



UDC 595.7:632

## THE FAUNA OF THE CARABIDA (COLOEPTERA) OF THE KYZYL KUM DESERT

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### ANNOTATION

*The article discusses the features of the fauna of the beetle fauna (coloeptera: carabidae) of the Kyzylkum desert. Ground beetles are productive and numerous entomophages. They regularly destroy pests of agricultural crops, are intermediate hosts of trematodes and nematodes that parasitize domestic animals.*

**KEY WORDS:** *fauna, collection, trematode, nematode, Kyzyl kum, sample, family, genus.*

There are more than 40,000 species of ground beetles in the world. The expediency of a comprehensive study of ground beetles, which are widespread in all natural and technogenic environments and effectively destroy pests of agricultural crops, is shown [1,2,3].

Ground beetle research was carried out in the Kyzylkum desert, one of the largest deserts in Central Asia, during 2020-2022.

In order to determine their fauna, sampling was carried out along designated routes and at designated locations. For this, samples were taken from the territory along the route in the direction of Nukus-Takhtakopyr, Nukus-Tortkul-Bukhara, Nukus-Uchkuduk, Nukus-Moinak-Orolkum, 5-10 km inside the routes.

The sampling of ground beetles was carried out by general entomological methods and methods developed for the genus Coleoptera.

Here, 43 species and subspecies belonging to 22 genera and 3 subfamilies of ground beetles have been identified. Among the studied species in all seasons, species of such genera as Calosoma, Calomera, Amara, Zabrus, Ophonus, Tachus dominate. In terms of species composition, our data are quite close to those of Davletshina (1979), except that some mesophilic species were not found and the number of desert and semidesert species increased.

**Table 1**

**Species composition of ground beetles of the Kyzylkum desert**

№	Subfamilies and subspecies	
<b>Subfamilies: Carabinae LATREILLE, 1802</b>		
1.	<i>Calosoma algiricum</i>	+
2.	<i>C. auropunctatum dzungaricum</i>	+
3.	<i>C. imbricatum deserticola</i>	+
4.	<i>C. olivieri</i>	+
5.	<i>C. reitteri</i>	+
<b>Subfamilies: Cicindelinae LATREILLE, 1802</b>		
6.	<i>Cicindela deserticola</i>	+
7.	<i>C. lacteola</i>	+
8.	<i>C. melancholica</i>	+
9.	<i>C. obliquefasciata</i>	+



10.	<i>C. sublacerata</i>	+
11.	<i>Megacephala euphratica armenica</i>	+
<b>Subfamilies: <i>Siagoninae</i> BONELLI, 1813</b>		
<b>Subfamilies: <i>Broscinae</i> Hope 1838</b>		
12.	<i>Dyshirius apicalis</i>	+
13.	<i>D. caspius</i>	+
14.	<i>D. cylinricus</i>	+
15.	<i>D. zimini</i>	+
16.	<i>Scarites angustus</i>	+
17.	<i>Scarites eurytus</i>	+
18.	<i>Broscus semistriat</i>	+
19.	<i>B. (Notaphocampa) niloticum</i>	+
20.	<i>Broscus punctatus</i> Dejean, 1828	+
21.	<i>B. Emphanes latiplaga</i>	+
22.	<i>B.(E) tenellum buchariplaga</i>	+
23.	<i>Pogonus virens</i>	+
24.	<i>Pogonistus syrdenus gravi</i>	+
25.	<i>Chlaenius (trichochlaensius) steveni</i>	+
26.	<i>Ch. (Ch) spoliatus</i>	+
27.	<i>Pt. liosomus</i>	+
28.	<i>Agonium extensium</i>	+
29.	<i>Taphoxenus gracilis</i>	+
30.	<i>Amara aena</i>	+
31.	<i>A. ovate</i>	+
32.	<i>A. tescicola</i>	+
33.	<i>A. fedtschenkoi</i>	+
34.	<i>Zabrus morio</i>	+
35.	<i>Carenochirus titanus</i>	+
36.	<i>Ophonus griseus</i>	+
37.	<i>Dicheirotichus ustulatus</i>	+
38.	<i>Anisodactylus pseudoaeneus</i>	+
39.	<i>Lebia (Lebia) menetriesi</i>	+
40.	<i>Microlestes negrita</i>	+
41.	<i>Agatus flavipes</i>	+
42.	<i>Discoptera komarovi</i>	+
43.	<i>Zuphium testaceum</i>	+

According to scientific sources, Davletshina (1979) found 38 species of ground beetles distributed in the Southwestern Kyzylkum. This situation is explained by the large number and diversity of plant species in the study area. This, in turn, leads to the enrichment of the beetle fauna. Although the gravelly, sandy and gypsum deserts of Kyzylkum are similar, the ground beetle fauna is very different in species composition and abundance.



Thus, as a result of our scientific research, it was confirmed that 43 species of ground beetles belonging to 22 genera are common in the sandy deserts of Northwestern Uzbekistan.

It has been proven that the biotopic distribution of the identified desert beetles depends primarily on abiotic, hydroedaphic and biotic environmental factors, is very sensitive to landscape changes and can serve as a good indicator under these conditions. It is necessary to study the ecology of ground beetles in the context of regions, to determine the possibilities of their use in the practice of biological control of harmful species.

## REFERENCES

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