Acta Biologica Sibirica
Vol 10 (2024): Acta Biologica Sibirica, 117–146
Articles

Weevils (Coleoptera, Curculionoidea) of the State National Natural Park "Ulytau" and adjacent territories, Kazakhstan. Report 1.

Izbasar I. Temreshev

LLP "Agro Consult", 010010, Astana, Almaty district, 21 Kanysh Satbaev st., Republic Kazakhstan; LLP Kazakh Scientific Research Institute of Plant Protection and Quarantine named after Zh. Zhiembayev, Almaty, Republic Kazakhstan

The results of primary studies of the fauna of weevils (Coleoptera, Curculionoidea) in the "Ulytau" State National Natural Park and in adjacent territories are presented. In total, 54 species, 40 genera and four families of weevil beetles are recorded, including 2 species Anthribidae, 3 species Attelabidae, 10 species Brentidae and 39 species Curculionidae. In the territory of the National park, 53 species of weevils belonging to 41 genera from 4 families (Anthribidae, Attelabidae, Brentidae and Curculionidae) are recorded. For the adjacent territories, 39 species of weevils belonging to 30 genera from 3 families (Anthribidae, Brentidae and Curculionidae) are recorded. *Dryophthorus corticalis* (Paykull, 1792) is firstly recorded from Kazakhstan. The distribution in Kazakstan of several other species of weevils (*Platystomos albinus* (Fabricius, 1758), *Perapion affine* (Kirby, 1808), *Allomalia quadrivirgata* (Costa, 1863), *Eremoxenus chan* Semenow-Tian-Schanskij, 1892, *Polydrusus piliferus* Hochhuth, 1847, *Orchestes alni* (Linnaeus, 1758), are *Orchestes jota* Fabricius, 1787) are clarified.

Acta Biologica Sibirica 10: 117–146 (2024) doi: 10.5281/zenodo.10874628

Corresponding author: Izbasar I. Temreshev (temreshev76@mail.ru)

Academic editor: R. Yakovlev | Received 27 January 2024 | Accepted 9 March 2024 | Published 28 March 2024

http://zoobank.org/EDD8AB0E-392A-458C-87C7-09D065C84BE2

Citation: Temreshev II (2024) Weevils (Coleoptera, Curculionoidea) of the State National Natural Park "Ulytau" and adjacent territories, Kazakhstan. Report 1. Acta Biologica Sibirica 10: 117–146. https://doi.org/10.5281/zenodo.10874628

Keywords

Specially protected natural area, checklist, Anthribidae, Attelabidae, Rhynchitinae, Dryophthorinae, Apioninae, Brentidae, Curculionidae, Scolytinae, Central Kazakhstan

Introduction

State National Natural Park "Ulytau" is located in the Ulytau region of Kazakhstan. Founded in accordance with the Decree of the Government of Kazakhstan No. 867 dated December 7, 2021 through the reorganization of the Ulytau forest and wildlife protection enterprise (Decree of the Government of the Republic of Kazakhstan dated December 7, 2021 No. 867 2023). The park was

created to restore and preserve ecosystems and natural complexes of the Ulytau mountain-steppe massif, as well as increase the tourism potential of the region. The head office is located in the village of Ulytau, 133 km from the regional center – the city of Zhezkazgan, with which it is connected by a highway. The area of the national natural park is 58.9 thousand hectares, the forested part is 7.918 hectares. The territory includes both meadow and steppe biotopes with lakes, rivers and artificial reservoirs, and the slopes of the Ulytau Mountains – an ancient low mountain range in the southwest of the Kazakh hills. The ridge is composed predominantly of granites. The slopes are dissected by gorges of temporary streams, bare and rocky. On the slopes there is predominantly steppe vegetation, in places in moist depressions there are birch and aspen groves, in rock crevices there are steppe grasses, wormwood, and ephedra; on rocky screes – shrubs. Extends of ridge is 200 km from north to south. The highest point is Mount Akmeshit, 1133 m above sea level. There are branches in the neighborhoods of the villages of Korgasyn, Sarlyk, Koskol and the Satpayev city (Specially Protected Natural Areas of the Republic of Kazakhstan 2023).

Weevils (Curculionoidea Latreille, 1802) are the largest group of phytophagous beetles. Approximately 97 000 species of weevils are known, incl. family Anthribidae Billberg, 1820, Attelabidae Billberg, 1820, Brentidae Billberg, 1820, Nemonychidae Bedel, 1882, Cimberididae Gozis, 1882, Caridae Thompson, 1992, Belidae Schönherr, 1826 and Curculionidae Latreille, 1802, at the same time, the taxonomy of the superfamily is a subject of debate. New species and genus are described every year, so the number indicated is not final (Legalov 2021; Legalov 2022a, b; Legalov and Kozlov 2023). Beetles of this superfamily are distributed all over the world. The group is represented by multispecies complexes in almost all natural (terrestrial, arboreal, soil, semiaquatic, freshwater etc.) and anthropogenic ecosystems. Many weevils are dangerous pests because of their ability to damage and kill crops, trees and busch, as well as storage grain and other products.

The fauna of weevils of the State National Natural Park "Ulytau" has been practically not studied. There is separate information on the adjacent territories of Ulytau oblast and neighboring regions of Central Kazakhstan (Arnoldi 1964; Baytenov 1974; Legalov 2017a, b; Kazenas and Baizhanov 2009; Temreshev et al. 2014; Temreshev 2023a; Temreshev et al. 2023). However, a general checklist of the above group for this specially protected natural area has not yet existed.

Materials and methods

The material was collected from May to August 2023 in Central Kazakhstan, Ulytau oblast. Standard techniques (Fasulati 1971) used in entomology were used during the collection of the material. The following sources (Ter-Minasyan 1950; Mityaev 1958; Yukhnevich 1958; Yukhnevich et al. 1958; Matesova et al. 1962; Samedov 1963; Arnoldi 1964; Arnoldi et al. 1965; Ter-Minasyan 1965; Baitenov 1968a, b; Kostin 1973; Arnoldi et al. 1974; Baytenov 1974; Ter-Minasyan 1974a, b; Terinasyan 1975; Egorov 1976; Mamaev et al. 1979; Ter-Minasyan 1988; Nurmuratov 1998; Korotyaev 1991; Ismukhambetov 1993; Egorov et al. 1996; Opanasenko and Legalov 1996; Leagalov 2006; Kazenas and Baizhanov 2009; Legalov 2010, 2020; Alonso-Zarazaga 2011a, b, c 2011; Caldara 2011; Knizek 2011; Lyal 2011; Nazarenko 2011; Pešić 2011; Prena 2011; Sforzi 2011; Temreshev 2011; Tryzna and Valentine 2011; Mantillieri 2012; Caldara 2013a, b; Colonelli 2013; Hlavac and Maughan 2013; Lapeva-Gjonova 2013; Meregalli et al. 2013; Skuhrovec 2013; Temreshev 2013; Tem- reshev and Esenbekova 2013; Yunakov et al. 2013; Temreshev 2014a, b; Temreshev et al. 2014; Temreshev 2016a, b; Arzanov 2017; Legalov 2017a, b; Temreshev 2017a, b; Kizub and Slutsky 2018; Prena 2018; Legalov 2021; Legalov 2022a, b; Alonso-Zarazaga et al. 2023; Legalov and Kozlov 2023; Temreshev 2023a; Temreshev et al. 2023; *Dryophthorus corticalis* (Paykull & G.de, 1792) in GBIF Secretariat (2023)) were used for species determination of the beetles, clarification of their taxonomic position, biology and the distribution. The material was collected were determined autor. Studied specimens are kept in the private collection of I.I. Temreshev (Almaty, Kazakhstan).

The taxonomy of weevils is given mostly in accordance with Cooperative catalogue of Palaearctic Coleoptera Curculionoidea. Work Version 3.1 (Alonso-Zarazaga et al. 2023).

The plants that the material was collected were determined using special literature (Flora of Kazakhstan 1956; 1958; 1960; 1961a, b; 1963; 1964; 1965; 1966).

Photographs of weevils and their habitat were taken with a camera Redmi 7, Canon EOS 50 D and microscope Levenhuk DTX RC by author (Figs 2, 4). Descriptions and body measuring were performed using a Micromed MC var 1-C dissecting stereomicroscope and microscope Levenhuk DTX RC.

For convenience as well as some geographical and administrative terms: UO – Ulytau oblast, Ud. – Ulytau district, ex. – exemplar, mt. – mounts, nei. – neighborhoods, v. – village and the initials of the collector: IT – I.I. Temreshev.

The coordinates of the material collection locations: Zhezkazgan city, shore of the Kengir reservoir – N 47°48'22.42" E 67°41'48.32"; Zhezkazgan city, bus terminal area – N 47°46'49.52" E 67°41'32.68"; Nei. Talap v. – N 47°40'8.11" E 67°51'45.16"; Satpayev city, shore of lake Ainakol – N 47°52'51.07" E 67°33'29.56"; Nei. Karsakpai v. – N 47°50'2.56" E 66°43'40.60; Nei. Baikonur v. – N 47°49'8.96 E 66° 2'29.14"; Nei. Terekty v. – N 48° 4'31.88" E 68°32'10.71"; Nei. Zhezdy v. – N 48° 3'24.33" E 67° 3'30.21"; Nei. Ulytau v. – N 48°38'48.48" E 67° 2'10.88"; Nei. Sarlyk v. – N 48°43'8.63"E 66°42'5.82"; Nei. Korgasyn v. 1– N 49°12'25.21" E 66°39'36.39"; Nei. Korgasyn v. 2 – N 49°14'4.02" E 66°39'23.48"; Nei. Koskol v. – N 49°30'55.31" E 67° 4'9.25".

The locations of material collection are shown on the map (Fig. 1).

Figure 1. *The locations of material collection. Red line - borders of the main territory of Ulytau National Park. Red circles – branches in the neighborhoods of the villages of Korgasyn, Koskol and the Satpayev city.*

When collecting material, both a variety of natural terrestrial and aquatic biocenoses and anthropogenically disturbed biomes were examined (Fig. 2).

The division of the territory of Kazakhstan into regions is given according to the work of M.S. Baitenov (Baytenov 1974), with some changes (Fig. 3).

Result

As a result of the research, a preliminary checklist of weevils of the State National Natural Park "Ulytau" has been compiled. Some of them are shown in the figures below (Fig. 4).

Superfamily Curculionoidea Latreille, 1802

Family Anthribidae Billberg, 1820

1. Platystomos albinus (Fabricius, 1758) (Fig. 4A, B). This species develops under the bark of rotten deciduous trees (*Alnus*, *Salix*, *Querqus*, *Populus*, *Betula*, *Acer*, *Fagus*, *Tilia*, *Castanea*, *Crataegus*, etc.). Slightly harmful (Ter-Minasyan 1965; 1974; Mamaev et al 1979; Egorov 1996).

Distribution in Kazakhstan: East, South-East (Baytenov 1974). It is firstly recorded from Central Kazakhstan.

Material examined. 1 ex. ♀ – 25.05.2023, UO, Ud, nei. Zhezdy v., on White willow *Salix alba* L., IT; 1 ex. ♂, 1 ex. ♀ – 25.05.2023, UO, Ud, nei. Sarlyk v., on European white birch *Betula pendula* Roth, IT; 2 ex. ♀ – 20.06.2023, UO, Ud, nei. Ulytau v., on European aspen *Populus tremula* L., IT.

2. Tropideres albirostris (Herbst, 1783). This species develops under decaying bark, in rotten wood of various deciduous species (Ter-Minasyan 1965; Mamaev et al. 1979).

Distribution in Kazakhstan: East, Central South, South-East (Baytenov 1974; Temreshev 2014a; 2016a; Legalov 2017a).

Material examined. 1 ex. ♂ – 25.05.2023, UO, Ud, nei. Sarlyk v., on European white birch *B. pendula*, IT; 1 ex. ♀ – 20.06.2023, UO, Ud, nei. Ulytau v., on European aspen *P. tremula*, IT.

Family Attelabidae Billberg, 1820

Subfamily Attelabinae Billberg, 1820

3. Apoderus coryli Linnaeus, 1758 (Fig. 4C). This species develops to *Corylus*, *Alnus*, *Fagus*, *Quercus*, *Betula*, *Salix* (Ter-Minasyan 1955, 1974; Opanasenko and Legalov 1996).

Distribution in Kazakhstan: North, Central, East (Baytenov 1974; Legalov 2017a).

Material examined. 3 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., birch grove, on European white birch *B. pendula*, IT; 2 ex. – 20.06.2023, UO, Ud, nei. Ulytau v., aspen grove, on European aspen *P. tremula*, IT.

Subfamily Rhynchitinae Gistel, 1848

4. Auletobius sanguisorbae Schrank, 1798 (Fig. 4D). This species develops to Rosa, Sanguisorba (Baytenov 1974; Opanasenko and Legalov 1996; Legalov 2006). Distribution in Kazakhstan: West,

North, Central, East (Baytenov 1974; Legalov 2017a).

Material examined. 1 ex. – 25.05.2023, UO, Ud, nei. Koskol v., on Common briar *Rosa canina* L., IT; 5 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., on Barnet rose *Rosa spinosissima* L., IT; 4 ex. – 20.06.2023, UO, Ud, nei. Ulytau v., on Burnet bloodwort *Sanguisorba officinalis* L., IT; 3 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v., birch grove, on Burnet bloodwort *S. officinalis*, IT.

5. *Byctiscus betulae* Linnaeus, 1856. This species develops to *Betula*, *Pyrus*, *Alnus*, *Corylus*, *Tilia*, *Populus*, *Corylus*, *Salix*, *Acer*, *Ulmus*, *Vitis*. Harmful to grapes, raspberries, roses, cherries, rowan trees, hazel trees, green spaces (Ter-Minasyan 1955; Yukhnevich et al. 1958; Matesova et al. 1962; Samedov 1963; Baytenov 1974; Ter-Minasyan 1974; Legalov 2006).

Distribution in Kazakhstan: West, North, Central, East (Baytenov 1974; Legalov 2017a).

Material examined. 3 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., on European white birch *B. pendula*, IT; 1 ex. – 20.06.2023, UO, Ud, nei. Ulytau v., on European aspen *P. tremula*, IT.

Family Brentidae Billberg, 1820

Subfamily Apionidae Schoenherr, 1823

6. *Trichapion simile* (Kirby, 1811). Throughout most of its range the species is oligophagous on various spcies of birches *Betula* (Arnoldi et al 1974; Ter-Minasyan 1975).

Distribution in Kazakhstan: North, Central, East, South, Southeast (Baytenov 1974; Ter-Minasyan 1975; Temreshev 2016a).

Material examined. 3 ex. – 25.05.2023, UO, Ud, nei. Ulytau v., on European white birch *B. pendula*, IT; 5 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., on European white birch *B. pendula*, IT; 2 ex. – 20.06.2023, UO, Ud, nei. Ulytau v., on European white birch *B. pendula*, IT.

7. *Malvapion malvae* (Fabricius, 1775). This species develops on Malvaceae (*Malva*, *Althaea*, etc.). Imago marked on birch, plum and other trees (Arnoldi et al 1974).

Distribution in Kazakhstan: Sporadic throughout (Baytenov 1974).

Material examined. 5 ex. – 23.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on Garden tree-mallow *Malva thuringiaca* (L.) Vis. and Common hollyhock *Alcea rosea* L., IT; 2 ex. – 25.05.2023, UO, Ud, nei. Zhezdy v., on Cheeseweed mallow *Malva parviflora* L., IT; 7 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., on Common marsh-mallow *Althaea officinalis* L., IT; 4 ex. – 20.06.2023, UO, Ud, nei. Ulytau v., on Garden tree-mallow *M. thuringiaca*, IT IT.

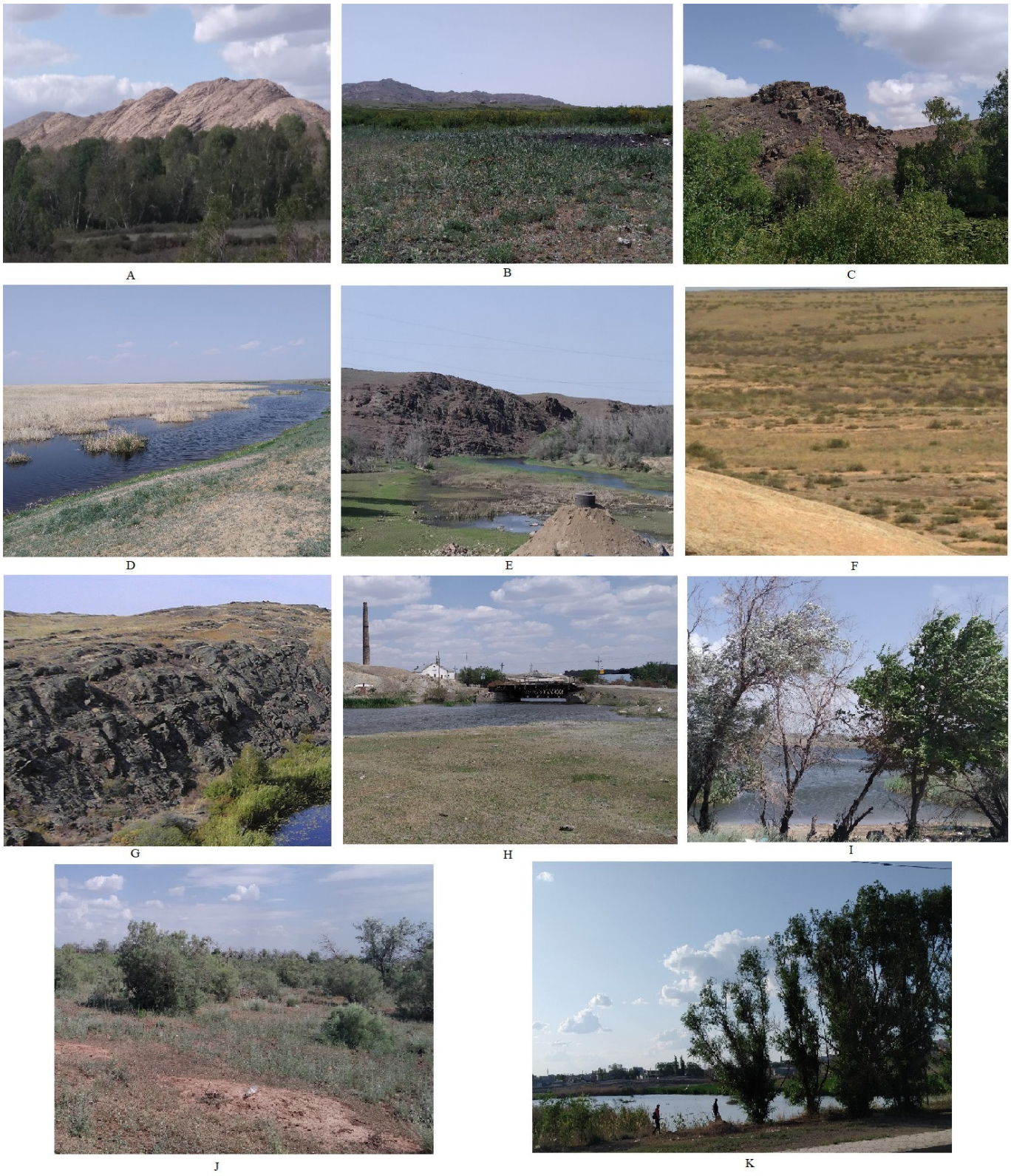

Figure 2. *Habitat of weevils of the State National Natural Park "Ulytau" and adjacent territories: neighborhoods of Ulytau village (A), neighborhoods of Sarlyk village (B), neighborhoods of Korgasyn village (C), neighborhoods of Koskol village (D), neighborhoods of Zhezdy village (E), neighborhoods of Terekty village (F), neighborhoods of Baikonur village (G), neighborhoods of Karsakpai village (H), Satpayev city, shore of lake Ainakol (I), neigh- borhoods of Talap village (J), Zhezkazgan city, shore of the Kengir reservoir (K).*

Figure 3. *The division of the territory of Kazakhstan into regions.*

8. *Perapion affine* (Kirby, 1808) (Fig. 4E). This species develops on leguminous plants (Fabacea), in particular, on the *Lathyrus*. Slightly harmful (Arnoldi et al 1974; Ter-Minasyan 1975).

Distribution in Kazakhstan: West (Baytenov 1974). Is firstly recorded from Central Kazakhstan.

Material examined. 4 ex. – 25.05.2023, UO, Ud, nei. Ulytau v., on Meadow pea *Lathyrus pratensis* L., IT; 3 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., on Chickpea milkvetch A*stragalus cicer* L., IT; 6 ex. – 20.06.2023, UO, Ud, nei. Ulytau v., on Meadow pea *L. pratensis*, IT.

9. *Pseudaplemonus artemisiae* (Moravitz, 1861). This species develops on a Matted sealavender *Limonium bellidifolium* (Gouan) Dumort. Steppes, salt marshes (Kizub and Slutsky 2018).

Distribution in Kazakhstan: West, North, Central (Baytenov, 1974; Korotyaev 1991; Kazenas and Baizhanov 2009; Legalov 2017a; Kizub and Slutsky 2018; Temreshev et al 2023).

Material examined. 2 ex. – 20.06.2023, UO, Ud, nei. Ulytau v., on Matted sealavender *Limonium bellidifolium* (Gouan) Dumort, IT.

10. *Rhopalapion longirostre* (Olivier, 1807). This species develops on Malvaceae but are almost always associated with Common hollyhock *A. rosea* (Arnoldi et al. 1974)

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Temreshev 2016a).

Material examined. 7 ex. – 23.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on Garden tree-mallow *Malva thuringiaca* (L.) Vis. and Common hollyhock *A. rosea*, IT; 5 ex. – 25.05.2023, UO, Ud, nei. Zhezdy v., on Cheeseweed mallow *M. parviflora*, IT; 6 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., on Common marshmallow *A. officinalis*, IT; 8 ex. – 20.06.2023, UO, Ud, nei. Ulytau v., on Garden tree-mallow *M. thuringiaca*, IT; 1 ex. – 24.08.2023, UO, Ud, nei. Ulytau v., on Garden tree-mallow *M. thuringiaca*, IT; 2 ex. – 24.08.2023, UO, Ud, nei. Sarlyk v., on Garden tree-mallow *M. thuringiaca*, IT.

Subfamily Nanophyinae Gistel, 1848

11. Allomalia quadrivirgata (Costa, 1863). This species develops on a *Tamarix*. Slightly harmful (Mityaev 1958; Baytenov 1974; Nazarenko 2011).

Distribution in Kazakhstan: South-East (Mityaev 1958). It is firstly recorded from Central Kazakhstan.

Material examined. 8 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on Saltcedar *Tamarix ramosissima* Ledeb., IT; 4 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on a Saltcedar *T. ramosissima*, IT; 14 ex. – 24.05.2023, UO, Ud, Satpayev city, shore of lake Ainakol, on Saltcedar *T. ramosissima* and *Tamarix gracilis* Willd., IT; 6 ex. – 24.05.2023, UO, Ud, nei. Ulytau v., on Saltcedar *T. ramosissima*, IT; 8 ex. – 20.06.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on Saltcedar *T. ramosissima*, IT; 5 ex. – 20.06.2023, UO, Ud, Satpayev city, shore of lake Ainakol, on Saltcedar *T. ramosissima*, IT.

12. *Corimalia fausti* (Reitter, 1890). This species develops on a *Tamarix*. Slightly harmful (Mityaev 1958; Baytenov 1974; Nazarenko 2011).

Distribution in Kazakhstan: South, South-East (Baytenov 1974; Legalov 2017a).

Is firstly recorded from Central Kazakhstan.

Material examined. 5 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on Saltcedar *T. ramosissima*, IT; 2 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on Saltcedar *T. ramosissima*, IT; 7 ex. – 24.05.2023, UO, Ud, Satpayev city, shore of lake Ainakol, on Saltcedar *T. ramosissima* and *T. gracilis*, IT; 3 ex. – 24.05.2023, UO, Ud, nei. Ulytau v., on Saltcedar *T. ramosissima*, IT.

13. *Corimalia helenae* Korotyaev et Zherichin, 1996. This species develops on a *Tamarix*. Slightly harmful (Mityaev 1958; Baytenov 1974; Nazarenko 2011).

Distribution in Kazakhstan: West, Central, South, South-East (Baytenov 1974; Kazenas and Baizhanov 2009; Legalov 2017a).

Material examined. 4 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on Saltcedar *T. ramosissima*, IT; 2 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on Saltcedar *T. ramosissima*, IT; 5 ex. – 24.05.2023, UO, Ud, nei. Ulytau v., on Saltcedar *T. ramosissima*, IT; 2 ex. – 24.05.2023, UO, Ud, nei Zhezdy v., on Saltcedar *T. ramosissima*, IT; 4 ex. – 20.06.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on a Saltcedar *T. ramosissima*, IT; 2 ex. – 20.06.2023, UO, Ud, Satpayev city, shore of lake Ainakol, ona Saltcedar *T. ramosissima*, IT; 3 ex. – 12.07.2023, UO, Ud, Satpayev city, shore of lake Ainakol, on Saltcedar *T. ramosissima* and *T. gracilis*, IT; 4 ex. – 14.07.2023, UO, Ud, nei Zhezdy v., on Saltcedar *T. ramosissima*, IT; 3 ex. – 23.08.2023, UO, Ud, nei Zhezdy v., on Saltcedar *T. ramosissima*, IT.

14. *Titanomalia komaroffi* (Faust, 1877). This species develops on a *Tamarix*. Forms galls. Very harmful (Mityaev 1958; Baytenov 1974; Legalov 2021c).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Temreshev 2014a; Legalov 2021c).

Material examined. 3 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on Saltcedar *T. ramosissima*, IT; 1 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on Saltcedar *T. ramosissima*, IT; 5 ex. – 24.05.2023, UO, Ud, Satpayev city, shore of lake Ainakol, on Saltcedar *T. ramosissima*, IT; 2 ex. – 24.05.2023, UO, Ud, nei. Ulytau v., on Saltcedar *T. ramosissima*, IT.

Subfamily Brentinae Billberg, 1820

15. *Eremoxenus chan* Semenow-Tian-Schanskij, 1892 (Fig. 4F). This species lives in a community with carpenter ants (*Camponotus turkestanicus* Emery, 1887) (Mantillieri 2012; Lapeva-Gjonova 2013).

Distribution in Kazakhstan: West, South (Legalov 2017a). It is firstly recorded from Central Kazakhstan.

Material examined. 1 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., dead under stoun on shore of lake, IT; 1 ex. – 19.06.2023, UO, Ud, nei. Baikonur v., on a log near the anthill of *C. turkestanicus*, IT.

Family Curculionidae Latreille, 1802

Subfamily Bagoinae Thomson, 1859

16. *Bagous argillaceus* Gyllenhal, 1836. On aquatic plants, presumably related to Polygonaceae (*Polygonum* and *Rumex*) (Arnoldi et al 1965; Baytenov 1974).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Temreshev 2012; Temreshev and Esenbekova 2013; Temreshev 2014a; Temreshev et al 2014; Temreshev 2016a, b; Legalov 2017a; Temreshev 2023b).

Material examined. 2 ex. – 22.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, in aquatic plants, IT; 5 ex. – 25.05.2023, UO, Ud, nei. Ulytau v., in aquatic plants, IT.

17. *Bagous glabrirostris* (Herbst, 1795) (Fig. 4G). On aquatic plants – *Stratiotes*, *Ceratophyllum*, *Potamogeton*, *Alisma*, etc. (Arnoldi et al 1965; Baytenov 1974).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Temreshev and Esenbekova 2013; Temreshev 2014b; 2016a, b; Legalov 2017a; Temreshev 2018; 2023a).

Material examined. 1 ex. – 22.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, in aquatic plants, IT; 1 ex. – 25.05.2023, UO, Ud, nei. Ulytau v., in aquatic plants, IT.

Subfamily Erirhininae Schönherr, 1825

18. *Arthrostenus fullo* Boheman, 1836. On semi-aquatic plants (Arnoldi et al 1974; Baytenov 1974).

Distribution in Kazakhstan: Central, South, South-East (Baytenov 1974; Temreshev and Esenbekova 2013; Temreshev 2015; 2016a, b; Legalov 2017a; Temreshev 2018).

Material examined. 2 ex. – 22.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on Common reed *Ph. australis*, IT; 1 ex. – 25.05.2023, UO, Ud, nei. Ulytau v., dead in net of spider *Larinioides ixobolus* (Thorell, 1873), IT.

19. *Lepidonotaris petax* Sahlberg, 1829. On reeds along the banks of reservoirs, especially brackish ones (Arnoldi et al 1974; Baytenov 1974; Egorov et al 1996).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Temreshev 2014b; Temreshev et al 2014; Legalov 2017a).

Material examined. 1 ex. – 22.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on Common reed *Ph. australis*, IT; 1 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., bank of stream, on Wood

club-rush *S. sylvaticus*, IT; 2 ex. – 22.07.2023, UO, Ud, nei. Baikonur v., dead under stoun, IT; ex. – 23.07.2023, UO, Ud, nei. Terekty v., on Common reed *Ph. australis*, IT.

Subfamily Conoderinae Schönherr, 1833

20. *Baris artemisia*e (Herbst, 1795). On the wormwoods. Damages pasture vegetation (Arnoldi et al 1974; Baytenov 1968b; 1974).

Distribution in Kazakhstan: West, North, Central, South (Baytenov 1974; Legalov 2017a).

Material examined. 3 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, mowing with a net, IT; 5 ex. – 26.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 3 ex. – 26.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT.

21. *Coryssomerus capucinus* (Beck, 1817). This species develops on Asteraceae (Arnoldi et al 1965; Baytenov 1974; Legalov 2023).

Distribution in Kazakhstan: North, Central (Baytenov 1974; Legalov 2017a; 2023).

Material examined. 2 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, on *T. achilleifolium*, IT; 3 ex. – 26.05.2023, UO, Ud, nei. Sarlyk v., *A. millefolium*, IT; 2 ex. – 26.05.2023, UO, Ud, nei. Koskol v., on *Matricaria chamomilla* L., IT.

22. *Eubrychius velutus* Becker, 1817. On the *Myriophyllum* (Arnoldi et al 1974; Baytenov 1974).

Distribution in Kazakhstan: Central (Baytenov 1974).

Material examined. 1 ex. – 22.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on Eurasian watermilfoil *Myriophyllum spicatum* L., IT; 2 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., on American watermilfoil *M. sibiricum* Kom., IT; 1 ex. – 22.07.2023, UO, Ud, nei. Baikonur v., on Myriadleaf *M. verticillatum* L., IT; 2 ex. – 23.07.2023, UO, Ud, nei. Terekty v., on Myriadleaf *M. verticillatum*, IT.

23. *Phytobius leucogaster* (Marsham, 1802). On *Myriophyllum* (Arnoldi et al 1974; Baytenov 1974; Legalov and Stolbov 2022).

Distribution in Kazakhstan: North, Central, South, South-East (Baytenov 1974; Temreshev 2016b; Legalov 2017a; Legalov and Stolbov 2022).

Material examined. 2 ex. – 22.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on Eurasian watermilfoil *M. spicatum*, IT; 4 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., on American watermilfoil *M. sibiricum*, IT; 1 ex. – 22.07.2023, UO, Ud, nei. Baikonur v., on Myriadleaf *M. verticillatum*, IT; 3 ex. – 23.07.2023, UO, Ud, nei. Terekty v., on Myriadleaf *M. verticillatum*, IT.

Subfamily Curculioninae Latreille, 1802

24. *Orchestes alni* (Linnaeus, 1758). On willow, alder, birch (Ter-Minasyan 1953; Baytenov 1974).

Distribution in Kazakhstan: North (Baytenov 1974). It is firstly recorded from Central Kazakhstan.

Material examined. 7 ex. – 22.06.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on *S. alba* and *P. tremula*, IT; 4 ex. – 20.07.2023, UO, Ud, in the same place, on *S. alba*, IT.

25. *Orchestes jota* Fabricius, 1787 (Fig. 4H). On willow, alder, birch (Arnoldi et al 1965; Baytenov 1974).

Distribution in Kazakhstan: North (Baytenov 1974; Legalov 2017a). It is firstly recorded from Central Kazakhstan.

Material examined. 2 ex. – 25.05.2023, UO, Ud, nei. Ulytau v., on *S. alba*, IT; 3 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., on *B. pendula*, IT; 4 ex. – 25.05.2023, UO, Ud, nei. Koskol v., on *S. alba*, IT.

26. *Tychius flavus* Becker, 1864. On alfalfa, clover, sweet clover, harmful (Samedov 1963; Arnoldi et al 1965; 1974; Baytenov 1974).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Legalov 2017a).

Material examined. 4 ex. – 26.05.2023, UO, Ud, nei. Korgasyn v., mowing with a net, IT; 6 ex. – 26.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 7 ex. – 26.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 6 ex. – 22.06.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, mowing with a net, IT.

27. *Tychius meliloti* Stephens, 1831. On sweet clovers, especially *Melilotus officinalis* (L.) Lam., harmful. (Arnoldi et al 1965; Baytenov 1974).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Temreshev et al 2014; Temreshev 2016a; Legalov 2017a).

Material examined. 4 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, mowing with a net, IT; 7 ex. – 26.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 9 ex. – 26.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 5 ex. – 22.06.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, mowing with a net, IT.

28. *Tychius picirostris* (Fabricius, 1787). On *Trifolium*, harmful (Arnoldi et al 1965; Baytenov 1974).

Distribution in Kazakhstan: Central, South (Baytenov 1974; Temreshev et al 2014; Legalov 2017a).

Material examined. 3 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, mowing with a net, IT; 5 ex. – 26.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 7 ex. – 26.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 2 ex. – 22.06.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, mowing with a net, IT.

Subfamily Dryophthorinae Schoenherr, 1825

29. *Dryophthorus corticalis* (Paykull, 1792) (Fig. 4I). This species develops to wood of coniferous and deciduous species, occasionally in the forest floor. An as sociation with anthills of ants of the genus *Lasius* has been noted. It often lives near anthills, but whether there is a connection between ants and this beetle is not known for certain. The larva is thought to feed on dead wood but beyond this little is known of the beetle’s biology. Despite its wide distribution the species is generally very local and considered to be rare e.g. in Germany and the United Kingdom it is classed as endangered and in Denmark critically so, but the general lack of records may be at least partly due to its cryptic lifestyle and the lack of appropriate sampling (Pešić 2011).

Material examined. 2 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, birch forest, under bark in rotten wood of dead European white birch *B. pendula*, IT.

Remarks. *D. corticalis* is distributed in Palearctic Region in Europe (Austria, Belarus, Bulgaria, Czechia, Denmark, Estonia, Finlandia, France, Georgia, Germany, Great Britain, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine) and Asia (Far East (Primorskii Krai), Japan and Korea). The species is also noted in Afrotropical Region, Australian Region and Nearctic Region (Egorov 1976; Egorov

et al 1996; Lyal 2011; Prena 2018; Legalov 2020; Alonso-Zarazaga et al 2023; *Dryophthorus corticalis* (Paykull & G.de, 1792) in GBIF Secretariat (2023)). It is firstly recorded from Kazakhstan (Fig. 5).

Note. The species was found along with lined flat bark beetles (Laemophloeidae) – *Placonotus testaceus* (Fabricius, 1787), pleasing fungus beetles (Erotylidae) – *Dacne bipustulata* (Thunberg, 1781), *Triplax russica* (Linnaeus, 1758) and hairy fungus beetles (Mycetophagidae) – *Litargus connexus* (Geoffroy, 1785), *Mycetophagus multipunctatus* Fabricius, 1792, false skin beetles (Biphyllidae) – *Biphyllus lunatus* (Fabricius, 1787) for which the Ulytau Oblast is also a new distribution records in Kazakhstan (Temreshev 2011b; 2019; 2022; 2023a; 2024). No anthills of of ants of the genus *Lasius* were noted nearby, but an anthill of European fire ant *Myrmica rubra* (Linnaeus, 1758) was found next to the examined tree. The birch tree in which the beetle was found was infected mushroom King Alfred's cake *Daldinia concentrica* (Bolton) Cesati et Notaris.

30. *Sitophilus zeamais* Motschulsky, 1855. Dangerous polyphagous pest of stocks and raw materials (Temreshev 2017a).

Distribution in Kazakhstan: Central, South, South-East (Temreshev 2017a, b).

Material examined. 1 ex. – 22.08.2023, UO, Ud, Ulytay v., hotel building, to light, IT.

31. *Sphenophorus abbreviatus* (J.C. Fabricius, 1787). This species develops in the rhizomes of *Scirpus*. Imago marked on *Caragana halodendron* (Pall.) Dum. Cours (Arnoldi et al 1965; Baytenov 1974; Temreshev 2011a, 2016).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Temreshev 2011a; Temreshev 2016a; Legalov 2017a).

Material examined. 1 ex. – 24.05.2023, UO, Ud, nei. Satpaev city, shore of lake Ainakol, on Wood club-rush *Scirpus sylvaticus* L., IT; 1 ex. – 19.06.2023, UO, Ud, nei. Satpaev city, shore of lake Ainakol, on Common reed *Ph. australis*, IT; 1 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., bank of stream, on Wood club-rush *S. sylvaticus*, IT.

32. *Sphenophorus piceus* (Pallas, 1776). This species develops in the rhizomes of large cereals, mainly Common reed *Ph. australis*. Harmful to corn, rice and sugar cane (Arnoldi et al 1965; 1974; Baytenov 1974; Temreshev 2011a; 2016a).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Temreshev 2011a; 2016a; Legalov 2017a).

Material examined. 1 ex. – 22.05.2023, UO, Ud, nei. Baykonur v., shore of river, on Common reed *Ph. australis*, IT; 3 ex. – 23.05.2023, UO, Ud, nei. Terekty v., shore of lake, on Common reed *Ph. australis*, IT; 2 ex. – 24.05.2023, UO, Ud, nei. Satpaev city, shore of lake Ainakol, on Wood club-rush *S. sylvaticus*, IT; 1 ex. – 25.05.2023, UO, Ud, nei. Zhezdy v., shore of river Ulken Zhezdy, on Common reed *Ph. australis*, IT; 1 ex. – 19.06.2023, UO, Ud, nei. Satpaev city, shore of lake Ainakol, dead on road, IT; 3 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., aspen grove, bank of stream, on Wood club-rush *S. sylvaticus*, IT.

Subfamily Entiminae Schoenherr, 1823

33. *Eusomus ovulum* Germar, 1824. This species develops on a Asteracea. Damages sunflower, saffiower, alfalfa, sainfoin, soybean, strawberry, sugar beets, and tree species – oak, ash, maple, elderberry, willow, yellow acacia (Samedov 1963; Arnoldi et al 1965; Baytenov 1974; Arnoldi et al 1974; Ismukhambetov 1993).

Distribution in Kazakhstan: West, Central, South, South-East (Baytenov 1974; Legalov 2017a).

Material examined. 3 ex. – 22.05.2023, UO, Ud, nei. Baikonur v., mowing with a net, I.I. Temreshev; 2 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., mowing with a net, IT; 3 ex. – 23.05.2023, UO, Ud, nei. Terekty v., shore of lake, mowing with a net, IT; 2 ex. – 24.05.2023, UO, Ud, Satpayev city, shore of lake Ainakol, mowing with a net, IT; 5 ex. – 25.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 3 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, mowing with a net, IT; 2 ex. – 25.05.2023, UO, Ud, nei. Talap v., mowing with a net, IT; 1 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, mowing with a net, IT.

34. *Eusomostrophus acuminatus* (Boheman, 1840). Polyphagous, on wormwood, but can harm cereals, alfalfa, and acacia. Capable of parthenogenesis (Baytenov 1974b; Korotyaev 1987; Temreshev et al 2023).

Distribution in Kazakhstan: West, North, Central, East (Arnoldi 1964; Baytenov 1974; Kazenas and Baizhanov 2009; Legalov 2017a).

Material examined. 6 ex. – 23.05.2023, UO, Ud, nei. Terekty v., shore of lake, mowing with a net, IT; 5 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., mowing with a net, IT; 4 ex. – 26.05.2023, UO, Ud, nei. Korgasyn v., mowing with a net, IT; 5 ex. – 26.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 6 ex. – 26.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 2 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, mowing with a net, IT; 3 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT.

35. *Polydrusus piliferus* Hochhuth, 1847. Steppes. Harms Rosaceae by eating buds and grafts, and sugar beets (Samedov 1963; Arnoldi et al 1965; Baytenov 1974b; Arnoldi et al. 1974; Ismukhambetov 1993).

Distribution in Kazakhstan: South, South-East (Baytenov 1974; Temreshev 2014a; 2016a; Legalov 2017a). Is firstly recorded from Central Kazakhstan.

Material examined. 7 ex. – 25.05.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT; 4 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v., mowing with a net, IT; 5 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 3 ex. – 25.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 6 ex. – 21.06.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 3 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, mowing with a net, IT; 2 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT.

36. *Sitona callosus* Gyllenhal, 1834. On various legumes (Fabacea). Damages clover, alfalfa, sainfoin, sand acacia, etc. (Samedov 1963; Arnoldi et al 1965; 1974; Baytenov 1974; Korotyaev 1974).

Distribution in Kazakhstan: Everywhere (Baytenov 1968a, 1974; Legalov 2017a).

Material examined. 8 ex. – 22.05.2023, UO, Ud, nei. Baikonur v., mowing with a net, IT; 5 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., mowing with a net, IT; 5 ex. – 25.05.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT; 7 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, mowing with a net, IT; 8 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 6 ex. – 25.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 9 ex. – 21.06.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 5 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, mowing with a net, IT; 4 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT.

37. *Sitona lineatus* (Linnaeus, 1758). Recorded on various species of legumes, rose leaves, deciduous and coniferous shoots, sugar beets. Damages peas, vetch, clovers, lentils, beets, etc. (Samedov 1963; Arnoldi et al 1965; Baytenov 1974; Ter-Minasyan 1974; Ismukhambetov 1993).

Distribution in Kazakhstan: West, North, East (Baytenov 1974; Legalov 2017a).

Material examined. 6 ex. – 22.05.2023, UO, Ud, nei. Baikonur v., mowing with a net, IT; 3 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., mowing with a net, IT; 4 ex. – 25.05.2023, UO, Ud, nei. Talap v., mowing with a net, IT; 2 ex. – 25.05.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT; 5 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, mowing with a net, IT; 5 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 4 ex. – 25.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 7 ex. – 21.06.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 3 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, mowing with a net, IT; 1 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT.

38. *Sitona macularius* (Marsham, 1802). On legumes. Harmful to alfalfa, peas and other cultivated legumes (Samedov 1963; Arnoldi et al 1965; 1974; Baytenov 1974; Ter-Minasyan 1974).

Distribution in Kazakhstan: Everywhere (Baytenov 1968a, 1974).

Material examined. 4 ex. – 22.05.2023, UO, Ud, nei. Baikonur v., mowing with a net, IT; 3 ex. – 24.05.2023, UO, Ud, Satpayev city, mowing with a net, mowing with a net, IT; 2 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., mowing with a net, IT; 3 ex. – 25.05.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT; 4 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, mowing with a net, IT; 4 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 3 ex. – 25.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 5 ex. – 19.06.2023, UO, Ud, Satpayev city, mowing with a net, mowing with a net, IT; 5 ex. – 21.06.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 3 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, mowing with a net, IT; 2 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT.

39. *Sphaeroptochus fasciolatus* Gebler, 1829. On *Spiraea* and *Caragana* (Arnoldi 1964; Baytenov 1974).

Distribution in Kazakhstan: West, Central, East, South-East (Arnoldi 1964; Baytenov 1974; Kazenas and Baizhanov 2009; Legalov 2017a).

Material examined. 2 ex. – 22.05.2023, UO, Ud, nei. Baikonur v., mowing with a net, IT; 1 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., mowing with a net, IT; 2 ex. – 24.05.2023, UO, Ud, Satpayev city, shore of lake Ainakol, mowing with a net, IT; 2 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, mowing with a net, IT; 3 ex. – 26.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 4 ex. – 26.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 1 ex. – 22.06.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT; 1 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, mowing with a net, IT.

40. *Tanymecus palliatus* (Fabricius, 1793). On various herbs. Polyphagous pest, often damages beets, sunflowers, and other crops (Samedov 1963; Arnoldi et al 1965; 1974; Baytenov 1974; Ismukhambetov 1993).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Kazenas and Baizhanov 2009; Temreshev 2014a; 2016a; Legalov 2017a).

Material examined. 2 ex. – 22.05.2023, UO, Ud, nei. Baikonur v., mowing with a net, IT; 1 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., mowing with a net, IT; 3 ex. – 25.05.2023, UO, Ud, nei. Talap v., mowing with a net, IT; 4 ex. – 23.05.2023, UO, Ud, nei. Terekty v., mowing with a net, IT; 1 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, mowing with a net, IT; 2 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 4 ex. – 25.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 3 ex. – 21.06.2023, UO, Ud, nei. Koskol v., mowing with a net, IT; 2 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, mowing with a net, IT; 1 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., mowing with a net, IT.

Subfamily Lixinae Schoenherr, 1823

41. *Asproparthenis foveicollis* Gebler, 1834. This species develops on a Amaranthaceae. Pest of sugar, fodder and table beets (Ter-Minasyan 1972; Baytenov 1974; Ter-Minasyan 1988; Ismukhambetov 1993).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Ismukhambetov 1993; Kazenas and Baizhanov 2009; Legalov 2017a).

Material examined. 2 ex. – 23.05.2023, UO, Ud, nei. Terekty v., on Saltwort *Salsola* sp., IT; 1 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, dead under stoun, IT; 3 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., on Common lambsquarters *Chenopodium album* L., IT.

42. Asproparthenis punctiventris (Germar, 1824). This species develops on a Amaranthaceae and Polygonaceae. Dangerous pest of sugar, fodder and table beets. Damage to maple and oak leaves was observed (Samedov 1963; Arnoldi et al 1965; Baytenov 1974; Ter-Minasyan 1988; Ismukhambetov 1993).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Temreshev 2014a; Temreshev et al 2014; Temreshev 2016a; Legalov 2017a).

Material examined. 1 ex. – 23.05.2023, UO, Ud, nei. Terekty v., on Saltcedar *T. ramosissima*, IT; 2 ex. – 25.05.2023, UO, Ud, nei. Koskol v., dead under household rubbish, in net of spider *Steatoda albomaculata* (De Geer, 1778), IT; 3 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 1, on Common lambsquarters *Ch. album*, IT.

43. *Asproparthenis vexata* (Gyllenhal, 1834). This species develops on a Amaranthaceae. Pest of sugar beets (Samedov 1963; Arnoldi et al 1965; Baytenov 1974; Arnoldi et al 1974; Ismukhambetov 1993; Nurmuratov 1998; Legalov 2017a).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Ismukhambetov 1993; Nurmuratov 1998; Temreshev et al 2014).

Material examined. 4 ex. – 24.05.2023, UO, Ud, nei. Ulytau v., on Saltwort Salsola sp., IT; 1 ex. – 18.06.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, dead in net of spider *Araneus angulatus* (Clerck, 1758), IT; 2 ex. – 25.05.2023, UO, Ud, nei. Koskol v., on *Halocnemum strobilaceum* (Pall.) M.Bieb., IT.

44. *Conorhynchus nigrivittis* (Pallas, 1781). This species develops on a Amaranthaceae. Pest of sugar beets (Samedov 1963; Arnoldi et al 1965; Baytenov 1974; Arnoldi et al 1974; Ismukhambetov 1993; Nurmuratov 1998).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Ismukhambetov 1993; Nurmuratov 1998; Legalov 2017a).

Material examined. 3 ex. – 22.05.2023, UO, Ud, nei. Baikonur v., on Tatarian orach *Atriplex tatarica* L., IT; 1 ex. – 25.05.2023, UO, Ud, nei. Koskol v., on *H. strobilaceum*, IT.

45. *Cyphocleonus dealbatus* (Gmelin, 1790). This species develops on a Asteracea. Pest of medicinal herbs (Arnoldi et al 1965; Baytenov 1974; Temreshev 2016; Temreshev et al 2023).

Distribution in Kazakhstan: Everywhere (Baytenov 1974; Temreshev 2014a; 2016a; Legalov 2017a; Temreshev et al 2023).

Material examined. 2 ex. – 25.05.2023, UO, Ud, nei. Koskol v., on Field milk thistle *Sonchus arvensis* L., 1753, IT; 1 ex. – 25.05.2023, UO, Ud, nei. Sarlyk v., on Bloodwort *A. millefolium*, IT; 2 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, on Tansies *Tanacetum achilleifolium* (M. Bieb.) Sch.

Bip., IT.

46. *Lixus incanescens* Boheman, 1836. This species develops on a Amaranthaceae. Pest of sugar beets (Samedov 1963; Arnoldi et al 1965; Baytenov 1968a, 1974; Ter-Minasyan 1988; Ismukhambetov 1993; Arnoldi et al 1974; Nurmuratov 1998; Temreshev 2014; Temreshev et al 2014; Temreshev 2016a).

Distribution in Kazakhstan: Everywhere (Baytenov 1968a, 1974; Temreshev 2014a; Temreshev et al 2014; Temreshev 2016a; Legalov 2017a).

Material examined. 2 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on American pigweed *Amaranthus retroflexus* L., IT; 1 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on *T. ramosissima*, IT; 5 ex. – 24.05.2023, UO, Ud, Satpayev city, shore of lake Ainakol, on Common lambsquarters *Ch. album*, IT; 1 ex. – 24.05.2023, UO, Ud, nei. Ulytau v., on Common lambsquarters *Ch. album*, IT; 3 ex. – 19.06.2023, UO, Ud, nei. Baikonur v., on Tatarian orach *A. tatarica*, IT.

47. *Lixus pulverulentus* (J.A. Scopoli, 1763). This species develops on a Asteracea. Damages crops (Amaranthaceae, Malvacea, Fabacea) (Samedov 1963; Arnoldi et al 1965; Ter-Minasyan 1965; Baitenov 1968a, 1974; Arnoldi et al 1974; Arzanov 2017).

Distribution in Kazakhstan: Everywhere (Baytenov 1968a, 1974; Temreshev 2014a; 2016a; Legalov 2017a).

Material examined. 2 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on *S. arvensis*, IT; 7 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on Chardon penche *Carduus nutans* L., 1753, IT; 6 ex. – 24.05.2023, UO, Ud, Satpayev city, shore of lake Ainakol, on Chardon penche *C. nutans*, 1753, IT; 3 ex. – 24.05.2023, UO, Ud, nei. Ulytau v., on *I. helenium*, IT; 4 ex. – 22.06.2023, UO, Ud, nei. Ulytau v., on Chardon penche *C. nutans*, IT; 2 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., dead under stoun, IT.

Subfamily Scolytinae Latreille, 1804

48. *Anisandrus dispar* Fabricius, 1792. This species develops on a *Betula*, *Populus*, *Acer*, *Fraxinus*, *Querqus*, *Fagus*, *Carpinus*, fruits threes (Kostin 1973; Temreshev 2013).

Distribution in Kazakhstan: North, Central, East, South-East (Kostin 1973; Temreshev 2013; Legalov 2022).

Material examined. 7 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., on White willow *S. alba* and black poplar *Populus nigra* L., IT; 12 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on European aspen *P. tremula* and White willow *S. alba*, IT; 3 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on silver poplar *Populus alba* L., 1753, IT; 5 ex. – 24.05.2023, UO, Ud, nei. Ulytau v., a European aspen *P. tremula*, IT; 2 ex. – 24.05.2023, UO, Ud, nei Zhezdy v., on White willow *S. alba*, IT; 3 ex. – 24.05.2023, UO, Ud, nei. Satpaev city, shore of lake Ainakol, on White willow *S. alba*, I.I. Temreshev; 9 ex. – 20.06.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on European aspen *P. tremula* and White willow *S. alba*, IT; 2 ex. – 19.06.2023, UO, Ud, Satpayev city, shore of lake Ainakol, on White willow *S. alba*, IT; 3 ex. – 19.06.2023, UO, Ud, nei. Baikonur v., on White willow *S. alba*, IT; 8 ex. – 20.06.2023, UO, Ud, nei. Ulytau v., on European white birch *B. pendula*, IT; 3 ex. – 12.07.2023, UO, Ud, Satpayev city, shore of lake Ainakol, on White willow *S. alba*, IT; 4 ex. – 12.07.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on European aspen *P. tremula*, IT; 3 ex. – 22.08.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on White willow *S. alba*, IT; 6 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, on European white birch *B. pendula*, IT.

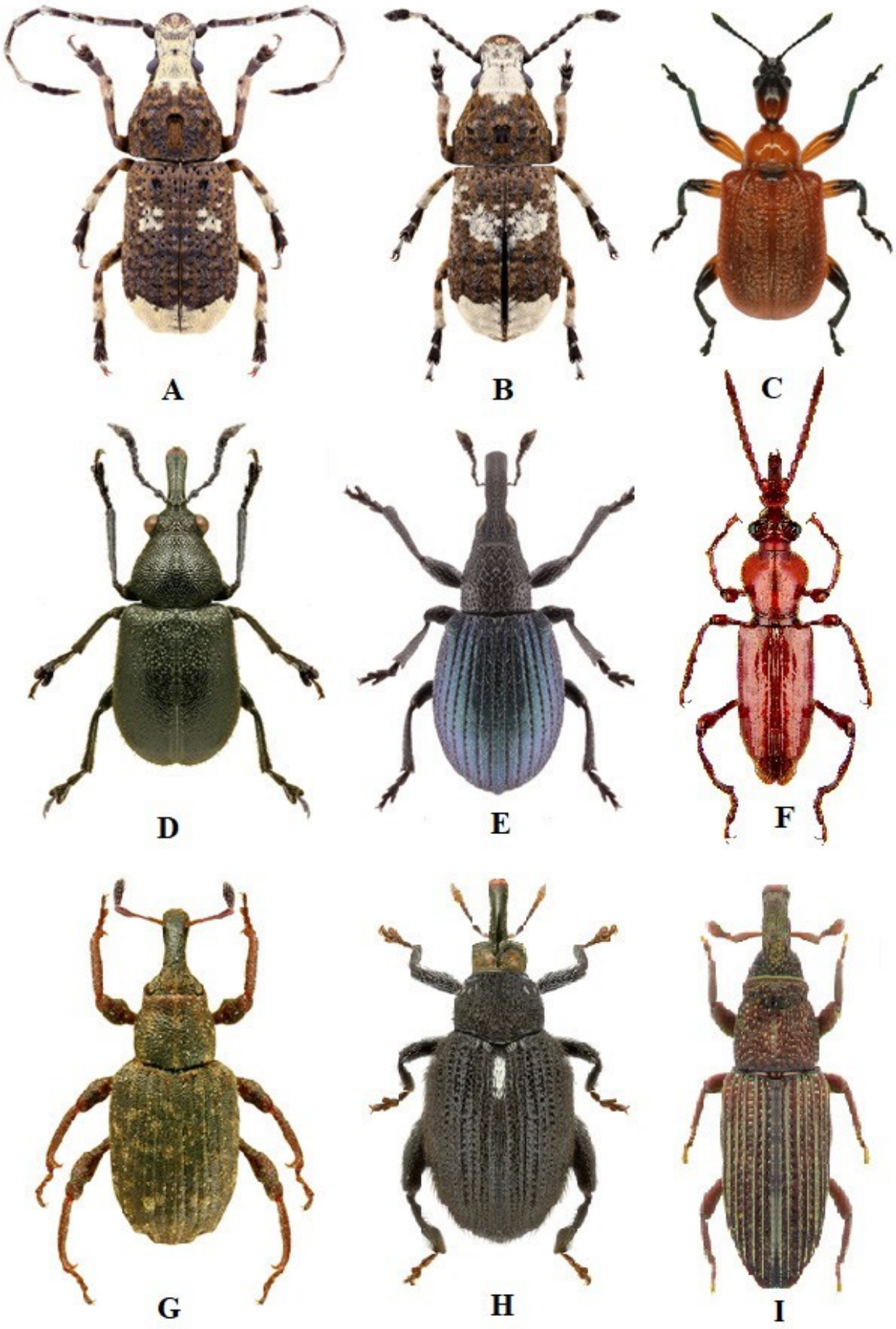
A
B
C
D
E
F
G
H
I

Figure 4. *Some species of the weewils from State National Natural Park "Ulytau": Platystomos albinus, male (A) and female (B); Apoderus coryli (C); Auletobius sanguisorbae (D); Perapion affine (E); Eremoxenus chan (F); Orchestes jota (G); Dryophthorus corticalis (H); Bagous glabrirostris (I). Central Kazakhstan.*

49. *Heteroborips cryptographus* (Ratzeburg, 1837). This species develops on a *Populus tremula* L. and *Populus nigra* L. (Kostin 1973; Temreshev 2013; Legalov 2022b).

Distribution in Kazakhstan: Central, South-East (Kostin 1973; Temreshev 2013).

Material examined. 5 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., on black poplar *P. nigra*, IT; 3 ex. – 19.06.2023, UO, Ud, nei. Baikonur v., on black poplar *P. nigra*, I.I. Temreshev; 6 ex. – 20.06.2023, UO, Ud, nei. Ulytau v., on European aspen *P. tremula*, IT.

50. *Scolytus jaroschewskii* Schevyrew, 1893. This species develops on a *Elaeagnus* and *Ulmus* (Kostin 1973; Temreshev 2013, 2016).

Distribution in Kazakhstan: all except the extreme North and North-East (Kostin 1973; Temreshev 2013; 2016a).

Material examined. 7 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on field elm *Ulmus minor* (Mill., 1768), IT; 5 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on European white elm *Ulmus laevis* Pall., IT; 12 ex. – 24.05.2023, UO, Ud, nei. Satpaev city, shore of lake Ainakol, on silverberry *Elaeagnus angustifolia* L., IT; 18 ex. – 19.06.2023, UO, Ud, Satpayev city, on silverberry *E. angustifolia*, IT; 5 ex. – 12.07.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on field elm *U. minor*, IT; 3 ex. – 22.08.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on field elm *U. minor*, IT.

51. *Scolytus rugulosus* Ratzeburg, 1837. This species develops on a *Prunus*, *Pyrus*, *Malus*, *Armeniaca*, *Crataegus*, *Sorbus*, *Mespilus*, *Cotoneaster*, Amelanchier et al. (Kostin 1973; Temreshev 2013).

Distribution in Kazakhstan: Everywhere (Kostin 1973; Temreshev 2013; 2016a; Legalov 2022b).

Material examined. 3 ex. – 25.08.2023, UO, Ud, nei. Ulytau v., on Peking cotoneaster *Cotoneaster acutifolius* Turcz., IT.

52. *Trypophloeus granulatus* (Ratzeburg, 1837). This species develops on a Populus and Salix (Kostin 1973; Temreshev 2013).

Distribution in Kazakhstan: Central, East (Kostin 1973; Temreshev 2013). Material examined. 9 ex. – 24.05.2023, UO, Ud, nei. Satpaev city, shore of lake Ainakol, on black poplar *P. nigra* and White willow *S. alba*, IT; 4 ex. – 19.06.2023, UO, Ud, Satpayev city, on White willow *S. alba*, IT; 4 ex. – 23.05.2023, UO, Ud, nei. Karsakpai v., on White willow *S. alba*, IT.

53. *Xyleborinus saxeseni* (Ratzeburg, 1837). This species develops on a *Populus*, *Salix*, fruits threes (Kostin 1973; Temreshev 2013).

Distribution in Kazakhstan: Everywhere except for the desert zone (Kostin 1973; Temreshev 2013; 2016a; Legalov 2022b).

Material examined. 7 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on European aspen *P. tremula* and White willow *S. alba*, IT; 5 ex. – 24.05.2023, UO, Ud, Zhezkazgan city, bus terminal area, on silver poplar *P. alba*, IT; 6 ex. – 24.05.2023, UO, Ud, nei. Korgasyn v. 1, on European aspen *P. tremula*, IT; 8 ex. – 22.08.2023, UO, Ud, Zhezkazgan city, shore of the Kengir reservoir, on European aspen *P. tremula*, IT; 11 ex. – 24.08.2023, UO, Ud, nei. Korgasyn v. 2, on European aspen *P. tremula*, IT.

Subfamily Hyperinae Marseul, 1863

54. *Hypera meles* (Fabricius, 1792). On the clovers and alfalfa. Harmful (Samedov 1963; Arnoldi et al 1965; Baytenov 1974; Temreshev et al 2023).

Distribution in Kazakhstan: West, Central, East (Baytenov 1974; Legalov 2017a; Temreshev et al 2023).

Material examined. 1 ex. – 25.05.2023, UO, Ud, nei. Korgasyn v. 1, mowing with a net, IT; 2 ex. – 26.05.2023, UO, Ud, nei. Sarlyk v., mowing with a net, IT; 4 ex. – 26.05.2023, UO, Ud, nei. Koskol v., mowing with a net, IT.

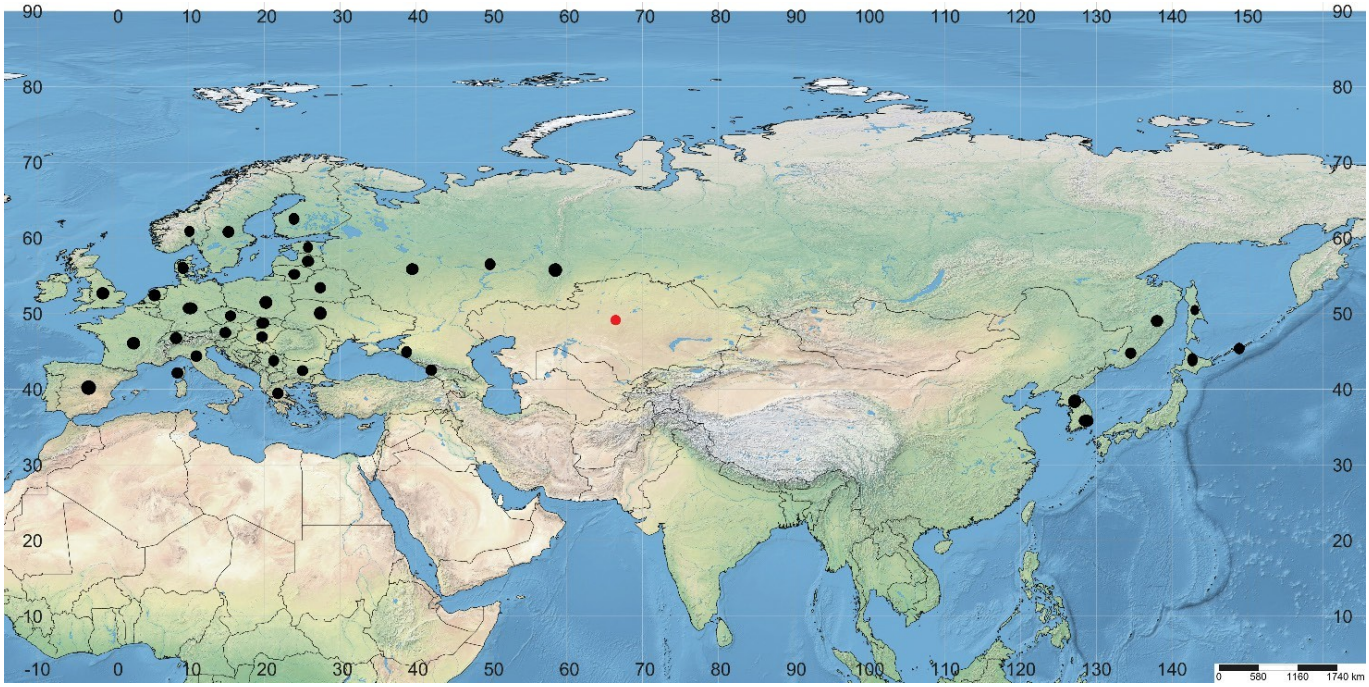

Figure 5. *Distribution of Dryophthorus corticalis in Palearctic region. New records are indicated with red circles. Known indicated in black circles*

Conclusion

Based on the results of primary studies of the fauna of weevils (Coleoptera, Curculionoidea) in the State National Natural Park "Ulytau" and in the surrounding areas, a total of 54 species, 40 genera and 4 families of weevil beetles have been recorded, incl. 2 species Anthribidae, 3 species Attelabidae, 10 species Brentidae and 39 species Curculionidae. In the territory of the National park, 53 species of weevils belonging to 41 genera from 4 families (Anthribidae, Attelabidae, Brentidae and Curculionidae) have been recorded. For the adjacent territories, 39 species of weevils belonging to 30 genera from 3 families (Anthribidae, Brentidae and Curculionidae) were recorded. The finds of *D. corticalis* from Ulytau Oblast of Central Kazakhstan are currently first record this species in Kazakhstan and for Central Asia. Since the species was discovered in Central Kazakhstan, it can be assumed that in the future it will be found in the west and north of the country. The distribution in Kazakhstan of several other species of weevils has been clarified. Some of them (*Allomalia quadrivirgata* (Costa, 1863), *Eremoxenus chan* Semenow-Tian-Schanskij, 1892, *Polydrusus piliferus* Hochhuth, 1847) were previously found only in the southern and southeastern parts of the country. Other species of weevils (*Platystomos albinus* (Fabricius, 1758), *Perapion affine* (Kirby, 1808), *Orchestes alni* (Linnaeus, 1758), *Orchestes jota* Fabricius, 1787) were previously discovered in the north and west of Kazakhstan. This shows the need for further study of

the weevil fauna of both Central Kazakhstan as a whole and of State National Natural Park "Ulytau". New interesting finds cannot be excluded.

Acknowledgements

The work was carried out within the framework of the project "Comprehensive assessment of the state of the environment and health of the population of the cities of Zhezkazgan, Satpayev and Ulytau district of the Ulytau region with the formation of an environmental electronic geographic information system".

Autor thanks to Azamat Beysaly (Ulytau, Kazakhstan) for help in organizing the expedition in State National Natural Park "Ulytau" and to doctor of biological sciences Andrei Aleksandrovich Legalov (Institute of Systematics and Ecology of Animals, Novosibirsk, Russia) for the scientific articles he sent and for the valuable comments that improved the manuscript.

References

Alonso-Zarazaga MA (2011a) Rhynchitidae Gistel, 1848. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 7: Curculionoidea I. Apollo Books, Stenstrup, 109–129 p.

Alonso-Zarazaga MA (2011b) Attelabidae Billberg, 1820. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 7: Curculionoidea I. Apollo Books, Stenstrup, 129–142 p.

Alonso-Zarazaga MA (2011c) Apionidae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearc- tic Coleoptera. Vol. 7: Curculionoidea I. Apollo Books, Stenstrup, 148–177 p.

Alonso-Zarazaga MA, Barrios H, Borovec R, Caldara R, Colonnelli E, Gültekin L, Hlaváč P, Korotyaev B, Lyal CHC, Machado A, Meregalli M, Pierotti H, Ren L, Sánchez-Ruiz M,Sforzi A, Silfverberg H, Skuhrovec J, Trýzna M, Velázquez de Castro AJ, Yunakov NN (2023) Cooperative catalogue of Palaearctic Coleoptera Curculionoidea. Work Version 3.1. Part 1: Introduction and catalogue. https://weevil.myspecies.info/sites/weevil.info/files/CCPCC%20part%201%20Work%20Version%203.1.pdf#overlay-context=

Arzanov YuG (2017) Description of the preimaginal stages and biology of the weevil *Lixus* (*Dilixellus*) *pulverulentus* (Scopoli, 1763) (Coleoptera: Curculionidae: Lixini). Caucasian Entomological Bulletin 13(1): 53–57. http://dx.doi.org/10.23885/1814-3326-2017-13-1-53-57 [In Russian]

Arnoldi LV (1964) New species of weevils (Coleoptera, Curculionidae) from Central Kazakhstan. Proceedings of the Zoological Institute of the USSR Academy of Sciences 34: 164–171. [In Russian]

Arnoldi LV, Zaslavsky VA, Ter-Minasyan ME (1965) Family Curculionidae – Weevils. In: Key to insects of the European part of the USSR. T. II. Coleoptera and Strepsiptera. Nauka, Moscow-Leningrad, 485–621. [In Russian]

Arnoldi LV, Ter-Minasyan ME, Solodovnikova VS (1974) Family Curculionidae – Weevils. In: Insects and mites - pests of agricultural crops. T. II. Coleoptera. Nauka, Leningrad, 218–293. [In Russian]

Baytenov MS (1968a) Key to the stem beetle weevils (*Lixus* F., Curculionidae) of Kazakhstan. Bulletin of Agricultural Science of Kazakhstan 2: 111–116. [In Russian]

Baytenov MS (1968b) Baris weevils (*Baris* Germ., Curculionidae) of Kazakhstan. Bulletin of Agricultural Science of Kazakhstan 5: 93–98. [In Russian]

Baytenov MS (1974) Weevils of Central Asia and Kazakhstan. Publishing House Science of the Kazakh SSR, Alma-Ata, 285 pp. [In Russian]

Caldara R (2011) Erirhinidae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 7: Curculionoidea I. Apollo Books, Stenstrup, 192–198 p.

Caldara R (2013a) Curculionidae. Curculioninae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 8: Curculionoidea II. Apollo Books, Stenstrup, 117–172 p.

Caldara R (2013b) Curculionidae. Bagoinae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 8: Curculionoidea II. Apollo Books, Stenstrup, 172–176 p.

Colonelli E (2013) Curculionidae. Ceutorhynchinae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 8: Curculionoidea II. Apollo Books, Stenstrup, 176–214 p.

Decree of the Government of the Republic of Kazakhstan dated December 7, 2021 No. 867 (2023) “On some issues of the communal state institution “Ulytau Economy for the Protection of Forests and Wildlife” of the Department of Natural Resources and Environmental Regulation of the Karaganda Region. Available at: https://primeminister.kz/ru/decisions/07122021-867 [In Russian]

Dryophthorus corticalis (Paykull & G.de, 1792) in GBIF Secretariat (2023) GBIF Backbone Taxonomy. Checklist dataset https://doi.org/10.15468/39omeiaccessedviaGBIF.orgon2024-01-12.

Egorov AB (1976) A review of the fauna of weewils (Coleoptera, Curculionidae) of Primorye territorie. Entomological Review, LV (4): 826–841.

Egorov AB, Zherikhin VV, Korotyaev BA (1996) Family Curculionidae – Weevils. In: Key to insects of the Far East. T. III. Part 3. Coleoptera, or beetles. Vladivostok: Dalnauka, 249–312. [In Russian]

Flora of Kazakhstan (1956) Ferns, Gymnosperms, Cereals, etc. Vol. 1. Pavlov NV (Ed.) Academy of Sciences of the Kazakh SSR, Alma-Ata, 354 pp. [In Russian]

Flora of Kazakhstan (1958) Sedges, Orchids, etc. Vol. 2. Pavlov NV (Ed.) Academy of Sciences of the Kazakh SSR, Alma-Ata, 290 pp. [In Russian]

Flora of Kazakhstan (1960) Willow-Cloves. Vol. 3. Pavlov NV (Ed.) Academy of Sciences of the Kazakh SSR, Alma-Ata, 460 pp. [In Russian]

Flora of Kazakhstan (1961a) Nymphaeaceae-Rosaceae. Vol. 4. Pavlov NV (Ed.) Academy of Sciences of the Kazakh SSR, Alma-Ata, 548 pp. [In Russian]

Flora of Kazakhstan (1961b) Legumes. Vol. 5. Pavlov NV (Ed.) Academy of Sciences of the Kazakh SSR, Alma-Ata, 516 pp. [In Russian]

Flora of Kazakhstan (1963) Euphorbiaceae, Umbelliferae, etc. Vol. 6. Pavlov NV (Ed.) Academy of Sciences of the Kazakh SSR, Alma-Ata, 466 pp. [In Russian]

Flora of Kazakhstan (1964) Pyrolaceae-Labiatae. Vol. 7. Pavlov NV (Ed.) Academy of Sciences of the Kazakh SSR, Alma-Ata, 497 pp. [In Russian]

Flora of Kazakhstan (1965) Solanaceae-Compositae. Vol. 8. Pavlov NV (Ed.) Academy of Sciences of the Kazakh SSR, Alma-Ata, 450 pp. [In Russian]

Flora of Kazakhstan (1966) Compositae. Vol. 9. Pavlov NV (Ed.) Academy of Sciences of the Kazakh SSR, Alma-Ata, 654 pp. [In Russian]

Hlavac P, Maughan N (2013) Curculionidae. Cossoninae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 8. Curculionoidea II. Apollo Books, Stenstrup, 217–229 p.

Ismukhambetov ZhD (1993) Pests of sugar beet in Kazakhstan and protection of crops from them. Publishing House of the Kazakh Academy of Agricultural Sciences, Almaty, 188 pp. [In Russian]

Kazenas VL, Baizhanov MKh (2009) Insects of the Korgalzhin Nature Reserve and adjacent areas. Almaty, Nur-Print, 270 pp. [In Russian]

Kizub IV, Slutsky AI (2018) New data on the distribution of *Pseudaplemonus artemisiae* (F. Morawitz, 1861) (Coleoptera: Apionidae) in Ukraine and the Palearctic Region. Munis Entomology & Zoology, 13 (1): 98–105.

Knizek M (2011) Curculionidae. Scolytinae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 7: Curculionoidea I. Apollo Books, Stenstrup, 251–262 p.

Korotyaev BA (1991) New and little-known Palaearctic weevils (Coleoptera: Apionidae, Curculionidae). Entomological Review LXX (4): 875–902. [In Russian]

Kostin IA (1973) Beetles dendrophagous of Kazakhstan. Publisher of the Kazakh SSR Academy of Sciences, Institute of Zoology, Alma-Ata, 288 pp. [In Russian]

Lapeva-Gjonova A (2013) Ant-Associated Beetle Fauna in Bulgaria: A Review and New Data. Psyche: A Journal of Entomology 242037. http://dx.doi.org/10.1155/2013/242037

Legalov AA (2006) Annotated list of rhynchitid and tubeweed beetles (Coleoptera: Rhynchitidae, Attelabidae) of the fauna of Russia. Proceedings of the Russian Entomological Society. St. Petersburg 77: 200–210. [In Russian]

Legalov AA (2010) Annotated checklist of species of superfamily Curculionoidea (Coleoptera) from Asian part of Russia. Amurian zoological journal II (2): 93–132.

Legalov AA (2017a) Weevils (Coleoptera, Curculionoidea) from plains of Western Siberia, Kazakhstan and Middle Asia. Part 1. Euroasian Entomological Journal 16 (3): 259–282. [In Russian]

Legalov AA (2017b) Weevils (Coleoptera, Curculionoidea) from plains of Western Siberia, Kazakhstan and Middle Asia. Part 2. Euroasian Entomological Journal 16 (4): 360–374. [In Russian]

Legalov AA (2020) Revised checklist of weevils (Coleoptera: Curculionoidea excluding Scolytidae and Platypodidae) from Siberia and the Russian Far East. Acta Biologica Sibirica 6: 437–549. https://doi.org/10.3897/abs.6.e59314

Legalov AA (2021a) A new genus of the tribe Rhinocartini (Coleoptera, Rhynchitidae) from the Solomon Islands. Ecologica Montenegrina 49: 54–58. https://doi.org/10.37828/em.2021.49.4

Legalov AA (2021b) A new species of the genus *Notaris* Gernar, 1817 (Coleoptera: Curculionidae) from Kazakhstan. Ecologica Montenegrina 49: 59–63. https://doi.org/10.37828/em.2021.49.5

Legalov AA (2021c) First record of *Titanomalia komaroffi* (Faust, 1877) (Brentidae: Nanophyinae) from Volgograd region (Russia) with a list of the Russian Corimaliini. Ecologica Montenegrina 45: 37–42. http://dx.doi.org/10.37828/em.2021.45.7

Legalov AA (2022a) A new species of the genus *Caenorhinus* Thomson, 1859 (Coleoptera: Rhynchitidae) from Vietnam. Far Eastern Entomologist 445: 1–6. https://doi.org/10.25221/fee.445.1

Legalov AA (2022b) A checklist of bark and ambrosia beetles (Coleoptera: Scolytidae and Platypodidae) from Siberia and the Russian Far East. Acta Biologica Sibirica 8: 623–646. https://doi.org/10.5281/zenodo.7726527

Legalov AA (2023) First record of *Coryssomerus capucinus* (Beck, 1817) (Coleoptera, Curculionidae) from Novosibirskaya Oblast, Western Siberia. Acta Biologica Sibirica 9: 915–920. https://doi.org/10.5281/zenodo.10075914

Legalov AA, Stolbov VA (2022) New records of weevils (Coleoptera, Curculionidae) associated with *Myriophyllum* sp. in West Siberia, Russia. Euroasian entomological journal 21 (6): 361–363. http://dx.doi.org/10.15298/euroasentj.21.6.10

Legalov AA & Kozlov AO (2023) Two new species of the tribe Hyperini (Coleoptera, Curculionidae) from Central Asia. Ecologica Montenegrina 70: 38–45. https://doi.org/10.37828/em.2023.70.5

Lyal CLC (2011) Dryophtoridae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 7: Curculionoidea I. Apollo Books, Stenstrup, 185–192 p.

Mamaev BM, Krivosheina NP, Korolev SG (1979) Xylophilous larvae of Palaearctic species of the family Fungus weevils (Coleoptera, Anthribidae). In: Wood destroying insects and their entomophages. Nauka, Moscow, 168–189 p. [In Russian]

Mantillieri A (2012) Les Eremoxenini ouest-paléarctiques: une taxonomie et une diversité méconnues (Coleoptera, Brentidae). Bulletin de la Société entomologique de France 117 (4): 401–409.

Matesova GYa, Yukhnevich LA, Mityaev ID (1962) Review of insects damaging fruit and berry crops and grapevines in South-West Kazakhstan. In: Fauna and biology of insects of Kazakhstan. Proceedings of the Institute of Zoology XVIII: 3–45. [In Russian]

Meregalli M, Fremuth J, Gultekin L, Fremuth J (2013) Curculionidae. Lixinae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 8: Curculionoidea II. Apollo Books, Stenstrup, 437–472 p.

Mityaev ID (1958) Review of insect pests of tamarisk in the Balkhash-Alakul depression. Fauna and biology of insects of Kazakhstan. Proceedings of the Institute of Zoology VIII: 80–97. [In Russian]

Nazarenko VYu (2011) A review of species of the subfamily Corimaliinae (Coleoptera: Curculionoidea: Nanophyidae) of Ukraine. The Kharkov Entomological Society Gazette XIX (2): 38–40. [In Russian]

Nurmuratov T (1998) Insects and rodents living in desert pastures of South-East Kazakhstan. Konzhyk, Almaty, 288 pp. [In Russian]

Opanasenko FI, Legalov AA (1996) Review of the family Attelabidae (Coleoptera) of Western Siberia. Entomological Review 76 (2): 155–168. [In Russian]

Pešić SB (2011) First record of *Dryophthorus corticalis* (Coleoptera: Curculionoidea, Dryophthoridae) in Serbia. Kragujevac Journal Science 33: 83–86.

Prena J (2011) Curculionidae. Baridinae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 7: Curculionoidea I. Apollo Books, Stenstrup, 204–251 p.

Prena J (2018) An Annotated Inventory of the Weevils (Coleoptera: Curculionoidea) Described by Thomas Say. Bulletin of the Museum of Comparative Zoology 161 (9): 323–401.

https://doi.org/10.3099/MCZ161-09.1

Samedov NG (1963) Fauna and biology of beetles that damage agricultural crops in Azerbaijan. Publishing House of the Academy of Sciences of the Azerbaijan SSR, Baku, 385pp. [In Russian]

Sforzi A (2011) Brentidae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 7: Curculionoidea I. Apollo Books, Stenstrup, 142–148 p.

Skuhrovec J (2013) Curculionidae. Hyperinae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 8: Curculionoidea II. Apollo Books, Stenstrup, 423–437 p.

Specially Protected Natural Areas of the Republic of Kazakhstan (2023) Available at: https://www.oopt.kz/categories/view/ulytau_zak/ [In Russian]

Temreshev II (2011a) Review of Dryophthoridae beetles (Coleoptera: Curculionoidea: Dryophthoridae) of the fauna of Kazakhstan. Materials of the International Scientific Conference “Zoological Research for 20 Years of Independence of the Republic of Kazakhstan”. September 22–23, 2011. Nur-Print, Almaty, 165–167 p. [In Russian]

Temreshev II (2011b) Flat bark beetles (Coleoptera: Cucujoidea: Cucujidae, Silvanidae, Laemophloeidae) of Kazakhstan and their economic importance. Researches, Results 1: 19–22. [In Russian]

Temreshev II (2012) Materials on the fauna of aquatic beetles (Insecta, Coleoptera) of the State National Natural Park “Altyn-Emel”. KazNU Bulletin. Ecological series 1 (33): 281–284. [In Russian]

Temreshev II (2013) Fauna of bark beetles (Coleoptera: Curculionidae: Scolitinae) of Kazakhstan. Materials of the International Scientific and Practical Conference held as part of the annual readings in memory of Corresponding Member of the Academy of Sciences of the Kazakh USSR A.A. Sludsky. Almaty, March 11–12, 2013. Nur-Print, Almaty, 292–300 p. [In Russian]

Temreshev II (2014a) Weevils (Coleoptera, Curculionoidea) of the State National Natural Park "Altyn-Emel". Materials of the International Scientific and Practical Conference held as part of the annual readings in memory of Corresponding Member of the Academy of Sciences of the Kazakh USSR A.A. Sludsky. Almaty, March 11-12, 2014. Nur-Print, Almaty, 524–531 p. [In Russian]

Temreshev II (2014b) Aquatic beetles (Insecta, Coleoptera) of the State National Natural Park Ile-Alatau. KazNU Bulletin. Ecological series 3 (42): 266–271. [In Russian]

Temreshev II (2015) Materials for the fauna of aquatic beetles (Insecta, Coleoptera) of Southern Kazakhstan. Report 2. KazNU Bulletin. Biological series 2 (1): 58–65. [In Russian]

Temreshev II (2016a) Weevils (Coleoptera: Curculionoidea) of the State National Natural Park "Sairam-Ugamsky" and adjacent territories. Materials of the 10th International Scientific and Practical Conference "Problems of conservation of biological diversity of the Western Tien Shan. May 21st. Shymkent, 42–48 p. [In Russian]

Temreshev II (2016b) To the fauna and distribution of aquatic beetles (Insecta, Coleoptera) of South Kazakhstan. Acta Biologica Sibirica 2 (4): 15–28. [In Russian]

Temreshev II (2017a) Pests of stocks and raw materials, common in the territory of the Republic of Kazakhstan, and some related and quarantine species (species composition and brief technology protection measures). Second edition, revised and supplemented. LLP "Nur-Print", Almaty. [In Russian]

Temreshev II (2017b) Adventive insect species of the Sayram-Ugam National Natural Park, Kazakhstan. Acta Biologica Sibirica 3 (3): 12–22. https://doi.org/10.14258/abs.v3i3.3626 [In Russian]

Temreshev II (2018) Aquatic beetles (Insecta, Coleoptera) of the Zhongar-Alatau State National Natural Park. Aquatic bioresources and aquaculture of the South of Russia: Materials of the All-Russian scientific and practical conference dedicated to the 20th anniversary of the opening of the training direction “Aquatic bioresources and aquaculture” at the Kuban State University. Moskul GA (Ed.) Kuban State University, Krasnodar, 259–265 p. [In Russian]

Temreshev II (2019) Hairy Fungus beetles (Coleoptera, Mycetophagidae) of the Almaty oblast (Sout-East Kazakhstan). Acta Biologica Sibirica 5 (1): 63–70. https://doi.org/10.14258/abs.v5.i1.5193 [In Russian]

Temreshev II (2022) Review of the genus *Dacne* Latr. (Coleoptera, Erotylidae) from Kazakhstan. Acta Biologica Sibirica 8: 367–380. https://doi.org/10.14258/abs.v8.e21

Temreshev II (2023a) First record of *Triplax russica* (Linnaeus, 1758) (Coleoptera, Erotylidae) from Kazakhstan. Acta Biologica Sibirica 9: 147–155. https://doi.org/10.5281/zenodo.7825636

Temreshev II (2023b) Prelyminary data on aquatic and amphibiotic beetles (Insecta, Coleoptera) of Semizbai deposits (Northern Kazakhstan). Problems of aquatic entomology in Russia and neighboring countries: Proceedings of the IX All-Russian with International Participation Scientific Symposium on Amphibiotic and Aquatic Insects; K.L. Khetagurov North–Ossetian State University. IPC SOGU, Vladikavkaz, 153–160. [In Russian]

Temreshev II (2024) Biphyllidae (Coleoptera, Cucujoidea) – a new beetle family to the fauna of Kazakhstan. Acta Biologica Sibirica 10: 1–7. https://doi.org/10.5281/zenodo.10475177

Temreshev II, Esenbekova PA (2013) Materials for fauna of aquatic beetles (Insecta, Coleoptera) of South Kazakhstan. KazNU Bulletin. Ecologycal series 3 (39): 130–138. [In Russian]

Temreshev II, Kolov SV, Childebaev MK (2014) New information on insect fauna of Korgalzhin Biosphere Reserve, Kazakhstan. Euroasian Entomological Journal 14 (1): 9–13. [In Russian]

Temreshev II, Makezhanov AM, Zhanseiit FK (2023) Preliminary data of the entomofauna of the Taldykol lakes in Central Kazakhstan. Euroasian Entomological Journal 22 (1): 48–51. https://doi.org/10.15298/euroasentj.22.01.10 [In Russian]

Ter-Minasyan ME (1950) Leaf-rolling weevils (Attelabidae). Fauna of the USSR. Coleopterous insects. Vol. 27. Issue 2. Publishing House of the USSR Academy of Sciences, Moscow–Leningrad, 231 pp. [In Russian]

Ter-Minasyan ME (1965) Family Anthribidae – Fungus weevils. In: Key to insects of the European part of the USSR. Vol. II. Coleoptera and Strepsiptera. Nauka, Moscow–Leningrad, 479–480 p. [In Russian]

Ter-Minasyan ME (1974a) Fam. Attelabidae – Leaf-rolling weevils. In: Insects and mites are pests of agricultural crops. Vol. 2. Coleoptera, or beetles. Nauka, Leningrad, 209–218 p. [In Russian]

Ter-Minasyan ME (1974b) Family Anthribidae - Fungus weevils. In: Insects and mites are pests of agricultural crops. Vol. 2. Coleoptera, or beetles. Nauka, Leningrad, 208–209 p. [In Russian]

Ter-Minasyan ME (1975) Weevils Apionidae (Coleoptera), collected by Soviet-Mongolian expeditions in 1967–1971. In: Insects of Mongolia 3. Nauka, Leningrad, 249–253 p.

Ter-Minasyan ME (1988) Weevils of the subfamily Cleoninae of the fauna of the USSR. Root weevils (tribe Cleonini). Keys to the fauna of the USSR, published by the Zoological Institute of the USSR Academy of Sciences. Vol. 155. Nauka, Leningrad, 234 pp. [In Russian]

Tryzna M, Valentine BD (2011) Anthtribidae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 7: Curculionoidea I. Apollo Books, Stenstrup, 90–109 p.

Yunakov NN, Pelletier J, Alonso-Zarazaga MA, Machado A, Borovec R, Magnano L, Pierotti H, Velazquez de Castro AJ, Ren Li, Sanchez Ruis M (2013) Curculionidae. Entiminae. In: Löbl I, Smetana A (Eds) Catalogue of Palaearctic Coleoptera. Vol. 8: Curculionoidea II. Apollo Books, Stenstrup, 251–423 p.

Yukhnevich LA (1958) Insects and mites – pests of elm trees in Southern and South-Eastern Kazakhstan. In: Fauna and biology of insects of Kazakhstan. Proceedings of the Institute of Zoology VIII: 103–111. [In Russian]

Yukhnevich LA, Matesova GA, Mityaev ID (1958) Insects and mites – pests of fruit and berry plants in South-Eastern and Eastern Kazakhstan. In: Fauna and biology of insects of Kazakhstan. Proceedings of the Institute of Zoology VIII: 22–26. [In Russian]