG, 1852) (=Dacnusa anguligena NIXON, 1937) – 1 \bigcirc : No. 433. – In Europe (SHENEFELT 1974: 1048; TOBIAS 1986: 203) and Far East of Asiatic Russia (TOBIAS 1998: 407) widely distributed. New to the fauna of Mongolia.

Chorebus (Chorebus) gracilipes (THOMSON, 1895) – 2 \bigcirc \bigcirc : No. 1000. 1 \bigcirc : No. 1119. – My three specimens match the redescription of the species by GRIFFITHS (1968b: 110). Its known distribution shows a disjunct area: Sweden, Poland – Asiatic Russia (Maritime Territory, Kamchatka). New to the fauna of Mongolia.

Chorebus (Phaenolexis) gracilis (NEES, 1834) -1 \bigcirc : No. 514. 1 \bigcirc : No. 519. 1 \bigcirc : No. 523. 3 \bigcirc \bigcirc : No. 961. – Widely distributed in the Palaearctic Region. New to the fauna of Mongolia.

Chorebus (Phaenolexis) interstinctus TOBIAS, $1998 - 1 \ \bigcirc + 1 \ \textcircled{3}$: No. 523. – Deviations of the Mongolian female + male from the original description (TOBIAS 1998: 404): (1) mesosoma 1.8 times as long as high, (2) antenna with 30 antennomeres, (3) first tergite 2.2 times as long as broad behind and subparallel-sided, i.e. posteriorly slightly broadening, (4) body 2.2 mm long. Described from the Maritime Territory of Asiatic Russia. New to the fauna of Mongolia.

Chorebus (Phaenolexis) karelicus TOBIAS, 1986 – 1 \bigcirc : No. 926a. – Known in Russia in two distant localities: Karelia and Far East Maritime Territory. New to the fauna of Mongolia.

Chorebus (Stiphrocera) lissopleuris TOBIAS, 1998 – 1 \bigcirc : No. 931. – Deviating features of the Mongolian female from the original description: (1) antenna with 25 (and not 23) antennomeres; (2) first tergite 1.4 times (and not somewhat) longer than broad behind; (3) tergites 2–3(–4) reddish yellow. Described on the basis of the female holotype specimen from the Maritime Territory of Asiatic Russia. New to the fauna of Mongolia.

Chorebus (Stiphrocera) meracus TOBIAS, 1998 – 1 \bigcirc : No. 523. – The Mongolian female deviates from the original description (TOBIAS 1998: 361) as follows: (1) head in dorsal view twice (and not 1.7 times) as broad as long; (2) first tergite twice (and not 4 times) as long as broad behind; (3) mesoscutal dimple linear (and not oval). Antenna with 43 antennomeres, body 2.3 mm long. Described from the Maritime Territory of Asiatic Russia. New to the fauna of Mongolia.

Chorebus (Stiphrocera) misellus (MARSHALL, 1895) – 1 \bigcirc : No. 547. 1 \bigcirc : 921. 1 \bigcirc : No. 926a. – Widely distributed in the Palaearctic Region (SHENEFELT 1974: 1056, TOBIAS 1998: 356). New to the fauna of Mongolia.

Choebus (Stiphrocera) monfreya sp. n.: for its description see the chapter "Descriptions of the new species".

Chorebus (Stiphrocera) mucronatus (TELENGA, 1934) – 1 $\vec{\circ}$: No. 331. – Known in European Russia, Ukraine, Azerbaidjan and Kazakhstan (TOBIAS 1986: 177); SHENEFELT (1974: 1056) listed from Germany and Poland (Silesia). New to the fauna of Mongolia.

Chorebus (Stiphrocera) mufrius TOBIAS, 1998 – 1 \bigcirc : No. 312. 1 \bigcirc : No. 331. 1 \bigcirc : No. 486. 1 \bigcirc : No. 794. 1 \bigcirc : No. 900. 1 \bigcirc : No. 908. 1 \bigcirc : No. 978. 1 \bigcirc : No. 1069. 1 \bigcirc : No. 1126. 1 \bigcirc + 1 \bigcirc : No. 1150 (a total of nine females and two males). – The Mongolian series deviates in a few features from the single female holotype served for the original description: Female holotype: antenna with 22 antennomeres, mesoscutal dimple distinct and elongate, first tergite 1.5 times as long as broad behind; Mongolian series: antenna with 16–22 antennomeres (16: 1 \bigcirc , 17: 2 \bigcirc \bigcirc , 18: 2 \bigcirc \bigcirc , 19: 1 \bigcirc , 20: 1 \bigcirc , 21: 1 \bigcirc + 1 \bigcirc , 22: 1 \bigcirc + 1 \bigcirc), mesoscutal dimple less distinct and hardly elongate, first tergite 1.4–1.5 times as long as broad behind. Described from the Maritime Territory of Asiatic Russia (TOBIAS 1998: 356). New to the fauna of Mongolia.

Chorebus (Phaenolexis) nigriridis TOBIAS, 1998 – 1 ♂: Yellow Gobia, 1. IX. 1977, leg. G. MOLNÁR. – Described from Sakhalin (Asiatic Russia) (TOBIAS 1998: 399). New to the fauna of Mongolia; the Mongolian locality is the second known one.

Chorebus (*Chorebus*) *nixoni* BURGHELE, 1959 – 6 \bigcirc \bigcirc : No. 1000. 1 \bigcirc : No. 1126. – My female specimen from Mongolia deviates in a few features from the original description: (1) antenna with 19 antennomeres, (2) mesoscutum glabrous, (3) pair of lateral tubercules of first tergite less distinct, (4) body 2 mm long. Deviating features of the six Mongolian males: (1) antenna with 22 (1 \bigcirc), 23 (3 \bigcirc) and 24 (2 \bigcirc) antennomeres, (2) mesoscutum glabrous, (3) body 1.8–2 mm long. Described from Romania: Oltenia (BURGHELE 1959: 121) on the basis of "Hundreds of males and females bred… from pupae of *Hydropota* (=*Hydrellia*) griseola (FALL.)"; reported from Spain, Azerbaidjan and Maritime Territory of Asiatic Russia (TOBIAS 1998: 408).

Chorebus (Stiphrocera) orisellus sp. n.: for its description see the chapter "Descriptions of the new species".

Chorebus (Chorebus) ruficollis (STELFOX, 1957) – 1 \bigcirc : No. 395. – Up to now known in two countries of Europe: Ireland and Romania (SHENEFELT 1974: 1063) and Spain. New to the fauna of Mongolia.

Chorebus (Stiphrocera) rufimarginatus (STELFOX, 1954) $-3 \bigcirc \bigcirc$: No. 900. 1 \bigcirc : No. 915. – Deviating features of the Mongolian four females from the original description (STELFOX 1954: 178): (1) antenna with 27 (and not with 25–26) antennomeres; (2) temple in dorsal view moderately (and not "strongly") broadening behind eyes; (3) temple in lateral view somewhat, i.e. 1.2 times (and not

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"much") wider than eye; (4) tergites 2–3 faintly (and not "dull reddish"). Described from Ireland by two females and two males, and from England by one male (STELFOX l.c.).

Chorebus (Stiphrocera) rufiventris TOBIAS, 1998, male new – The male deviates from the original description of the female as follows: (1) antenna with 29 antennomeres (Q: 28); (2) head in dorsal view 1.8 times as broad as long (Q: 1.7 times); (3) metacarp 1.6 times as long as pterostigma (Q: twice). Described by the female holotype from the Maritime Territory of Asiatic Russia. New to the fauna of Mongolia.

Chorebus (Phaenolexis) serenus TOBIAS, 1998 – 1 \bigcirc : No. 94. 1 \bigcirc : No. 316. 1 \bigcirc : No. 331. 1 \bigcirc : No. 349. 1 \bigcirc : No. 973. – My two females match the original description (TOBIAS 1998: 388); deviations of the two further females are as follows (in brackets the holotype feature): (1) antenna with 28–30 antennomeres (27); (2) penultimate flagellomere 1.8–2 times as long as broad (1.3–1.5 times); (3) hind tarsus just shorter than hind tibia ("shorter"); (4) upper tooth of mandible somewhat less large in one female (very large). Described from the Jewish Autonomous District in Asiatic Russia on the basis of the female holotype. New to the fauna of Mongolia.

Chorebus (Stiphrocera) singularis (TOBIAS, 1962) – 1 \bigcirc : No. 514. – Described by a pair of female and male from European Russia (Leningrad district) and reported from Far East of Asiatic Russia (Kamchatka, Kuril Islands) (TOBIAS 1962: 130, 1998: 358). New to the fauna of Mongolia.

Chorebus (Stiphrocera) subampliator TOBIAS, 1998 – 1 3: No. 281. 1 3: No. 284. 1 3: No. 349. 5 9 + 6 33: No. 724. 1 9 + 2 33: No. 732. 1 3: No. 819. 1 9: No. 926. 2 99: No. 926a. 1 3: No. 931. 1 3: No. 1082. 1 3: No. 1136 (a total of nine females and fifteen males). – My specimens agree in every respect with the original description (TOBIAS 1998: 355). Described from Sakhalin Island and Chita Region of Asiatic Russia on the basis of 3 99 + 5 33 specimens. New to the fauna of Mongolia.

Chorebus (Phaenolexis) subnerissa TOBIAS, 1998 – 1 \bigcirc : No. 939. – Described from the Asiatic Russia: Chabarovsk, Maritime Territory, Sakhalin, Kuril Islands (TOBIAS 1998: 396). New to the fauna of Mongolia.

Chorebus (Stiphrocera) talpigo sp. n.: for its description see the chapter "Descriptions of the new species".

Chorebus (Stiphrocera) thusa (NIXON, 1937) – 1 \bigcirc : No. 519. 1 \bigcirc : No. 535. – Described from England (Nixon 1937: 72), reported from Sweden, Germany and European Russia (Leningrad district). New to the fauna of Mongolia.

Chorebus (Stiphrocera) trilobomyzae GRIFFITHS, 1968 – $1 \ \bigcirc + 1 \ \bigcirc$: No. 855. – In Europe known in four countries: England, Sweden, Germany and Poland (SHENEFELT 1974: 1069), in Asiatic Russia in Maritime Territory (TOBIAS 1998: 376). New to the fauna of Mongolia.

Chorebus (Stiphrocera) tumidus (TOBIAS, 1966) – $1 \ominus$: No. 494. – Described and so far known only in Turkmenia. New to the fauna of Mongolia.

Chorebus (Chorebus) uliginosus (HALIDAY, 1839) – $2 \Leftrightarrow \varphi + 1 \stackrel{?}{\circ}$: No. 1000. 1 \Leftrightarrow : No. 1002. – In Europe widely distributed (SHENEFELT 1974: 1069), in Asiatic Russia (Maritime Territory, Kamchatka) recently discovered (TOBIAS 1998: 408). New to the fauna of Mongolia.

Chorebus (Stiphrocera) xanthaspidae GRIFFITHS, 1968 – 1 \bigcirc : No. 1046. – Described from Denmark (GRIFFITHS 1968a: 37, 49 in key) and reported from Asiatic Russia (Irkutsk, Mariritime Territory, Sakhalin) (Tobias 1998: 377). New to the fauna of Mongolia.

Dacnusa (Pachysema) megastigma TOBIAS, 1998 – 1 3: No. 967. – My single male deviates from the original description in a few features as follows: (1) antenna with 26 antennomeres (and not 28–31); (2) eye in dorsal view 1.4 times as long as temple (and not 1.8 times); (3) hind femur 4.8 times as long as broad distally (and not 5 times). The species was described on the basis of four males (including the holotype) and one female specimens from Asiatic Russia (Irkutsk, Ussurisk and Maritime Territory). New to the fauna of Mongolia. Dacnusa (Aphanta) sasakawai TAKADA, 1977 – 1 \bigcirc : No. 552. – My specimen is a melanic form against the nominate form, the colour differences between them are as follows: (1) legs yellow-ish brown – legs yellow; (2) first tergite blackish brown, tergites 2–3 dark brown – first tergite yellowish brown to testaceous, tergites 2–3 yellowish brown. The species is widely distributed in the Palaearctic Region: Japan, Russia (Far East, European part), Hungary. New to the fauna of Mongolia.

Protodacnusa aridula (THOMSON, 1895) – 1 \bigcirc : No. 281. 2 \bigcirc \bigcirc : No. 331. 1 \bigcirc : No. 349. 1 \diamondsuit : No. 1018. – Reported from Mongolia by me (PAPP 2004: 249), however, the single male proved to represent a new species allied to *P. aridula*, see also *P. cubiceps sp. n.* in this paper. The single male listed here deviates from the nominate form by its less broadening first tergite, i.e. first tergite 1.4 times as long as broad behind (usually 1.2 times). Metasoma of the female dark reddish to brown (3 \bigcirc).

Protodacnusa subparallela PAPP, 2004, female new $-1 \ \bigcirc$: No. 331. $1 \ \bigcirc$: No. 381. $1 \ \bigcirc$: No. 416. $1 \ \bigcirc$: No. 476. $1 \ \bigcirc$: No. 523. $1 \ \oslash$: No. 771. – Additional features to the original description (PAPP 2004*a*: 266): female similar to the male: (1) antenna with 17 ($3 \ \bigcirc \ \bigcirc$) and 19 ($1 \ \bigcirc$) antennomeres; (2) head in dorsal view 1.75 times ($1 \ \bigcirc$) and 1.8 times ($3 \ \bigcirc \ \bigcirc$) as broad as long; (3) metacarp (*1–R1*) somewhat more than one-third length of pterostigma (Fig. 103); (4) first tergite 1.15–1.2 times as long as broad behind, beyond pair of spiracles less broadening (Fig. 104). Known only in Mongolia.

DESCRIPTIONS OF THE NEW SPECIES

The following abbreviations are applied in the descriptions (after VAN ACHTERBERG 1979: 248–249):

Fore wing -r = first section of the radial vein; I-RI = first section of the metacarpal vein; 2-IA = second section of the submedian vein; 3-CU(1) = third section of the discal vein; 2-SR = first transverse cubital vein; 3-SR = second section of the radial vein; CU1a-b = first (*a*) and second (*b*) sections of the subdiscal vein; SRI = third section of the radial vein.

Ocelli – OOL = ocellar-ocular line (i.e. shortest distance between hind ocellus and compound eye; POL = postocellar line (i.e. shortest distance between hind two ocelli).

Dinotrema interjactum sp. n. ♀ (Figs 1–7)

Material examined (1 \bigcirc) – Female holotype: Mongolia, Central aimak, 12 km SO von Ulaan–Baator, Nucht in Bogdo ul, 1500 m, 5 Juli 1964, leg. Z. KASZAB (loc. no. 273).

Holotype is deposited in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ. No. 10719.

Holotype is in good condition, glued on a card ventrally.

Etymology. – The species name "interjactum" indicates that it is intermediate between the closely related species.

Remark. – In my earlier paper (PAPP 1967: 209) this new species was reported under the name *Aspilota fuscicornis* (HALIDAY).

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Description of the female holotype. – Body 2.2 mm long. Antenna one-fourth shorter than body and with 18 antennomeres. First flagellomere twice and penultimate flagellomere 1.4 times as long as broad, flagellomeres clearly separated. – Head in dorsal view (Fig. 1) transverse, 1.75 times as broad as long, eye and temple of equal length, temple swollen, i.e. head between temples broader than between eyes. Ocelli small, elliptic, OOL nearly three times as long as POL. Head 1.5 times as broad as mesoscutum between tegulae. Eye in lateral view 1.5 times as high as wide, eye and temple of equal width (Fig. 2, see arrows), outline of head in lateral view as in Fig. 2. Mandible (Fig. 3) distinctly broadening distally, 1.3 times as long as broad between upper and lower teeth, tooth 1 large, tooth 2 spiky and less large, tooth 3 rounded; outer surface of mandible smooth. Tentorial pit clearly not reaching eye, about as long as its distance from eye. Head polished. Face and clypeus hairpunctured.

Mesosoma in lateral view stout, just longer than high. Midpit distinct, short and linear. Precoxal suture short, restricted to middle of mesopleuron and with three crenulae. Hind margin of mesopleuron smooth. Propodeum with an unusually formed and rather weakly carinated areola basalis, otherwise rugulose-uneven (Fig. 4). – Hind femur 3.8 times as long as broad distally (Fig. 5). Hind tibia and tarsus equal in length.

Fore wing as long as body. Second submarginal cell of usual length, 3-SR 2.3 times as long as 2-SR, SR1 just bent and 2.5 times as long as 3-SR. Subdiscal cell broadening distally, issuing *CU1a* from middle of 3-CU(1) + CU1b (Fig. 6).



Figs 1–12. 1–7. *Dinotrema interjactum* sp. n.: 1 = head in dorsal view, 2 = head in lateral view, 3 = mandible, 4 = propodeum, 5 = hind femur, 6 = subdiscal cell of fore wing, 7 = first tergite. – 8–9. *D. amoenidens* (FISCHER): 8 = head in dorsal view, 9 = propodeum. – 10–12. *D. sternaulicum* (FISCHER): 10 = mandible, 11 = head in dorsal view, 12 = propodeum

Metasoma one-sixth longer than head and mesosoma combined. First tergite (Fig. 7) moderately broadening posteriorly, 1.7 times as long as broad behind, just less than twice as broad behind as basally; pair of spiracles before middle of tergite, pair of keels converging, continuing parallel and merging posteriorly into uneven surface. Further tergites polished.

Ground colour of body blackish brown. Mandible brownish yellow, palpi yellowish. Scape and pedicel brownish, flagellum brown to dark brown. Tegula brown, parategula brownish yellow. Tergites brown with dark brown pattern. Legs brownish yellow, telotarsus brownish. Wings hyaline, veins light brown.

Male and host unknown. Distribution: Mongolia.

The new species, *Dinotrema interjactum*, runs to the species *D. amoenidens* (FISCHER) and *D. sternaulicum* (FISCHER) with the help of FISCHER's key (1976: 345–357) and is a member of the *signifrons*-group. – Related to *D. amoenidens* by their common features as large upper tooth of mandible, long *3–SR* and first tergite weakly striated or uneven; the two species are differentiated as follows:

1 (2) Pair of toruli in dorsal view less protruding, hence head virtually more transverse, temple not swollen (Fig. 8). Propodeum with a weak medio-longitudinal keel and along it widely rugose, lateral margin with crenulae, anteriorly with a transverse keel (Fig. 9). Ground colour of body black. ♀: 1.8–2 mm. – Austria, Switzerland, Hungary

D. amoenidens (FISCHER, 1973)

2 (1) Pair of toruli in dorsal view protruding, hence head virtually less transverse, temple swollen (Fig. 1). Propodeum with an unusually formed areola basalis and rugulose-uneven (Fig. 4). Ground colour of body blackish brown. ♀: 2.2 mm. – Mongolia **D. interjactum** sp. n.

The new species is also related to *D. sternaulicum* (FISCHER) considering their common features as temple in dorsal view more or less swollen, long 3-SR and first tergite 1.7–1.8 times as long as broad behind; the two species are distinguished by the following features:

- 1 (2) Upper tooth of mandible less protruding upwards (Fig. 10). Antenna with 23–26 antennomeres. Temple in dorsal view just swollen, toruli slightly less protruding (Fig. 11). Areola basalis of propodeum distinct, otherwise propodeum rugose (Fig. 12). Scape and pedicel yellow. 2: 2.5–2.6 mm. Austria D. sternaulicum (FISCHER, 1973)
- 2 (1) Upper tooth of mandible protruding upwards (Fig. 3). Antenna with 18 antennomeres. Temple in dorsal view swollen, toruli slightly more protruding

(Fig. 1). Areola basalis of propodeum unusual in form (Fig. 4). Scape and pedicel brownish. \bigcirc : 2.2 mm. – Mongolia **D. interjactum** sp. n.

D. badius sp. n.

(Figs 13-21)

Holotype and paratype are deposited in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ Nos 10720 (holotype) and 10721 (paratype).

Holotype and paratype are in good condition, glued on a pointed card by mesosternum. Etymology. – The species name "badius" is a phantasy name.

Description of the male holotype. – Body 3.4 mm long. Antenna about as long as body and with 34 antennomeres. First flagellomere 2.2 times and penultimate flagellomere 1.7 times as long as broad (Fig. 13). – Head in dorsal view (Fig. 14) transverse, 1.8 times as broad as long, eye somewhat longer than temple, temple rounded, occiput excavated; eye just protruding, i.e. head between eyes just broader than between temples. Ocelli less small, elliptic, OOL 2.5 times as long as POL. Head 1.4 times as broad as mesoscutum between tegulae. Eye in lateral view less high, 1.8 times as high as wide, temple beyond eye as wide as eye (Fig. 15, see arrows). Mandible with strong teeth, 1.4 times longer than broad between upper and lower teeth (Fig. 16). Tentorial pit not reaching eye. Occiput and temple hairy. Head polished.

Mesosoma in lateral view elongate, 1.4 times as long as high, polished. Pronotum less hairy, pronope present. Precoxal suture narrow, fairly deep and subcrenulate (Fig. 17). Mesoscutum hairy anteriorly. Propodeum densely rugulose, hairy; metapleuron pubescent. – Hind femur 3.1 times as long as broad distally, clearly broadening distally (Fig. 18). Hind tibia and tarsus equal in length.

Fore wing about as long as body. Pterostigma (Fig. 19) cuneiform, 5.7 times as long as wide, issuing *r* near from its base, *r* 1.4 times as long width of pterostigma; I-RI 0.65 times as long as pterostigma; 3-SR + SRI bent, *SRI* slightly S-form and approaching tip of wing. Subdiscal cell closed distally (Fig. 20).

First tergite (Fig. 21) slightly longer than broad behind, evenly broadening posteriorly, pair of spiracles at middle of tergite, rugose-rugulose, bald. Further tergites polished. Tergites 2–3 equal in length, border between them almost indistinct.

Ground colour of body black, hind tergites with faint brownish tint. Scape dark rusty, apically blackish; flagellum brownish black. Mandible dark rusty, palpi pale yellow. Tegula black, parategula brown. Coxae 1–2 brownish to brown, coxa 3 black. Legs 1–2 yellow; leg 3 reddish yellow, tibia distally dark fumous; tarsi brownish fumous. Wings hyaline, pterostigma and veins greyish brownish.

Description of the male paratype. – Similar to the male holotype. Body 3.3 mm long. Antenna with 36 antennomeres (right antenna damaged, with 32 antennomeres). Head in dorsal view 1.87 times as broad as long, eye just longer than temple. 1–R1 0.7 times as long as pterostigma. Hind leg with more darkening pattern.

Female and host unknown.

Distribution: Mongolia.

The new species, *Chorebus (Stiphrocera) badius*, is nearest to *Ch. (S.) tur-comanus* (TOBIAS) considering their common features as the high number of the antennomeres (34–41), hairless and posteriorly broadening first tergite. The two species are separated by the features keyed:

- 1 (2) Precoxal suture wide and crenulate (Fig. 22). Temple in dorsal view clearly (i.e. 0.7 times) shorter than eye (Fig. 23). First tergite 1.4–1.5 times as long as broad behind, rugulose (Fig. 24). First flagellomere four times and penultimate flagellomere 2.4 times as long as broad (Fig. 25). Mandible with less pointed teeth (Fig. 26). Metasoma, except black first tergite, testaceous. ♀: 2.4–2.5 mm. Hungary, Turkmenia Ch. (S.) turcomanus (TOBIAS, 1966)
- 2 (1) Precoxal suture narrow and finely crenulate (Fig. 17). Temple a bit shorter than eye (Fig. 14). First tergite somewhat longer than broad behind, rugose-



Figs 13–26. 13–21. *Chorebus (Stiphrocera) badius* sp. n.: 13 = first and 33rd flagellomeres, 14 = head in dorsal view, 15 = head in lateral view, 16 = mandible, 17 = mesopleuron with precoxal suture, 18 = hind femur, 19 = distal part of right fore wing, 20 = subdiscal cell of fore wing, 21 = tergites 1–3 with detail of the sculpture of first tergite. -22-26. *Ch. (S.) turcomanus* (TOBIAS): 22 = mesopleuron with precoxal suture, 23 = head in dorsal view, 24 = first tergite with detail of its sculpture, 25 = first and 34th flagellomeres, 26 = mandible

rugulose (Fig. 21). First flagellomere 2.2 times and penultimate flagellomere 1.7 times as long as broad (Fig. 13). Mandible with pointed teeth (Fig. 16). Metasoma black. 3: 3.3-3.4 mm. – Mongolia **Ch. (S.) badius** sp. n.

With the help of the key by TOBIAS (1998: 354–410) the new species runs to *Ch.* (*S.*) *sakhalinensis* TOBIAS, however, the two species are distinguished clearly from each other:

- 1 (2) Precoxal suture deep and rather wide. Pterostigma parallel-sided (cf. Fig. 138: 5 in TOBIAS 1998: 367). Flagellomeres distally 1.3 times as long as broad. Temple in dorsal view slightly swollen; head less transverse, 1.7 times as broad as long. Hind leg brownish yellow. ♂: 2.2 mm. Asiatic Russia (Sakhalin) *Ch. (S.) sakhalinensis* TOBIAS, 1998
- 2 (1) Precoxal suture less deep and narrow (Fig. 17). Pterostigma cuneiform (Fig. 19). Flagellomeres distally 1.8–1.7 times as long as broad. Temple in dorsal view not swollen; head transverse, 1.9 times as broad as long (Fig. 14). Hind leg yellowish with more or less dark suffusion. A: 3.3–3.4 mm. Mongolia

Ch. (S.) badius sp. n.

Chorebus (Stiphrocera) detorqus sp. n. ♀ (Figs 27–35, 39)

 $\label{eq:matrix} \begin{array}{l} \mbox{Material examined } (2 @ \hfill). - \mbox{Female holotype + 1 female paratype: Mongolia, Chovd aimak, 3 km N von Somon Uenč, im Tal Uenč gol, 1450 m, 2–3 Juli 1966, leg. Z. KASZAB (loc. no. 614). \end{array}$

Holotype and paratype are deposited in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ. Nos 10722 (holotype) and 10723 (paratype).

Holotype is in good condition: right antenna apically damaged (with 26 antennomeres), left hind wing medially somewhat creased. Paratype in fairly good condition: both antennae proximally damaged (with six antennomeres).

Etymology. – The species name "detorqus" indicates its close relationship to *Ch. geminus* (detorqus = descendant).

Description of the female holotype. – Body 2.8 mm long. Left antenna as long as body and with 31 antennomeres. First flagellomere twice, middle ones 1.8 times and penultimate flagellomere twice as long as broad. – Head in dorsal view (Fig. 27) transverse, 1.76 times as broad as long, eye slightly longer than temple, temple rounded; head between temples indistinctly broader than between eyes. Ocelli small, elliptic, far from each other, OOL twice as long as POL. Head 1.5 times as broad as mesoscutum between tegulae. Eye in lateral view 1.75 times as high as wide, temple beyond eye just less wide than eye (Fig. 28, see arrows). Inner margin of eye parallel, face 1.5 times as wide as high (Fig. 29). Mandible as long as broad between upper and lower teeth, first tooth large, second tooth less spiky (Fig. 30). Tentorial pit not reaching eye. Occiput almost bare: only with a few hairs, temple with more hairs. Head polished.

Mesosoma in lateral view 1.4 times as long as high, polished. Pronotum with disperse hairs, its fore margin with a row of hairs, pronope present. Precoxal suture wide, sinuate and crenulated (Fig. 31). Mesoscutum medially less densely hairy. Propodeum hairless, rugulose; metapleuron fairly pubescent with less distinct rosette. – Hind femur 3.6 times as long as broad distally (Fig. 32). Hind tibia and tarsus equal in length.

Fore wing as long as body. Pterostigma (Fig. 33) cuneiform, eight times as long as wide, issuing *r* near from its base, *r* almost twice as long as width of pterostigma; I-RI 0.85 times as long as pterostigma; 3-SR + SRI bent, *SRI* ending near to tip of wing. Subdiscal cell open distally, i.e. distal half of 2-IA effaced (Fig. 34).

First tergite (Fig. 35) evenly broadening posteriorly, 1.3 times as long as broad behind, pair of spiracles very small and at middle of tergite, rugo-rugulose, bald. Further tergites polished. Tergites 2 and 3 of equal length, border between them indistinct. Ovipositor sheath very short, concealed.

Head, mesosoma and first tergite black, metasoma black with faint dark brown tint. Scape, pedicel and flagellomeres 1–2 brown, rest of flagellum blackish. Mandible dark rusty, palpi pale yellow. Tegula blackish, parategula brown. Legs brownish yellow. Hind tibia distally faintly infuscate; hind and middle tarsi infuscate. Wings hyaline, pterostigma brown, veins light brown.

Description of the female paratype. – Similar to the female holotype. Body 2.6 mm long. Head in dorsal view 1.8 times as broad as long, temple slightly more swollen (Fig. 39). Pterostigma 6.6 times as long as wide, I-RI 0.75 times as long as pterostigma. Tergites 2–3 dark brown.



Figs 27–38. 27–35. *Chorebus (Stiphrocera) detorqus* sp. n.: 27 = head of the holotype in dorsal view, 28 = head of the holotype in lateral view, 29 = head of the holotype in frontal view, 30 = mandible, 31 = mesopleuron with precoxal suture, 32 = hind femur, 33 = distal part of right fore wing, 34 = subdiscal cell of fore wing, 35 = tergites 1–3 with detail of the sculpture of first tergite. – 36–38. *Ch. (S.) geminus* (TOBIAS): 36 = tergites 1–3, 37 = distal part of right fore wing, 38 = mandible

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Male and host unknown. Distribution: Mongolia.

The new species, *Chorebus (Stiphrocera) detorqus*, is nearest to *Ch. (S.) geminus* (TOBIAS) considering their hairless propodeum and strongly broadening mandible; the two species are distinguished by the following features:

- 1 (2) First tergite parallel-sided beyond pair of spiracles, spiracles more or less projecting (Fig. 36). Pterostigma parallel-sided (Fig. 37). Upper tooth of mandible more pointed (Fig. 38). Antenna with 32 (♂) and 39 (♀) antennomeres. Tergites 2–3 reddish brown. ♀: 2.3–2.6 mm, ♂: 2.3–2.4 mm. – Hungary, Ukraine, Russia (European part), Azerbaidjan *Ch.* (*S.*) *geminus* (TOBIAS, 1962)
- 2 (1) First tergite evenly broadening posteriorly, pair of spiracles not projecting (Fig. 35). Pterostigma cuneiform (Fig. 33). Upper tooth of mandible less pointed (Fig. 30). Antenna with 31 (♀) and 32 (♂) antennomeres. Tergites 2–3 dark rusty. ♀: 2.6–2.8 mm. Mongolia Ch. (S.) detorqus sp. n.

The new species stands near to *Ch. (S.) lissopleuris* TOBIAS considering their expanded mandible, posteriorly broadening first tergite and less hairy meso-scutum; the two species are differing from each other by the features as follows:

1 (2) Inner margin of eyes converging ventrally, i.e. face one-third wider than high (Fig. 40). Temple in dorsal view somewhat swollen (Fig. 41). Antenna with 23–25 (♀) antennomeres. First tergite somewhat more broadening posteriorly, i.e. 1.5 times as long as broad behind (Fig. 42). Metasoma testaceous, first tergite blackish brown, last tergites darkening. ♀: 1.3–1.8 mm. – Asiatic Russia (Far East Maritime Territory), Mongolia

Ch. (S.) lissopleuris TOBIAS, 1998

2 (1) Inner margin of eyes parallel, i. e. face 1.5 times as wide as high (Fig. 29). Temple in dorsal view not swollen (Fig. 27). Antenna with 31 (♀) and 32 (♂) antennomeres. First tergite somewhat less broadening posteriorly, i.e. 1.25–1.3 times as long as broad behind (Fig. 35). Metasoma blackish, tergites 2–3 dark rusty. ♀: 2.6–2.8 mm. – Mongolia **Ch. (S.) detorqus** sp. n.

Chorebus (Stiphrocera) monfreya sp. n. ♀ (Figs 43–49)

Material examined (1 \bigcirc). – Female holotype: Mongolia, Mittelgobi aimak, Delgerchangaj ul, 6 km S von Somon Delgerchangaj, 1650 m, 11 Juli 1967, leg. Z. KASZAB (loc. no. 908).

Holotype is deposited in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ. No. 10724.

Holotype is in fairly good condition: right fore and middle legs less visible owing to their mounting, left pair of wings creased. Specimen glued on a pointed card by its right mesopleuron.

Etymology. – The name ("monfreya") of the new species indicates its close relationship to *Ch. freya*, the prenom "mon" refers to its Mongolian origin.

Description of the female holotype. – Body 1.3 mm long. Antenna as long as body and with 17 antennomeres. First flagellomere 3.5 times, middle ones clearly twice and penultimate flagellomere just twice as long as broad. – Head in dorsal view (Fig. 43) transverse, 1.87 times as broad as long, eye as long as temple, occiput excavated. Ocelli small, elliptic, far from each other, OOL twice as long as POL. Head almost 1.6 times broader than mesoscutum between tegulae. Eye in lateral view twice as high as wide, temple beyond eye 1.5 times as wide as eye (Fig. 44, see arrows). Mandible one-fifth longer than broad between upper and lower teeth, teeth less strong (Fig. 45). Tentorial pit not reaching eye. Occiput with disperse hairs. Head polished.

Mesosoma in lateral view stout. 1.25 times as long as high, polished. Pronotum bald, pronope invisible (owing to mounting). Precoxal suture missing. Mesoscutum hairy on its anterior declivous part, otherwise bald. Propodeum polished, less hairy, above lunule strio-rugulose (Fig. 46).



Figs 39–52. 39. Chorebus (Stiphrocera) detorqus sp. n.: head in dorsal view. - 40–42. Ch. (S.) lissopleuris TOBIAS: 40 = head in frontal view, 41 = head in dorsal view, 42 = first tergite. - 43–49. Ch. (S.) monfreya sp. n.: 43 = head in dorsal view, 44 = head in latertal view, 45 = mandible, 46 = propodeum, 47 = distal part of right fore wing, 48 = subdiscal cell of fore wing, 49 = tergites 1–3 with detail of the sculpture of first tergite. - 50–52. Ch. (S.) freya (Nixon): 50 = first tergite with detail of the sculpture, 51 = head in dorsal view, 52 = distal part of right fore wing

Metapleuron densely hairy. – Hind femur five times as long as broad distally. Hind tibia and tarsus equal in length.

Fore wing one-fourth longer than body. Pterostigma (Fig. 47) wide and parallel-sided, 5.5 times as long as wide, I-RI 0.42 times as long as pterostigma; *r* issuing near from its base and shorter than width of pterostigma; 3-SR + SRI bent and ending far before tip of wing. Subdiscal cell closed distally (Fig. 48).

First tergite (Fig. 49) strongly and evenly broadening posteriorly, just longer than broad behind, pair of spiracles beyond middle of tergite, hind two-thirds of scutum rather longitudinally striate, laterally from scutum tergite rugo-rugulose. Third tergite somewhat longer than second tergite, together with further tergites polished. Ovipositor sheath very short and concealed.

Body black. Antenna blackish, scape with very weak rusty tint. Mandible dark rusty, palpi brownish. Tegula + parategula brown. Coxae black, legs blackish, femora apically and tibiae basally very faintly brownish. Wings hyaline, pterostigma and veins opaque brownish.

Male and host unknown.

Distribution: Mongolia.

The new species, *Chorebus (Stiphrocera) monfreya*, is nearest to *Ch. (S.) freya* (NIXON) considering their common features as blackish to black coloured body, short corporal length and small number of antennomeres (17 to 21); the two species are distinguished by a few features keyed:

1 (2) First tergite less broadening posteriorly, 1.3–1.5 times as long as broad behind, scutum rugulose (Fig. 50). Temple in dorsal view swollen, eye shorter than temple (Fig. 51). Pterostigma cuneiform, *1–R1* half as long as pterostigma (Fig. 52). ♀: 1.4 mm. – Sweden, Poland, Hungary

Ch. (S.) freya (NIXON, 1943)

2 (1) First tergite more broadening posteriorly, just longer than broad behind, scutum finely striate (Fig. 49). Temple in dorsal view just swollen, eye and temple equal in length (Fig. 39). Pterostigma with parallel sides, *1–R1* less than half as long as pterostigma (Fig. 47). ♀: 1.3 mm. – Mongolia

Ch.(S.) monfreya sp. n.

Considering the antenna with 17 antennomeres *Ch. monfreya* runs to *Ch. microsoma* TOBIAS with the help of the key to *Chorebus* species by TOBIAS (1998: 354–410), the two species are separated by the following features:

1 (2) First tergite twice as long as broad behind. Ovipositor sheath long, as long as basitarsus of hind leg. Middle flagellomeres 1.5 times as long as broad. Middle lobe of mesoscutum hairy. Basal half of flagellum yellowish brown, tergites 2–3 yellow. ♀: 1.1 mm. – Asiatic Russia (Far East Maritime Territory) *Ch. (S.) microsoma* TOBIAS, 1998

2 (1) First tergite just longer than broad behind (Fig. 49). Ovipositor sheath very short, concealed. Middle flagellomeres twice as long as broad. Middle lobe of mesoscutum bald, mesoscutum hairy only on its declivous fore part. Flagellum and tergites 2–3 black. ♀: 1.3 mm. – Mongolia

Ch. (S.) monfreya sp. n.

Chorebus (Stiphrocera) orisellus sp. n. ♂ (Figs 53–59)

Material examined (1 3). – Male holotype: Mongolia, Central aimak, cca 30 km O von Somon Nalajch, 1350 , 14 Juni 1966, leg. Z. KASZAB (loc. no. 523).

Holotype is deposited in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ. No. 10725.

Holotype is in good condition: right fore tibia + tarsus missing.

Etymology. – The species name "orisellus" indicates its close relationship to *Ch. anasellus*, i.e. its oriental ("ori") ally.

Description of the male holotype. –Body 1.3 mm long. Antenna as long as body and with 19 antennomeres. First flagellomere clearly twice, middle ones 2.5 times and penultimate flagellomere 2.6 times as long as broad. – Head in dorsal view (Fig. 53) transverse, 1.9 times as broad as long, eye and temple equal in length, temple rounded, occiput feebly excavated; head 1.5 times as broad as mesoscutum between tegulae. Eye in lateral view 1.85 times as high as wide, temple beyond eye somewhat wider than eye, ventrally narrowing (Fig. 54, see arrows). Inner margin of eye parallel. Mandible as long as broad between upper and lower teeth, upper tooth moderately produced (Fig. 55). Tentorial pit small, ending far from eye. Occiput bare, i.e. with scattered hairs, temple with somewhat more hairs. Head polished.

Mesosoma in lateral view 1.3 times as long as high, polished. Pronotum bare, medially with pronope. Precoxal suture missing. Mesoscutum hairy, pair of lateral lobes anteriorly hairy. Propodeum rugulose-subrugulose, pubescent; metapleuron pubescent with rosette. – Hind femur five times as long as broad distally (Fig. 56). Hind tibia and tarsus equal in length.

Fore wing about one-fifth longer than body. Pterostigma (Fig. 57) cuneiform, ten times as long as wide, issuing *r* near from its base, *r* a bit longer than width of pterostigma; 3-SR + SRI bent, *SRI* almost straight and ending before tip of wing; I-RI 0.55 times as long as pterostigma. Subdiscal cell short, somewhat widening distally, closed distally albeit veins *CU1b* less pigmented (Fig. 58).

First tergite (Fig. 59) evenly broadening posteriorly, 1.4 times as long as broad behind, pair of spiracles small and at middle of tergite, densely rugulose, anteriorly hairy and its posterior half rather pubescent. Further tergites polished. Second tergite somewhat longer than third tergite, border between them faintly distinct.

Antenna and body black. Mandible dark rusty, palpi brown. Tegula blackish, parategula dark brown. Coxae black, otherwise legs brownish black. Wings hyaline, pterostigma greyish brownish, veins light brown.

Female and host unknown.

Distribution: Mongolia.

The new species, *Chorebus (Stiphrocera) orisellus*, is nearest to *Ch. (S.) anasellus* (STELFOX) considering their dark coloured body and legs, antenna with low number of antennomeres and short marginal cell; the two species are distinguished by the features keyed:

1 (2) First tergite more broadening posteriorly, i.e. just longer than broad behind (Fig. 60). Hind femur four times as long as broad distally (Fig. 61). Pterostigma wide and parallel-sided, 6.3 times as long as wide (Fig. 62). Mandible dull reddish. ♂: (1.5–)2–2.2 mm. – Ireland, Turkey (BEYARSLAN & INANC 2000), Azerbaidjan, Russia (European part, Transbaykalia)

Ch. (S.) anasellus (STELFOX, 1952)

2 (1) First tergite less broadening posteriorly, i.e. 1.4 times as long as broad behind (Fig. 59). Hind femur five times as long as distally (Fig. 56). Pterostigma cuneiform, ten times as long as wide (Fig. 57). Mandible brownish yellow. ♂: 1.3 mm. – Mongolia
Ch. (S.) orisellus sp. n.



Figs 53–62. 53–59. *Chorebus (Stiphrocera) orisellus* sp. n.: 53 = head in dorsal view, 54 = head in lateral view, 55 = mandible, 56 = hind femur, 57 = distal part of right fore wing, 58 = subdiscal cell of fore wing, 59 = tergites 1–3 with detail of the sculpture of first tergite. – 60–62. *Ch. (S.) anasellus* (STELFOX): 60 = tergites 1–3 with detail of the sculpture of first tergite, 61 = hind femur, 62 = distal part of right fore wing

Chorebus (Stiphrocera) talpigo sp. n. ♀♂ (Figs 63–70, 75)

Material examined (1 \bigcirc + 1 \bigcirc). – Female holotype + male paratype: Mongolia, Central aimak, Ulan–Baator, Nucht in Bogdo ul, 1880–2000 m, 9 Juni 1966, leg. Z. KASZAB (loc. no. 508).

Holotype and paratype are deposited in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ. Nos 10726 (holotype) and 10727 (paratype).

Holotype is in good condition: right antenna apically damaged (with 34 antennomeres), fifth tarsomere of right fore leg missing; glued on a pointed card by its mesosternum. Paratype is in less good condition: left flagellum glued separately on the card, damaged apically (with 25 antennomeres); missing: tarsus of right hind leg, tarsomeres 3–5 of left hind leg; wings more or less creased; glued on a pointed card by its mesosternum.

The species name "talpigo" is a phantasy name.

Description of the female holotype. – Body 4.2 mm long. Antenna as long as body and with 42 antennomeres. First flagellomeres 3.4 times, middle ones subcubic (i.e. just longer than broad) and penultimate flagellomere 1.4 times as long as broad. – Head in dorsal view (Fig. 63) transverse, 1.87 times as broad as long, eye a bit longer than temple, temple rounded, occiput excavated. Ocelli rather elliptic, far from each other, OOL clearly twice as long as POL. Head 1.5 times as broad as mesoscutum between tegulae. Eye in lateral view 1.8 times as high as wide, temple beyond eye somewhat wider than eye (Fig. 64, see arrows). Mandible 1.5 times as long as broad between upper and lower teeth, teeth fairly strong (Fig. 65). Tentorial pit not reaching mandible. Head polished, face rugulose. Occiput and temple with disperse hairs.

Mesosoma in lateral view 1.5 times as long as high. Pronotum bald, hairy field restricted to fore part of its lateral wing, pronope deep. Notaulix evenly deep, reaching mesoscutal foveola and finely crenulate. Foveola of mesoscutum linear. Precoxal suture wide and crenulate (Fig. 66). Mesoscutum hairy along notaulix and laterally along margin. Propodeum and metapleuron densely rugulose and hairy, latter without rosette pubescence. – Hind femur 4.1 times as long as broad medially (Fig. 67). Hind tibia somewhat longer than hind tarsus.

Fore wing somewhat shorter than body. Pterostigma (Fig. 68) cuneiform, eight times as long as wide, issuing *r* near to its base, *r* 1.4 times as long as width of pterostigma, I-RI half as long as pterostigma; 3-SR + SRI bent, SRI S-form and ending far before tip of wing. Subdiscal cell closed distally albeit 2-IA distally less pigmented (Fig. 69).

First tergite (Fig. 75) beyond spiracles parallel-sided, twice as long as broad behind, pair of spiracles before middle of tergite, rugose, with long hairs, hairs laterally somewhat denser. Further tergites polished. Second tergite somewhat longer than third tergite, border between them almost indistinct. Ovipositor sheath in lateral view shorter than basitarsus, faintly upcurved (Fig. 70).

Antenna black. Head, mesosoma and first tergite black, tergites blackish brown, sternites brown. Mandible dark rusty, palpi brown. Tegula black, parategula brown. Coxa + trochanters of fore leg dark brown, coxae + trochanters of middle and hind legs black. Fore femur + tibia yellow, fore femur above with brown streak. Middle femur black, distally with yellow pattern, tibia yellow. Hind femur black, tibia yellowish and distally infuscate. Tarsi infuscate. Wings hyaline, pterostigma greyish brownish, veins light brown.

Description of the male paratype. – Similar to the female holotype. Body 4 mm long. Antenna with 46 antennomeres, middle flagellomeres somewhat though clearly longer than broad. Head in dorsal view 1.8 times as broad as long. Dark colour of legs more extended.

Host unknown.

Distribution: Mongolia.

With the help of TOBIAS's key (1998: 354–410) to the *Chorebus* species the new species, *Chorebus (Stiphrocera) talpigo*, runs to *Ch. (S.) nobilis* GRIFFITHS and to *Ch. (S.) cylindricus* (TELENGA) considering their elongate mesosoma and parallel-sided first tergite. Its common feature with *Ch. nobilis* is the well distinct and finely crenulated notaulix, the specific distinction between them is presented as follows:

1 (2) First tergite narrow, 2.3 times as long as broad behind, longitudinally striate (Fig. 76). Head in dorsal view less transverse, 1.7–1.75 times as broad as long, temple a bit longer than eye (Fig. 71). Face laterally densely hairpunctured. Teeth of mandible slightly less strong (Fig. 72). Precoxal suture narrow, mesopleuron finely granulate (Fig. 77). Legs yellow. ♀♂: 3–3.2 mm. – Ireland, Germany, Switzerland, Poland, Hungary

Ch. (S.) nobilis GRIFFITHS, 1968

2 (1) First tergite less narrow, twice as long as broad behind, rugose (Fig. 75). Head in dorsal view transverse, 1.8–1.87 times as broad as long, eye a bit longer than temple (Fig. 63). Face rugulose. Teeth of mandible slightly stronger



Figs 63–74. 63–70. *Chorebus (Stiphrocera) talpigo* sp. n.: 63 = head in dorsal view, 64 = head in lateral view, 65 = mandible, 66 = mesopleuron with precoxal suture, 67 = hind femur, 68 = distal part of right fore wing, 69 = subdiscal cell of right fore wing, 70 = posterior end of metasoma with ovipositor sheath. – 71–72. *Ch. (S.) nobilis* GRIFFITHS: 71 = head in dorsal view, 72 = mandible. – 73–74. *Ch. (S.) cylindricus* (TELENGA): 73 = head in dorsal view, 74 = mandible

(Fig. 65). Coxae and hind femur black, legs rather dark coloured. \bigcirc : 4.2 mm, \bigcirc : 4 mm. – Mongolia **Ch. (S.) talpigo** sp. n.

The new species is also near to *Ch. (S.) cylindricus* (TELENGA) considering their broad and parallel-sided first tergite, however, the two species are clearly distinct by the features as follows:

1 (2) Notaulix missing, at most indicated by a row of hairs. Precoxal suture narrow (cf. Fig. 77). Head in dorsal view less transverse, 1.6–1.65 times as broad as long (Fig. 73). Face hairpunctured. Mandible with slightly less strong teeth, second tooth spiky (Fig. 74). Antenna with 32–38 (♀) and 34–42 (♂) antennomeres. Ovipositor sheath more or less longer than hind basitarsus, upcurved (Fig. 8 in Nixon 1937: Plate XVIII). Legs yellow, hind femur + tibia more or less infuscate. ♀♂: (2.5–) 3.5–4.5 mm. – Europe, Palaearctic Asia *Ch.* (*S.*) *cylindricus* (TELENGA, 1934)



Figs 75–86. 75. *Chorebus (Stiphrocera) talpigo* sp. n.: tergites 1–3 with detail of the sculpture of first tergite. – 76–77. *Ch. (S.) nobilis* GRIFFITHS: 76 = tergites 1–3 with detail of the sculpture of first tergite, 77 = mesopleuron with precoxal suture. – 78–82. *Protodacnusa cubiceps* sp. n.: 78 = head in dorsal view, 79 = head in lateral view, 80 = mandible, 81 = hind femur, 82 = subdiscal cell of right fore wing. – 83–86. *P. amurensis* (TELENGA): 83 = mandible of male, 84 = mandible of female, 85 = head of male in dorsal view, 86 = head of female in dorsal view

2 (1) Notaulix distinct, fairly deep and finely crenulated. Precoxal suture wide (Fig. 66). Head in dorsal view transverse, 1.8–1.87 times as broad as long (Fig. 63). Face rugulose. Mandible with somewhat stronger teeth, second tooth less spiky (Fig. 65). Antenna with 42 (♀) and 46 (♂) antennomeres. Ovipositor sheath shorter than basitarsus of hind leg, less upcurved (Fig. 70). Legs blackish to black, fore femur and all tibiae yellowish with more or less dark pattern. ♀: 4.2 mm, ♂: 4 mm. – Mongolia

Protodacnusa cubiceps sp. n. ♂ (Figs 78–82, 87–88)

Material examined (1 3). – Male holotype: Mongolia, Central aimak, SO von Somon Bajazogt, 1600 m, 11 Juni 1966, leg. Z. KASZAB (loc. no. 519).

Holotype is deposited in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ. No. 10728.

Holotype is in good condition: right antenna apically damaged, i.e. with 22 antennomeres; hind pair of wings distally somewhat shrivelled; glued on a pointed card by its mesosternum between coxae 1 and 2.

Etymology. - The species name "cubiceps" refers to the cubic form of the head in dorsal view.

Description of the male holotype. – Body 3.3 mm long. Left antenna about as long as head, mesosoma and first tergite combined and with 27 antennomeres. First flagellomere 2.6 times and penultimate flagellomere 1.5 times as long as broad. – Head in dorsal view (Fig. 78) less transverse, 1.6 times as broad as long, temple 1.8 times length of eye, occiput hardly excavated. Ocelli small, elliptic, OOL three times as long as POL. Head 1.5 times as broad as mesoscutum between tegulae. Eye in lateral view twice as high as wide, temple also twice wider than eye, vertex high (Fig. 79). Mandible 1.3 times as long as broad between upper and lower teeth, upper tooth strong and fairly long (Fig. 80). Tentorial pit not reaching eye. Head polished.

Mesosoma in lateral view 1.4 times as long as high. Mesoscutum, scutellum and mesopleuron polished. Precoxal suture long, reaching anterior margin of mesopleuron, narrow and finely crenulate. Pronotum uneven with rugulose-subrugulose elements, pronope present. Propodeum evenly rugose. – Hind femur 4.2 times as long as broad medially (Fig. 81). Hind tibia and tarsus equal in length.

Fore wing somewhat shorter than length of body. Pterostigma (Fig. 87) cuneiform, eight times as long as wide, issuing *r* clearly proximally from its middle; *r* longer than width of pterostigma but shorter than length of pterostigma between its basal end and emitting point of *r*; 1-R1 half as long as pterostigma; marginal cell ending before tip of wing. Subdiscal cell distally open, i.e. *CU1b* missing (Fig. 82).

First tergite (Fig. 88) broad, 1.2 times as long as broad behind, beyond pair of spiracles subparallel-sided, pair of converging keels merging into rugosity, i.e. tergite evenly rugose. Further tergites polished. Third tergite almost 1.4 times longer than second tergite, border between them hardly distinct.

Ground colour of body black. Mandible rusty, palpi brownish yellow. Scape, pedicel and flagellomeres 1–2 brownish, flagellum blackish brown. Tegula black, parategula brown. Tergites

3–4 with faint brownish suffusion. Legs 1–2 brownish yellow. Hind leg: coxa black, trochanters and femur rusty brown, tibia yellowish brown and distally dark fumous, tarsus also fumous. Wings hyaline, pterostigma and veins opaque light brownish-greyish.

Female and host unknown. Distribution: Mongolia.

The new species, *Protodacnusa cubiceps*, is nearest to *P. amurensis* (TELEN-GA), the two species are distinguished by the features keyed:

1 (2) First tergite as long as broad behind, posteriorly finely striated (Fig. 89). Upper tooth of male mandible less strong and pointed (Fig. 83), that of female as in Fig. 84. Head in dorsal view between temples clearly (♂, Fig. 85) and less clearly (♀, Fig. 86) broader than between eyes. Pterostigma parallel-sided (♂, Fig. 90) and cuneiform (♀, Fig. 91), six times as long as wide, *1–R1* 0.3 times as long as pterostigma (Figs 90–91). Scape and tegula yellow. ♂: 2.8–3.2 mm, ♀: 3 mm. – Asiatic Russia (Amur Region), Mongolia

P. amurensis (TELENGA, 1934)

2 (1) First tergite 1.2 times as long as broad behind, rugose (Fig. 88). Upper tooth of mandible strong and less pointed (Fig. 80). Head in dorsal view between temples and eyes almost equal in breadth (Fig. 78). Pterostigma cuneiform, eight times as long as wide, *1–R1* half as long as pterostigma (Fig. 87). Scape brown, tegula black. ♂: 3.3 mm. – Mongolia



Figs 87–91. 87–88. *Protodacnusa cubiceps* sp. n.: 87 = distal part of right fore wing of male, 88 = tergites 1–3 with detail of the sculpture of first tergite. – 89–91. *P. amurensis* (TELENGA): 89 = tergites 1–3, 90–91 = distal part of right fore wing of male (90) and female (91)

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Protodacnusa effunda sp. n. ♀ (Figs 92–98)

Material examined (1 \bigcirc). – Female holotype: Mongolia, Chentej aimak, Čandagan tal, 40 km O von Somon Žargaltchaan, 1300 m, 28 August 1965, leg. Z. KASZAB (loc. no. 316).

Holotype is deposited in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ. No. 10729.

Holotype is in good condition: right three legs less to hardly visible owing to their mounting, base of right fore wing sticked to femora 1–2; glued on a pointed card by its mesosternum.

Etymology. - The species name "effunda" refers to the strongly broadening first tergite.

Description of the female holotype. – Body short, 1.4 mm long. Antenna as long as body and with 15 antennomeres. First flagellomere five times and penultimate flagellomere twice as long as broad. – Head in dorsal view (Fig. 92) transverse, 1.8 times as broad as long, temple 1.4 times length of eye, occiput excavated. Ocelli small, elliptic, far from each other, OOL 1.5 times as long as POL. Head 1.7 times as broad as mesoscutum between tegulae. Eye in lateral view 2.1 times as high as wide, temple also 2.1 times as wide as eye and ventrally somewhat narrowing (Fig. 93, see arrows). Mandible just broader between upper and lower teeth than its length, upper tooth strong (Fig. 94). Tentorial pit not reaching eye. Head polished, face dispersely hairpointed.



Figs 92–102. 92–98. *Protodacnusa effunda* sp. n.: 92 = head in dorsal view, 93 = head in lateral view, 94 = mandible, 95 = hind femur, 96 = distal part of right fore wing, 97 = subdiscal cell of right fore wing, 98 = tergites 1–3 with detail of the sculpture of first tergite. – 99–102. *P. ruthei* GRIFFITHS: 99 = tergites 1–3 with detail of the sculpture of first tergite, 100 = distal part of right fore wing, 101 = subdiscal cell of right fore wing, 102 = hind femur

Mesosoma in lateral view stout, 1.25 times as long as high, polished. Pronotum anteriorly uneven, pronope present. Precoxal suture distinct, smooth. Propodeum anteriorly with very dense hairpunctures. – Hind femur four times as long as broad medially (Fig. 95). Hind tibia and tarsus equal in length.

Fore wing as long as body. Pterostigma (Fig. 96) less wide, subcuneiform: parallel-sided and narrowing only at its distal fourth, ten times as long as wide and issuing *r* near to its basal end of pterostigma; *r* as long as width of pterostigma; I-RI short, 0.34 times length of pterostigma, i.e. marginal cell ending far before tip of wing; 3-SR + SRI bent as in Fig. 96. Subdiscal cell distally open, i.e. *CU1b* missing (Fig. 97).

First tergite (Fig. 98) strongly broadening posteriorly, somewhat (1.2 times) broader behind than long, evenly broadening from base to its end, basally somewhat less than half as broad as apically; converging pair of keels merging into rugosity, i.e. tergite evenly rugose. Further tergites polished. Third tergite somewhat longer than second tergite, border between them almost indistinct (Fig. 98). Ovipositor sheath concealed.

Ground colour of body black. Scape and pedicel dark rusty, flagellum blackish. Mandible brownish yellow, palpi brown. Tegula dark brown, parategula light brown. Tergites (except black first tergite) with faint brownish tint. Legs brown to dark brown, hind coxa black, femora 1–2 apically and tibiae 1–2 proximally pale brownish. Wings hyaline, pterostigma and veins opaque light brownish-greyish.

The new species, *Protodacnusa effunda*, is nearest to *P. ruthei* GRIFFITHS considering their open subdiscal cell and more or less broadening first tergite; the two species are distinguished by the following features:

1 (2) First tergite less broadening posteriorly, 1.5–1.7 times as long as broad behind (Fig. 99). Antenna with 21–26 antennomeres. Pterostigma wide, eight times as long as wide, marginal cell long, i.e. ending somewhat nearer to tip of wing (Fig. 100). Subdiscal cell open as in Fig. 101. Hind femur five times as long as broad medially, parallel-sided (Fig. 102). Mandible rusty brown, tegula black. ♀: 2.5–3 mm. – Europe (three countries), Mongolia

P. ruthei GRIFFITHS, 1964

2 (1) First tergite strongly broadening posteriorly, somewhat (1.2 times) broader behind than long (Fig. 98). Antenna with 15 antennomeres. Pterostigma less wide, ten times as long as wide, marginal cell short, i.e. ending somewhat less near to tip of wing (Fig. 96). Subdiscal cell open distally as in Fig. 101. Hind femur four times as long as broad medially (Fig. 102). Mandible brownish yellow, tegula dark brown. ♀: 1.4 mm. – Mongolia

Additional taxonomic remarks to Tobiasnusa atomus PAPP

In 2004 I have described a new genus and species under the name *Tobiasnusa atomus* from Mongolia (PAPP 2004*c*). During description the article by TOBIAS et

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PEREPETSHAENKO (1995) with the description of *Alysdacnusa breviventris* gen. et sp. n. escaped my attention. The new taxa have been established on the basis of a single female (i.e. on the basis of the holotype) specimen taken in Turkmenia. Within the subfamily Alysiinae the author duo assigned their *Alysdacnusa breviventris* to the tribe Alysiini. This assignment was justified by them by the features as follows: (1) pterostigma wide (Fig. 4 in TOBIAS & PEREPETSHAENKO 1995: 678) and (2) radial (or marginal) vein faintly angular at the meeting of its sections 3-SR and SR1 (Fig. 4 l.c.).

At first sight, indeed, my *Tobiasnusa atomus* seems to be very similar to *Alysdacnusa breviventris* which I ranged in the tribe Dacnusini within the sub-family Alysiinae. It has a wide (i.e. 2.1 times longer than wide, Fig. 3 in PAPP 2004c: 129) pterostigma, which feature occurs in several dacnusine genera too, e.g. in *Lepton, Sarops, Trachionus*, and, furthermore, its radial vein is not angular, not even faintly.

Owing to the high similarity of the two species it is reasonable to present a taxonomic distinction between them:

Alysdacnusa breviventris TOBIAS et PEREPETSHAENKO

Generic differences: (1) recurrent vein (m-cu) of the fore wing postfurcal (Fig. 4 in TOBIAS & PEREPETSHAENKO 1995: 678); (2) submediallan (1A), anal (2A) and recurrent (m-cu) veins of the hind wing present (Fig. 4 l.c.); (3) propodeum with a small pointed denticule antero-basally (Fig. 1 l.c., in lateral view).



Figs 103–107. 103–104. *Protodacnusa subparallela* PAPP: 103 = distal part of right fore wing, 104 = tergites 1–3. – 105–107. *Tobiasnusa atomus* PAPP: 105 = median part of right fore wing, 106 = proximal part of right hind wing, 107 = part of metasoma with retracted hypopygium and ovipositor apparatus

Specific differences: (1) antenna with $17 (\bigcirc)$ antennomeres; (2) precoxal suture present as a narrow linear furrow; (3) hind femur 4.5 times as long as broad; (4) pterostigma issuing *r* proximally from its middle (Fig. 4 l.c.); (5) first tergite somewhat longer than broad behind; (6) ovipositor sheath very short, concealed.

Tobiasnusa atomus PAPP

Generic differences: (1) recurrent vein (m-cu) of fore wing antefurcal (Fig. 105); (2) submediallan (*1A*), anal (*2A*) and recurrent (m-cu) veins of hind wing missing (Fig. 106); (3) propodeum without denticule antero-basally.

Specific differences: (1) antenna with 13 (\bigcirc) and 14 (\bigcirc) antennomeres; (2) precoxal suture missing; (3) hind femur three times as long as broad (Fig. 7 in PAPP 2004*c*: 129); (4) pterostigma issuing *r* fom its middle (Fig. 3 1.c.); (5) first tergite slightly broader behind than long (Fig. 9 1.c.); (6) ovipositor sheath long, as long as hind tarsomeres 1–2 combined (Fig. 107).

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