

## Blister beetles (Coleoptera, Meloidae) of Mongolia

## Жуки-нарывники (Coleoptera, Meloidae) Монголии

S.E. Tshernyshev\*, S.I. Axentiev\*\*  
С.Э. Чернышев\*, С.И. Аксентьев\*\*

\* Siberian Zoological Museum, Institute of Animal Systematics and Ecology, Russian Academy of Sciences, Siberian Branch, Frunze str. 11, Novosibirsk 630091, Russia.

\* Сибирский зоологический музей, Институт систематики и экологии животных СО РАН, ул. Фрунзе 11, Новосибирск 630091, Россия

\*\* A.N. Severtzov Institute of Ecology and Evolution, Russian Academy of Sciences, Leninskiy prosp. 33, Moscow 117071 Russia.

\*\* Институт проблем эволюции и экологии им. А.Н. Северцова, РАН, Ленинский просп. 33, Москва 117071 Россия.

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КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Meloidae, фауна, систематика, ландшафтное распределение, Монголия.

ABSTRACT. The complete list of the blister beetles of the Mongolian fauna including 34 species and one subspecies is presented. The independence of the genus *Deratus* Motsch., 1848 stat.n. is reestablished. New status and new combination are proposed for the *Epicauta sibirica* ssp. *dubia* F., stat. et syn.n. and *Megatrachelus sibirica* (Tauscher, 1812), comb.n. Besides, new synonyms are established: *Mylabris (Chalcabris) ledebouri* Gebl., 1829 = *M. (Ch.) ledebouri fortunata* Kasz., 1969, syn.n.; *M. (Micrabris) sibirica* F.-W., 1823 = *M. (M.) dashidorzsi* Kasz., 1964, syn.n.; *Meloe (Desertimeloe) auropictus* Den., 1821 = *M. (D.) centripubens* Rtt., 1898, syn.n.; *Meloe* (s.str.) *lobata* Gebler, 1832 = *M. tenuipes* Jakovlev, 1897 = *M. bella* Jakovlev, 1897 = *M. tarsalis* Jakovlev, 1897, syn.n.; *Megatrachelus sibirica* (Tauscher, 1812) = *Lydus quadrisignatus* Fald., 1835, syn.n. = *L. quadrinotatus* Well., 1910, syn.n.; *Stenoria flaviventris* Ball., 1878 = *S. tristis* Esch., 1897, syn.n.; *S. hauseri* Esch., 1904 = *S. steppensis* Kasz., 1966, syn.n.; *Deratus fasciatus* Fald., 1835 = *D. tibialis* Motsch., 1873, syn.n. = *Hapalus mongolicus* Kasz., 1965, syn.n. The species: *Mylabris (Chrysabris) smaragdina* Gebl. 1841, *Mylabris (Micrabris) quadrisignata* F.-W., 1823; *Zonitis fortucci* Fairm, 1887; *Ctenopus melanogaster* F.-W., 1824; *Stenoria flaviventris* Ball., 1878 are recorded for the first time for the fauna of this territory. A picture of the landscape distribution and a map of various localities of Meloidae are given.

РЕЗЮМЕ. Для фауны Монголии приводится полный список жуков нарывников, включающий 34 вида и один подвид. Восстанавливается самостоятельность рода *Deratus* Motsch., 1848, stat.n. Устанавливается новый статус и приводится новая комбинация для видов *Epicauta sibirica* ssp.

*dubia* F., stat. et syn.n. и *Megatrachelus sibirica* (Tauscher, 1812), comb.n. Установлены новые синонимы: *Mylabris (Chalcabris) ledebouri* Gebl., 1829 = *M. (Ch.) ledebouri fortunata* Kasz., 1969, syn.n.; *M. (Micrabris) sibirica* F.-W., 1823 = *M. (M.) dashidorzsi* Kasz., 1964, syn.n.; *Meloe (Desertimeloe) auropictus* Den., 1821 = *M. (D.) centripubens* Rtt., 1898, syn.n.; *Meloe* (s.str.) *lobata* Gebler, 1832 = *M. tenuipes* Jakovlev, 1897 = *M. bella* Jakovlev, 1897 = *M. tarsalis* Jakovlev, 1897, syn.n.; *Megatrachelus sibirica* (Tauscher, 1812) = *Lydus quadrisignatus* Fald., 1835, syn.n. = *L. quadrinotatus* Well., 1910, syn.n.; *Stenoria flaviventris* Ball., 1878 = *S. tristis* Esch., 1897, syn.n.; *S. hauseri* Esch., 1904 = *S. steppensis* Kasz., 1966, syn.n.; *Deratus fasciatus* Fald., 1835 = *D. tibialis* Motsch., 1873, syn.n. = *Hapalus mongolicus* Kasz., 1965, syn.n. Впервые для фауны страны отмечены виды: *Mylabris (Chrysabris) smaragdina* Gebl., 1841, *Mylabris (Micrabris) quadrisignata* F.-W., 1823; *Zonitis fortucci* Fairm, 1887; *Ctenopus melanogaster* F.-W., 1824; *Stenoria flaviventris* Ball., 1878. Дана картина ландшафтно-биотопического распределения и географического распространения Meloidae.

## 1. Introduction

The fauna of the blister beetles of Mongolia has been studied quite completely in recent years. It was dealt with by German and Russian complex expeditions in the end of last century and in the beginning of the present one, as well as by the numerous expeditions to Mongolia of the 60ies-80ies from Germany, Hungary, former Czechoslovakia and USSR. Several new species (*Meloe lederi* Reitt., *Stenoria laterimaculata* Reitt. etc.) were described based on the rich material collected by them.

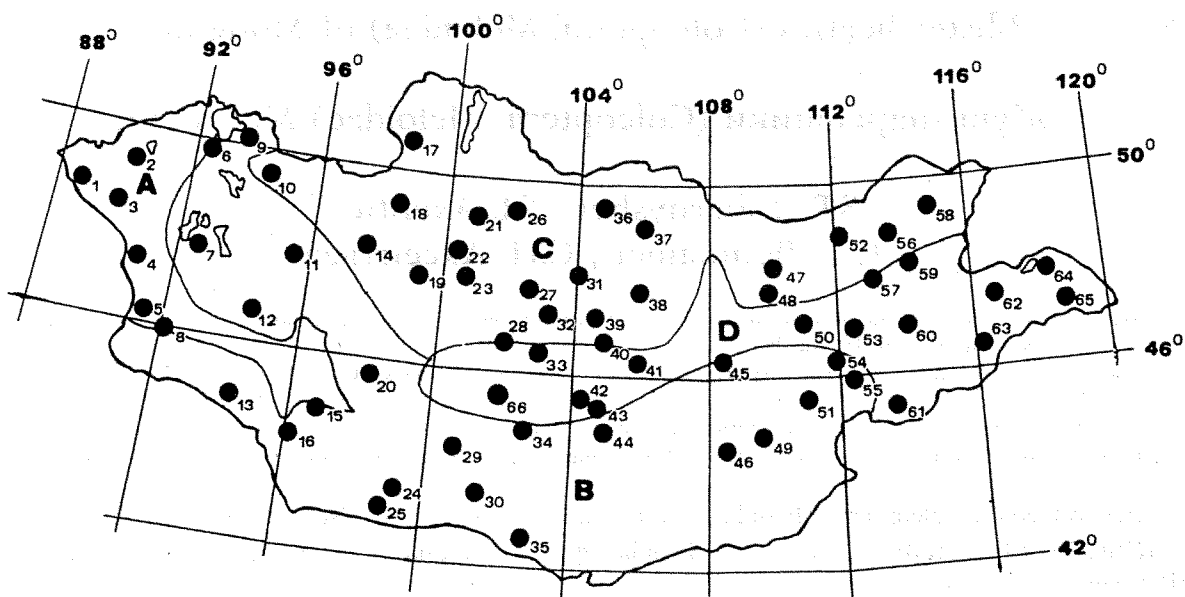


Fig. 1. Map with distribution patterns of the Mongolian Meloidae (the explanation of localities see in the text): A — mountain-steppe zone; B — desert-steppe zone; C — mountain forest-steppe zone; D — steppe zone.

Рис. 1. Карта ландшафтного распределения Meloidae Монголии (расшифровка точек в тексте): А — горно-степная зона; В — пустынно-степная зона; С — горная лесостепная зона; D — степная зона.

The information about these findings was published as reports about studies of the material brought by these expeditions and was presented mostly as Lists of species [Kaszab, 1963-1969]. The absence of summarized data on the meloid fauna of Mongolia led to the confusion of some taxa which were described earlier as a good species (*Mylabris* (Ch.) *ledebouri fortunata* Kasz., 1969, *M. (Micrabris) dashidorzi* Kasz., 1964; *Meloe centripubens* Rtt., 1898, *Lydus quadrisignatus* Fald., 1835, *L. quadrinotatus* Well., 1910, *Stenoria steppensis* Kasz., etc.). Indicated for the Mongolian fauna were some genera whose areas do not extend to the Eastern part of the Continental Asia (as *Lydus* Latr.).

The first summarizing work was published by Zhantsantombo [1969]. The article was first to give a complete list of the Mongolian blister beetles with some notes on their landscape distribution. However, no attempt was made in that work at critical taxonomic analysis.

All of the vast expedition material known from the literature and deposited in Russian museums was studied by the authors of the present paper. As a result of this work, we found some species of blister beetles new for Mongolian fauna — *Mylabris* (*Chrysabris*) *smaragdina* Gebl., (*Mylabris* (*Micrabris*) *quadrisignata* F.-W., *Zonitis fortucci* Fairm., *Ctenopus melanogaster* F.-W., *Stenoria flaviventris* Ball. Besides that, a study of the types and descriptions of some species allowed us to establish new synonyms, which was essential for the general picture of the Mongolian fauna. As the result the meloid fauna of Mongolia is

now known to be represented by 34 species and one subspecies (Table 1).

All known localities of the blister beetles in Mongolia are shown in the Map (Fig. 1). The landscape distribution is presented according the data of Lavrenko, Karamysheva and Nikulina [1991]. Beetles were collected over the entire territory of Mongolia, from the Western mountain-steppe part (Bayan-Ulege Aimak, env. of Khoton-Nur Lake) to the Eastern steppes (Eastern Aimak, Salkhit Mt.); the southernmost locality is in the Gobi Desert (South-Gobi Aimak, near Gurvan-Tes Somon), the northernmost, in the mountain forest-steppe of the Khubsugul Aimak (Delger-Muren Riv.). The vast material from the cited literature and many original findings are included in the list of localities, the original localities are also indicated in Material.

It is of interest that in the western part of Mongolia (Mongolian Altai) were recorded species are characteristic for Middle Asia, in particular for Kazakhstan — *Cerocoma schreberi*, *Mylabris frolovi*, *M. monosona*, *M. quadrisignata*, *M. smaragdina*, *M. coerulescens*, *M. sedecimpunctata*, *M. scabiosae*, *Zonitis glazunovi*. These species ranged in the territory of the zone A (see Fig. 1) and have not been found eastwards. The desertified Gobi part of Mongolia is inhabited by the specific complex which was known earlier from the desert regions of Middle Asia or China — *Ctenopus melanogaster*, *Stenoria flaviventris*, *Zonitis fortucci*, *Meloe auro-pictus*, *Meloe lederi*, *Mylabris ledebouri*. The branch of the desert-steppe zone (B) in the Uvs-Nur Aimak indicates the way of penetration of these

Table 1. Zonal distribution of Mongolian blister-beetles.  
Таблица 1. Зональное распределение жуков-нарывников Монголии.

Meloidae species	Landscape zones			
	Desert-steppe B	Steppe D	Mountainsteppe A	Mount.-Foreststeppe C
<i>Mylabris ledebouri</i> Gebler	+	-	-	-
<i>Meloe lobata</i> Gebler	+	-	-	-
<i>Deratus fasciatus</i> (Faldermann)	+	-	-	-
<i>Stenoria flaviventris</i> (Ballion)	+	-	-	-
<i>Ctenopus melanogaster</i> (F.-W.)	+	-	-	-
<i>Mylabris crocata</i> (Pallas)	+	-	+	-
<i>Mylabris atrata</i> (Pall.as)	+	-	+	-
<i>Mylabris smaragdina</i> Gebler	+	-	+	-
<i>Megatrachelus sibirica</i> (Tauscher)	+	-	+	-
<i>Meloe lederi</i> Reitter	+	-	-	+
<i>Mylabris mongolica</i> (Dokhtourov)	++	+	+	+
<i>Meloe auropictus</i> Denier	++	+	-	+
<i>Mylabris aulica</i> Menetries	+	++	+	++
<i>Mylabris splendidula</i> (Pallas)	+	+	-	+
<i>Lytta caraganae</i> (Pallas)	+	+	-	++
<i>Epicauta megalcephala</i> (Gebler)	+	+	++	+
<i>Epicauta ambusta</i> (Pallas)	+	+	++	+
<i>Epicauta sibirica</i> (Pallas)	+	+	++	+
<i>Mylabris speciosa</i> (Pallas)	-	+	+	++
<i>Mylabris sibirica</i> (Fischer-Waldheim)	-	+	+	++
<i>Zonitis glasunovi</i> Semenov	-	+	-	-
<i>Zonitis fortucci</i> Fairmaire	-	+	-	-
<i>Megatrachelus polita</i> (Gebler)	-	+	-	+
<i>Stenoria hauseri</i> Escherisch	-	+	-	-
<i>Stenoria laterimaculata</i> Reitter	-	+	-	-
<i>Cerocoma schreberi</i> (Fabricius)	-	-	+	-
<i>Mylabris frolovi</i> Germar	-	-	+	-
<i>Mylabris monosona</i> Wellman	-	-	+	-
<i>Mylabris coerulescens</i> Gebler	-	-	+	-
<i>Mylabris quadrisignata</i> (F.-W.)	-	-	+	-
<i>Mylabris sedecimpunctata</i> Gebler	-	-	+	-
<i>Mylabris scabiosae</i> (Olivier)	-	-	+	-
<i>Mylabris solonica</i> (Pallas)	-	-	-	+
<i>Meloe brevicollis</i> Panzer	-	-	-	+
<i>Epicauta sibirica</i> ssp. <i>dubia</i> (Fabricius)	-	-	-	+

species into South Siberia (Tuva), whereas close neighbourhood with the mountain-steppe zone A allows the Middle Asian fauna to move towards Siberia. For the northeastern part of Mongolia usual residents of the East Siberian fauna, like *Epicauta megalcephala*, *E. ambusta*, *E. sibirica*, *M. splendula*, *M. sibirica*, *M. aulica*, *Lytta caraganae*, *M. brevicollis*, *Megatrachelus polita* are characteristic, and the most specific species for this part are *Epicauta sibirica* ssp. *dubia*, *Mylabris solonica*, and *Meloe lobata*, which could be transferred to the Far-Eastern fauna (see Table 1).

As for the specific differentiation, the richest is the mountain-steppe zone A, which hosts 51.4 % of all species collected in the territory of Mongolia. This zone is also the richest in the specific species which could be found only there (20 % of all species present in the Mongolian fauna). Somewhat less numerous are the specific blister beetles of the desert-steppe zone B (14 %), even fewer are those specific for the forest-steppe zone C (9 %), and only one species ranged in the territory of the steppe zone D (3 %).

All specimens have been borrowed from or deposited in the following museums:

SZM — Siberian Zoological Museum (Novosibirsk), Institute of Animal Systematics and Ecology, Siberian Branch of the Russian Academy of Sciences (curator S.E. Tshernyshev);

ZISP — Zoological Institute, the Russian Academy of Sciences, St. Petersburg (curator B.A. Korotyaev);

ZMUM — Zoological Museum of Moscow State University (curator N.B. Nikitskiy).

Collecting localities of the meloid species in Mongolia are (Fig. 1):

1 — Bayan-Ulege Aimak, env. of Khoton-Nur Lake; 2 — Uvs-Nur Aimak, env. of Achit-Nur Lake; 3 — Bayan-Ulege Aimak, env. of Tolbo-Nur Lake; 4 — Bayan-Ulege Aimak, env. of Bulgan Somon; 5 — Khovd Aimak, near Bulgan-Gol Somon; 6 — Uvs-Nur Aimak, env. of Ulangom Somon; S bank of Uvs-Nur Lake; 7 — Khovd Aimak, env. of Khara-Us-Nur Lake; 8 — Khovd Aimak, near Uench Somon; 9 — Uvs-Nur Aimak, Tes Somon, NE bank of Uvs-Nur Lake; 10 — Uvs-Nur Aimak, env. of Baru-Turun Somon; 11 — Dzabkhan Aimak, near Songino Somon; 12 — Gobi-Altai Aimak, env. of Bayan-Ula Somon; 13 — Gobi-Altai Aimak, env. of Khairkhan Somon; 14 — Dzabkhan Aimak, near Numreg Somon; 15 — Gobi-Altai Aimak, Khatan-Khairkhan Mt.; 16 — Gobi-Altai Aimak, Khatan-Dersniy-Khuduk; 17 — Khubsugul Aimak, Delger-Muren Riv.; 18 — Khubsugul Aimak, near Buren-Khan Somon; 19 — Ara-Khangai Aimak, env. of Tsetserleg Somon; 20 — Gobi-Altai Aimak, env. of Beger-Nur Somon; 21 — Khubsugul Aimak, Toson-Tsengel Somon; 22 — Ara-Khangai Aimak, env. of Dzhargalant Somon; 23 — Ara-Khangai Aimak, near Tevshrulekh Somon; 24 — Bayan-Khongor

Aimak, Ingeni-Khovryn-Bulak Lake; 25 — Bayan-Khongor Aimak, near Talyn-Bilgekh-Bulak Somon; 26 — Bulgan Aimak, env. of Un't Somon; 27 — Bulgan Aimak, Bayan-Nur Lake; 28 — Uver-Khangai Aimak, env. of Khudzhirt Somon; 29 — Bayan-Khongor Aimak, near Bayan-Leg Somon; 30 — South-Gobi Aimak, env. of Noyon Somon; 31 — Ara-Khangai Aimak, near Bulgan Somon; 32 — Bulgan Aimak, Khishig-Under; 33 — Uver-Khangai Aimak, Arbai-Khere; 34 — South-Gobi Aimak, env. of Bayan-Dalai Somon; 35 — South-Gobi Aimak, near Gurvan-Tes Somon; 36 — Selenga Aimak, env. of Sukhe-Bator Somon; 37 — Selenga Aimak, near Darkhan Somon; 38 — Central Aimak, env. of Ulan-Bator City; 39 — Ara-Khangai Aimak, Lun Somon; 40 — Central Aimak, env. of Undzhul Somon; 41 — Middle-Gobi Aimak, env. of Delger-Tsogt Somon; 42 — Bulgan Aimak, near Dashin-Chilen Somon; 43 — Middle-Gobi Aimak, env. of Delger-Khangai Somon; 44 — South-Gobi Aimak, env. of Dalan-Dzadgad Somon; 45 — East-Gobi Aimak, near Choir Somon; 46 — East-Gobi Aimak, env. of Mandakh Somon; 47 — Khentei Aimak, env. of Muren Somon; 48 — Khentei Aimak, near Dzhargalt-Khan Somon; 49 — East-Gobi Aimak, env. of Dzun-Bayan Somon; 50 — Khentei Aimak, near Under-Khan Somon; 51 — East-Gobi Aimak, near Khara-Airag Somon; 52 — Khentei Aimak, env. of Norovlin Somon; 53 — Sukhe-Bator Aimak, near Balmyn-Khuduk Somon; 54 — Sukhe-Bator Aimak, env. of Bayan-Tere Somon; 55 — Sukhe-Bator Aimak, Khongor Somon; 56 — Eastern Aimak, Tsagan-Obo Mt.; 57 — Sukhe-Bator Aimak, near Bayan-Terem Somon; 58 — Eastern Aimak, Khavirga Somon; 59 — Eastern Aimak, env. of Choibalsan Somon; 60 — Sukhe-Bator Aimak, near Barun-Urt Somon; 61 — Sukhe-Bator Aimak, Bogdo-Ula Mountain; 62 — Eastern Aimak, env. of Tamsag-Bulag Somon; 63 — Eastern Aimak, Lag-Nur Lake; 64 — Eastern Aimak, near Khalkh-Gol Somon; 65 — Eastern Aimak, Salkhit Mt.; 66 — Uver-Khangai Aimak, Kholt Stow.

## 2. List of Mongolian Meloidae

### Subfamily MELOINAE

#### Tribe CEROCOMINI

*Cerocoma* Geoffroy, 1762

*Cerocoma schreberi* Fabricius, 1781

MONGOLIAN LOCALITY: 5.

REMARKS. A single record from near Bulgan-Gol Somon. Probably, this is the easternmost locality of the species. Its presence in the territory of Mongolia indicates the possibility of penetration of the European and Middle-Asian fauna to the Eastern part of Eurasia.

DISTRIBUTION. Europe, Middle Asia, Kazakhstan, W-Mongolia.

## Tribe EPICAUTINI

*Epicauta* Dejean, 1834*Epicauta megalocéfala* (Gebler, 1817)

MATERIAL. CENTRAL AIMAK: 100 km S of Ulan-Bator, Dzorgoi Mountains, 29.7.[19]69, L. Medvedev — 3 spec. (ZISP, SZM); SELENGA AIMAK: 120 km W of Ulan-Bator, 26.7.[19]69, L. Medvedev — 6 spec. (ZISP); KHENTEI AIMAK: 25 km NE of Bayan-Adraga Somon, 6.7.[19]76, E. Narchuk — 8 spec. (ZISP); 8 km N of Binder Somon, Onon Riv., 3.7.1976, E. Narchuk — 4 spec. (ZISP); ARA-KHANGAI AIMAK: confluence of the Rivers Sumiin and Chulutyn-Gol, steppe, 30.6.1975, E. Narchuk — 13 spec. (ZISP).

MONGOLIAN LOCALITIES: 6, 9, 10-12, 17, 19, 21, 22, 32, 37-40, 42, 45-47, 50, 51, 57, 59, 60.

REMARKS. The species is widely spread from the west to the east of the Inner Mongolia, except the South-Gobi Desert and northern part of the country.

DISTRIBUTION. Siberia, Mongolia, China, Russian Far East, Korea.

*Epicauta ambusta* (Pallas, 1781)

MATERIAL. DZABKHANGAI AIMAK: 17 km SW of Ula-sutai Somon, Gantsyn-Daba pass, 16.7.[19]80, E. Gurjeva — 6 spec. (ZISP, SZM); KHENTEI AIMAK: 8 km N of Somon Binder, Onon Riv., 3.7.1976, E. Narchuk — 4 spec. (ZISP); ARA-KHANGAI AIMAK: confluence of Sumiin and Chulutyn-Gol Riv., steppe, 30.6.1975, E. Narchuk — 3 spec. (ZISP).

MONGOLIAN LOCALITIES: 2, 9, 10, 13, 14, 19, 22, 33, 38, 39, 47, 48.

REMARKS. Similar in distribution to the previous species, but shows stronger tendency towards the northern part of Inner Mongolia.

DISTRIBUTION. E-Siberia, Mongolia, China, Russian Far East (Priamurie), Korea.

*Epicauta sibirica* (Pallas, 1777)

MATERIAL. SELENGA AIMAK: 120 km W of Ulan-Bator, 26.7.[19]69, L. Medvedev — 3 spec. (ZISP); KHENTEI AIMAK: 8 km N of Somon Binder, 4-5.7.1976, Kerzhner — 2 spec. (ZISP); EASTERN AIMAK: env. of Somon Bayan-Dun, 9.7.1976, Kerzhner — 1 spec. (ZISP).

MONGOLIAN LOCALITIES: 2, 12, 14, 18, 19, 21, 23, 26, 27, 31, 32, 34, 37-45, 56, 57, 61, 64.

REMARKS. This species is widely spread in Mongolia and can be found both in the forest-steppe of Sukhe-Bator and in the semi-desert near Achit-Nur (South-Gobi Aimak).

DISTRIBUTION. S-Urals, N-Kazakhstan, Siberia, Mongolia, China.

*Epicauta sibirica* ssp. *dubia* (Fabricius, 1781) **stat.n.**

MONGOLIAN LOCALITY: 26.

REMARKS. The specimens were collected in the forest-steppe near Toson-Tsengel Somon. Formerly *E. dubia* was considered as a good species, the dark coloration of head (head black, only a spot on the forehead and temples red) and the shape of the apical antennal segments of male being the strongest characters. The investigation of a vast material of both forms (*E. dubia*

and *E. sibirica*) shows that the shape of antennal segments in male varies strongly. Among *E. sibirica* specimens could be found with 3rd antennal segment widened to the apex and 4th-8th segments having pointed corners, as in *E. dubia* (according to the description). These characters are therefore unreliable. But head coloration of the Eastern subspecies is quite constant, only very few specimens being similar in this point to *E. sibirica*.

DISTRIBUTION. E-Siberia, Russian Far East (Primorie), E-Mongolia, Korea, Japan. The present record in Mongolia is the westernmost locality of the subspecies.

## Tribe MYLABRINI

*Mylabris* Fabricius, 1775*Mylabris (Chalcabris) frolovi* Germar, 1824

MONGOLIAN LOCALITIES: 4, 8.

DISTRIBUTION. Middle and Central Asia: Iran, Afghanistan, China (Xinjiang Prov.), Mongolia.

*Mylabris (Chalcabris) splendidula* (Pallas, 1781)

MONGOLIAN LOCALITIES: 9, 10, 12, 13, 19, 29, 37-42, 45, 50, 53.

DISTRIBUTION. Kazakhstan, W-Siberia (Altai), S-Siberia (Tuva), Transbaikalia, Mongolia, NW-China.

*Mylabris (Chalcabris) monosona* Wellman, 1910

MONGOLIAN LOCALITIES: 5, 8.

DISTRIBUTION. Kirghizia, Dzungaria, Semirechye, South of Kazakhstan to Aral Lake, S-Siberia (Tuva), Transbaikalia, Mongolian steppes, NW-China.

*Mylabris (Chalcabris) speciosa* (Pallas, 1882)

MATERIAL. CENTRAL AIMAK: 100 km S of Ulan-Bator, Dzorgoi Mountains, 29.7.[19]69 L. Medvedev, — 4 spec. (ZISP); BAYAN-KHONGOR AIMAK: 60 km ENE Bayan-Burd Somon, Derkhiy-Tsagan-Obo, 12.6.[19]76, I. Kerzhner — 4 spec. (ZISP).

MONGOLIAN LOCALITIES: 2-4, 9, 19, 21, 26-28, 38-40, 42, 59, 61.

DISTRIBUTION. W. & S-Siberia (Altai, Tuva), Transbaikalia, Primorie, Korea, Mongolia, NW-China.

*Mylabris (Chalcabris) mongolica* (Dokhtoureff, 1889)

MATERIAL. SELENGA AIMAK: 120 km W of Ulan-Bator, 26.7.[19]69, L. Medvedev — 4 spec. (ZISP); SOUTH-GOBI AIMAK: 42 km E of Noyon Somon, Barun-Bulasan-Khuduk, 17.6.[19]73, G. Medvedev — 3 spec. (ZISP).

MONGOLIAN LOCALITIES: 4, 7, 8, 12, 20, 24, 25, 29, 30, 34-40, 44, 49.

REMARKS. The species is widely spread in Mongolia, occurring in the forest-steppe zone (Sukhe-Bator, Bulgan), and steppe zone (Undzhul, Uench) and being the most common and abundant in the desert-steppe landscape.

DISTRIBUTION. S-Siberia (Tuva), Mongolia.

*Mylabris (Chalcabris) ledebouri* Gebler, 1829

= *M. (Ch.) ledebouri fortunata* Kaszab, 1969: 320, **syn.n.**

MATERIAL. GOBI-ALTAI AIMAK: Tost-Ula, Tsagan-Ders-Khuduk, 22.6[1973], G. Medvedev, 2 spec. (ZISP); SOUTH-GOBI AIMAK: 25 km W of Noyon Somon, Khuryun-Khalkha-Nur Lake, 20.6[1973], G. Medvedev — 15 spec. (ZISP).

MONGOLIAN LOCALITIES: 16, 30, 43.

REMARKS. The subspecies *fortunata* described by Kaszab [1969] is only an aberration of the nominative form. The variability and distribution range of the species are not wide.

DISTRIBUTION. Lower Zavolzhye to Saratov (Russia), Kazakhstan, W-Siberia (SE-Altai), NW part and S of the central part of Mongolia.

*Mylabris (Chalcabris) coerulecens* Gebler, 1841

MONGOLIAN LOCALITIES: 3, 4.

DISTRIBUTION. Transcaspiya, sands of Uzbekistan and Kazakhstan, Zaisan, China (Xinjiang), Mongolia.

*Mylabris (Chrysabris) smaragdina* Gebler, 1841

MATERIAL. KHOVD AIMAK: 50 km SSW of Ulench Somon, Utyn-Mod Stov, 27.6.1980, I. Kerzhner — 2 spec. (ZISP, SZM).  
MONGOLIAN LOCALITY: 8.

REMARKS. The species was described from the environs of Zaisan Lake, and formerly was known only from Kazakhstan. This is the first record from Mongolia.

DISTRIBUTION. Kazakhstan, Mongolia.

*Mylabris (Micrabris) sibirica* Fischer-Waldheim, 1823

= *Mylabris dashidorszi* Kaszab, 1964a: 346, **syn.n.**

MATERIAL. SELENGA AIMAK: 120 km W of Ulan-Bator, 26.7[19]69 L. Medvedev — 3 spec. (ZISP, SZM); KHENTEI AIMAK: 25 km NE of Bayan-Adraga Somon, 6.7[19]76 E. Narchuk — 4 spec. (ZISP, SZM); ARA-KHANGAI AIMAK: 40 km SSW Tevshrulekh Somon; H=1400 m, southern steppe slope, 18.6[19]75 E. Gurjeva — 4 spec. (ZISP); EASTERN AIMAK: 32 km SE of Salkhit Mountain, 15.6[19]76 Kerzhner — 4 spec. (ZISP).

MONGOLIAN LOCALITIES: 4, 19, 23, 37-40, 47, 48, 57, 65.

REMARKS. A species having very variable characters. Its taxonomy is insufficiently elaborated. *M. dashidorszi* Kaszab, 1964 (type studied) belongs to *M. sibirica* and should be synonymized with ssp. *hokumenensis* Kono, 1934 described from Korea.

DISTRIBUTION. E-Europe, Siberia, Kazakhstan, Kirghizia, Mongolia.

*Mylabris (Micrabris) quadrisignata* Fischer-Waldheim, 1823

MATERIAL. BAYAN-ULEGEI AIMAK: SE bank of Khoton-Nur Lake, 16.7[19]78, E. Gurjeva — 8 spec. (ZISP, SZM).

MONGOLIAN LOCALITY: 1.

DISTRIBUTION. Tien-Shan Mts.: Kirghizia, China (Xinjiang), Mongolia. First recorded in the Mongolian fauna.

*Mylabris (Eumylabris) crocata* (Pallas, 1781)

MONGOLIAN LOCALITIES: 4, 8.

DISTRIBUTION. Syria, Spain, Germany, Hungary, Balkan Peninsula, S-European part of the Russia, S-Siberia, Iran, Kazakhstan, Dzungaria, Mongolia.

*Mylabris (Eumylabris) aulica* Ménétrières, 1832

MATERIAL. ARA-KHANGAI AIMAK: near Tevshrulekh Somon, 11.8[19]69, L. Medvedev — 1 spec. (ZISP); KOBDO AIMAK: 50 km SSW Ulench Somon, Utyn-Mod, 27.6.1980, E. Gurjeva — 3 spec. (ZISP, SZM); BAYAN-KHONGOR AIMAK: 60 km ENE Bayan-Burd Somon, Derkhiin-Tsagan-Obo, 12.6[19]76, I. Kerzhner — 4 spec. (ZISP); EASTERN AIMAK: 60 km SSW Choibalsan Somon, 20.7[19]75, E. Narchuk — 7 spec. (ZISP, SZM); 30 km NNE Khavirga Somon, saline, in soil splits and under plants, 21.8[19]75, E. Gurjeva — 3 spec. (ZISP); 32 km SE of Salkhit Mt., Numregiin-Gol Riv., 15.6[19]77, I. Kerzhner — 5 spec. (ZISP).

MONGOLIAN LOCALITIES: 2, 6, 7, 12, 21, 23, 25, 27, 29, 34, 37, 38, 40, 42, 47, 52, 55, 57-60, 63, 65.

DISTRIBUTION. Kazakhstan, Siberia, Mongolia, NE-China.

*Mylabris (Argabris) sedecimpunctata* Gebler, 1825

MONGOLIAN LOCALITIES: 4, 5.

DISTRIBUTION. Middle Asia, S-Kazakhstan, China (Xinjiang), Mongolia.

*Mylabris (s.str.) atrata* (Pallas, 1773)

MONGOLIAN LOCALITIES: 4, 5.

DISTRIBUTION. S-European part the former Soviet Union, Caucasus, Uzbekistan, Kazakhstan, Siberian steppes (Altai, Tuva, Transbaikalia), NW-China (Xinjiang), Mongolia.

*Mylabris (s.str.) solonica* (Pallas, 1781)

REMARKS. In the Mongolian fauna first recorded by B. Kuzin [1954]. Can be found in the forest-steppe zone of the NE part of the territory.

DISTRIBUTION. Transbaikalia, Russian Far East, Korea, NE-Mongolia, China.

*Mylabris (s.str.) scabiosae* Olivier, 1811

MONGOLIAN LOCALITIES: 4, 5.

DISTRIBUTION. S-Eurasia, Caucasus, Middle Asia, Balkan Peninsula, Asia Minor, Syria, Mesopotamia, Iran, China (Xinjiang), Mongolia.

## Tribe LYTTINI

*Lytta* Fabricius, 1775*Lytta (s.str.) caraganae* (Pallas, 1781)

MATERIAL. CENTRAL AIMAK: 100 km S of Ulan-Bator, Dzorgoi Mts., 29.7[19]69, L. Medvedev — 2 spec. (ZISP); SELENGA AIMAK: 120 km W of Ulan-Bator, 26.7[19]69, L. Medvedev — 4 spec. (ZISP, SZM); 30 km NNE of Un't Somon, Selenga River, 25.6[19]78, E. Gurjeva — 5 spec. (ZISP, SZM); KHENTEI AIMAK: 8 km N Binder Somon, Onon River, 3.7.1976, E. Narchuk — 4 spec. (ZISP).

MONGOLIAN LOCALITIES: 10, 19, 26, 28, 39, 40, 42, 47, 54, 64.

REMARKS. In Mongolia spread from the Northwest to the East, also occurring in the desert-steppe regions of Dashin-Chilen, but most abundant in the mountain steppe and steppe zones.

DISTRIBUTION. Siberia (Altai, Khakassia, Tuva, Transbaikalia), Russian Far East, Korea, Mongolia, China.

### Supertribe MELOITAE

#### Tribe MELOINI

*Meloe* Linnaeus, 1758

*Meloe* (s.str.) *lobata* Gebler, 1832

= *Meloe tenuipes* Jakovlev, 1897: 239, **syn.n.**

= *Meloe bella* Jakovlev, 1897: 240, **syn.n.**

= *Meloe tarsalis* Jakovlev, 1897: 241, **syn.n.**

REMARKS. The species was described from near Nerchinsk, at present the type is probably lost. *M. lobata* is widespread and strongly variable (also in what concerns the shape of male antennal segments). We revised the types of *M. tenuipes*, *M. tarsalis* and *M. bella*, described by Jakovlev, and found that all of them are synonyms of *M. lobata* (the shape of the modified antennal segments in male being rather variable and the coloration of the beetles varying from violet to dark-blue).

DISTRIBUTION. S-Siberia (Tuva), Transbaikalia, Russian Far East (Primorie), Korea, Japan (Hokkaido), Mongolia, China.

*Meloe* (*Eurimeloe*) *brevicollis* Panzer, 1792

MATERIAL. BULGAN AIMAK: Un't Somon, Khushit-Bulu, 12.7.1967, Tsensuren — 1 spec. (ZISP); 30 km NNE of Un't Somon, Selenga River, 25.6.1978, E. Gurjeva — 1 spec. (ZISP).

MONGOLIAN LOCALITIES: 23, 26.

REMARKS. A very variable species in what concerns the coloration (from blue to black), the sculpture of body surface and the shape of pronotum. Tends to the forest-steppe landscapes, and the finding within the mountain forest-steppe zone is quite natural.

DISTRIBUTION. Mediterranean area, Europe, Caucasus, Middle Asia, Siberia, Mongolia.

*Meloe* (*Eurimeloe*) *lederi* Reitter, 1895

MATERIAL. BAYAN-KHONGOR AIMAK: between Shine-Dzhinst-Ula and Bayan-Gobi, 4.7.[1]973, G. Medvedev — 1 spec. (ZISP).

MONGOLIAN LOCALITIES: 12, 38, 39, 44.

REMARKS. Described from Urga. Occurs in the desert-steppe landscapes.

DISTRIBUTION. Mongolia.

*Meloe* (*Desertimeloe*) *auropictus* Denier, 1821

= *Meloe centripubens* Reitter, 1897: 209, **syn.n.**

MATERIAL. MIDDLE-GOBI AIMAK: Delger-Khangai, 10.7.1967, Tsensuren — 2 spec. (ZISP, SZM); ARA-KHANGAI AIMAK, confluence of Sumiin and Chulutyn-Gol Rivers, steppe, 30.6.1975, E. Narchuk — 1 spec. (ZISP).

MONGOLIAN LOCALITIES: 12, 22, 34, 40, 41, 43, 44, 49, 55.

REMARKS. Described from Urga and Chichikar, spread from the west (Dzhargalan) to the east (Khongor) of the Inner Mongolia. The species *M. centripubens* Reitt. was also described from near Urga and has no special differences from *M. auropictus* Den. (according to the descriptions). Most of the material was collected both in steppe and desert-steppe zones, which is probably the consequence of the beetle's preference for arid landscapes.

DISTRIBUTION. Mongolia.

#### Subfamily ZONITIDINAE

#### Tribe ZONITIDINI

*Zonitis* Fabricius, 1775

*Zonitis glasunovi* Semenov, 1893

REMARKS. Described from Turkmenia and first recorded in Mongolia by Z. Kaszab [1964a].

DISTRIBUTION. Middle Asia, Mongolia.

*Zonitis fortucci* Fairmaire, 1887

MATERIAL. EASTERN AIMAK: Khalkhin-Gol Riv., 33 km SE of Khalkhin-Gol Somon, 31.7.1976, M. Kozlov — 1 spec. (ZISP).

MONGOLIAN LOCALITY: 64.

DISTRIBUTION. Mongolia, China (Beijing).

*Megatrachelus* Motschulsky, 1845

*Megatrachelus polita* (Gebler, 1832)

MATERIAL. ARA-KHANGAI AIMAK: Dzhargalant, Ider Riv., 20.7.[19]75, E. Narchuk — 5 spec. (ZISP, SZM); EASTERN AIMAK: Tamsag-Bulag, 25.7.[19]76, E. Gurjeva — 3 spec. (ZISP); Khalkhin-Gol River, 33 km SE Khakh-Gol Somon, 31.7.[19]76, E. Gurjeva — 3 spec. (ZISP).

MONGOLIAN LOCALITIES: 21, 23, 33, 38, 40, 62, 64.

REMARKS. Spread in the Central part (Undzhul, Ulan-Bator, Tevshrulekh) and in the East (Khalkh-Gol) of Mongolia, in the mountain forest-steppe and steppe zones.

DISTRIBUTION. S-Siberia (Tuva, Transbaikalia), Russian Far East (Primorie), Korea, Japan, Mongolia, China.

*Megatrachelus sibirica* (Tauscher, 1812) **comb.n.**

= *Lydus quadrisignatus* Faldermann, 1835: 335, **syn.n.**

= *Lydus quadrinotatus* Wellman, 1910: 25, **syn.n.**

MONGOLIAN LOCALITY: 15.

REMARKS. This species was described by Tauscher in 1812 as *Zonitis* and for a long time was considered a *Zonitis* or a *Nemognatha*. We found the material from Mongolia which was erroneously determined by Dr. Kaszab as *Euzonitis bimaculatus* Pallas. An investigation of this material shows that the species belongs to the genus *Megatrachelus* rather than to *Euzonitis*. The species which were described after Tauscher from Mongolia: *Lydus quadrisignatus* Faldermann, 1835 and *L. quadrinotatus* Wellman, 1910 — according to the de-



scriptions, also belong to the same species, *Megatrachus sibirica* (Tausch.) comb.n.

Our specimens were collected in the SW part of Mongolia in the mountain steppe and desert-steppe zones.

DISTRIBUTION. Mongolia.

#### Tribe SITARINI

##### *Deratus* Motschulsky, 1848, **stat.n.**

REMARKS. The type species of the genus *Apalus* F., 1775 is *A. bimaculatus* L., 1761. Motschulsky described a new genus *Deratus* for the species *Apalus necydalius* Pall., 1782 and *Deratus tibialis* Motsch., 1873 basing on such characters as smooth pronotum and habitus resembling *Stenoria* Mulsant et Rey, 1857. Taking into account the strong differences of these species from *Apalus* and *Stenoria*, we support the independence of the genus *Deratus*.

##### *Deratus fasciatus* (Faldermann, 1835)

= *Deratus tibialis* Motschulsky, 1873: 493, **syn.n.**

= *Hapalus mongolicus* Kaszab, 1965b: 227, **syn.n.**

REMARKS. Both species, *Apalus fasciatus* Faldermann and *A. mongolicus* Kaszab (type studied), were described from Mongolia. We could not find any distinct characters delimiting these two species. The main difference of *Deratus tibialis* Motschulsky (type not preserved) is the dark coloration of legs — a very variable character, which allows us to synonymize this form with *D. fasciatus* (Fald.).

DISTRIBUTION. SE-Siberia (Tuva, Transbaikalia), Mongolia, NW-China.

#### Tribe STENORIINI

##### *Stenoria* Mulsant et Rey, 1857

##### *Stenoria flaviventris* (Ballion, 1878)

= *Stenoria tristis* Escherich, 1897: 124, **syn.n.**

REMARKS. Known from the desert-steppe zone (Uvs-Nur Aimak). The coloration of elytra varies from yellow in females to black in males. *S. tristis* Esch. was described from a female with yellow elytra, while *S. flaviventris* Ball. from a male with black elytra. Both these forms are in fact one species.

DISTRIBUTION. Urals, Tuva, Mongolia, Dzhungaria.

##### *Stenoria hauseri* Escherich, 1904

= *Stenoria steppensis* Kaszab, 1966c: 568, **syn.n.**

MONGOLIAN LOCALITY: 60.

REMARKS. Upon examining the types of *Stenoria hauseri* Esch. and *S. steppensis* Kasz. we found that both species are identical, and no distinctive characters can be found. The beetles were collected in the Eastern part, in steppes near Barun-Urt Somon.

DISTRIBUTION. Mongolia, Russian Far East (Primoric), Tibet.

##### *Stenoria laterimaculata* Reitter, 1898

MATERIAL. UVER-KHANGAI AIMAK, Kholst Stow, N. Gobi (approx. 45.8°N, 102.3°W), 27.3-17.5.1926, Kozlov — 1 spec. (ZISP).

MONGOLIAN LOCALITY: 66.

DISTRIBUTION. Mongolia. Described from Kurusch-Dagh.

##### *Ctenopus* Fischer-Waldheim, 1824

##### *Ctenopus melanogaster* Fischer-Waldheim, 1824

MATERIAL. BAYAN-KHONGOR AIMAK: 180 km N of Shine-Dzhinst Mt., oasis Ekhiijn-Gol, on the *Sophora alopecuroides* flowers, 23-26.6.[1]983, A. Kireichuk — 1 spec. (ZISP).

MONGOLIAN LOCALITY: 19.

DISTRIBUTION. Iran, Turkestan, Caucasus, Persia, Mongolia.

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