

ORTHOPTERA INSECTS (SUPERORDER ORTHOPTERIDA, ORDER ORTHOPTERA) FROM THE “R. STEPANOV” ENTOMOLOGICAL COLLECTION PRESERVED IN THE NATIONAL MUSEUM OF ETHNOGRAPHY AND NATURAL HISTORY OF THE REPUBLIC OF MOLDOVA

MOCREAC Nadejda, ȚUGULEA Cristina, DERJANSCHI Valeriu

Abstract. The paper contains the inventory list of 371 insect specimens from the Orthoptera order (Insecta, Polyneoptera) kept in the “R. Stepanov” collection of the National Museum of Ethnography and Natural History from the Republic of Moldova. The specimens studied in this paper were collected from 1910 to 1939, which represented a transition period from the Russian Empire 1910-1917 to the Moldavian Democratic Republic, also known as the Moldavian Republic (1917-1939).

Keywords: Orthoptera, museum, Stepanov, list, species.

Rezumat. Insecte Orthoptere (Superordinul Orthopterida, Ordinul Orthoptera) din colecția entomologică „R. Stepanov” păstrată în Muzeul Național de Etnografie și Istorie Naturală al Republicii Moldova. Lucrarea constă în inventarierea a 371 de exemplare de insecte din cadrul ordinului Orthoptera (Insecta, Polyneoptera) păstrate în colecția „R. Stepanov” din cadrul Muzeului Național de Etnografie și Istorie Naturală din Republica Moldova. Exemplarele studiate în această lucrare au fost colectate în perioada 1910-1939, reprezentând o perioadă de tranziție de la Imperiul Rus 1910-1917 la Republica Democrată Moldovenească, cunoscută și sub denumirea de Republica Moldova (1917-1939).

Cuvinte cheie: Orthoptera, muzeu, Stepanov, listă, specie.

INTRODUCTION

This is one of the first papers regarding the entomological collection of „R. Stepanov” stored in the National Museum of Ethnography and Natural History located in the capital of the Republic of Moldova - Chișinău (ȚUGULEA & et al, 2020; ȚUGULEA, 2021). The paper presents the catalogue of the Orthoptera collection of R. Stepanov collected during 1910-1939, during Stepanov’s research into the insect’s fauna in the Bessarabia (in our days the Republic of Moldova and some towns from Ukraine). This collection includes 370 specimens of the Orthoptera order from 20,000 insect specimens from the Lepidoptera and Coleoptera orders.

R. Stepanov was a famous scientist and naturalist with a big heart for insect biodiversity. During his scientific activity from 1900-1940, he collected entomological materials from various ecosystems, anthropogenic and natural ecosystems, especially from woods, parks, and orchards; flooded meadows and riversides; grasslands, etc. from Bessarabia, and not only.

In our days, the entomological collection of R. Stepanov is stored in the National Museum of Ethnography and Natural History, located in Chișinău, Republic of Moldova. Due to its considerable scientific interest and being known as one of the oldest entomological collections of the Republic of Moldova, we decided to publish the insects from the Orthoptera order from the “R. Stepanov” Entomological Collection.

MATERIAL AND METHODS

The specimens of the Orthoptera order in this paper were collected between 1910 and 1939 from the country's whole territory, in districts and localities from the Central, Southern, and, Northern Regions of the Republic of Moldova (Fig. 1).

In this collection, there are Orthoptera specimens stored in the “R. Stepanov” Entomological Collection:

- ✓ In the collection *Baurci-Moldoveni, Izmail* = a village in the Cahul District of the Republic of Moldova (coordinates: 46°1'57"N 28°13'52"E);
- ✓ In the collection of *Beni* – we could not find the locality written on the label;
- ✓ In the collection of *Bularda* = a village from Dereneu commune in Călărași District of the Republic of Moldova (coordinates: 47°21'22"N 28°13'16"E);
- ✓ In the collection of *Cahul* = a city and municipality in the southern part of the Republic of Moldova. The city is the administrative center of *Cahul District* (coordinates: 46°55'0"N 28°11'01"E);
- ✓ In the collection of *Chiprianovsk* = Căpriană village, in the Strășeni District of the Republic of Moldova (coordinates: 47°07'02"N 28°30'15"E);
- ✓ In the collection of *Chițcani* = a village in the Căușeni district, Republic of Moldova - the seat of the commune with the same name. It is one of the oldest documented villages in Moldova (coordinates: 46°47'8"N 29°36'29"E);
- ✓ In the collection of *Ciocana forest* = belongs to the Ciocana Sector of the capital of the Republic of Moldova – Chișinău);

- ✓ In the collection of *Clișcăuți, Hotinsc* = Klishkivtsi (English), Клішківці (Ukrainian), is a commune in Dnistrovskyi Raion, Chernivtsi Oblast of Ukraine, Khotyn Raion, Ukraine (coordinates: 48°26'17"N 26°16'1"E);
- ✓ In the collection of *Cornești* = a village in the Ungheni District of the Republic of Moldova (coordinates: 47°22'3"N 27°59'58"E);
- ✓ In the collection of *Dîșcova* = a village from the Puținței commune in Orhei District of the Republic of Moldova (coordinates: 47°22'57"N 28°36'02"E);
- ✓ In the collection of *Dunai, Ismail* = the collections were made near the Danube River meadows from the vicinity of the town of Ismail, Odesa Oblast, Ukraine (coordinates: 47°21'22"N 28°13'16"E);
- ✓ In the collection of *Durlești* = a town in the Chișinău municipality, Republic of Moldova, located in the North-West part of Chișinău, is the largest of the suburbs of the capital (coordinates: 47°01'04"N 28°45'45"E);
- ✓ In the collection of *Goiani* = a commune composed of two villages, Goian and Iagorlic from Dubăsari District (coordinates 47°22'40"N 29°9'47"E);
- ✓ In the collection of *Grinăuți* = Grinăuți-Moldova is a commune in the Ocnîța district, Republic of Moldova, consisting of the villages of Grinăuți-Moldova (village-residence), Grinăuți-Raia and Rediul Mare (coordinates: 48°17'00"N 27°27'00"E);
- ✓ In the collection of *Leova, Izmail* = a city in Moldova, located 92 km southwest of the capital, Chișinău, also, it is the administrative center of Leova District. The city is situated on the east bank of the Prut River. The collections were made in the flooded meadow of the Prut River (coordinates: 46°29'N 28°15'E);

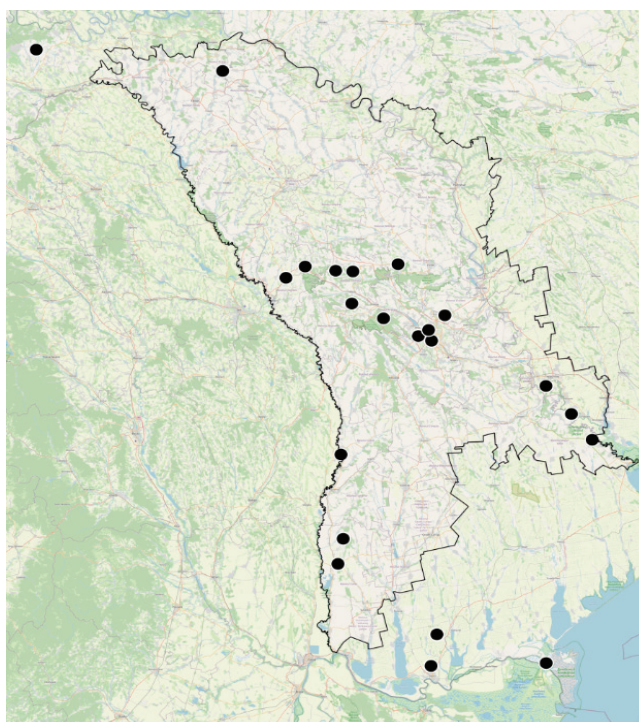


Figure 1. The collection points of the orthopteran stored in the Entomological Collection R. Stepanov”.

- ✓ In the collection of *Hîrbovăț* = a village belonging to Onișcani commune (Călărași District) which is composed of three villages: Hîrbovăț, Onișcani, and Sverida (coordinates: 47°22'00"N 28°17'00"E);
- ✓ In the collection of *Izmail* = Ismail town, Odesa Oblast, Ukraine (coordinates: 45°21'4"N 28°50'47"E);
- ✓ In the collection of *Mlinchi* – a village in the Hotin District of the Chernivtsi Region (Ukraine), administratively dependent on the Clișcăuți commune (in Ukrainian Млинки, transliterated: Mlînkî), (coordinates: 48°27'36"N 26°13'48"E);
- ✓ In the collection of *Petricani* = a neighbourhood of the Rîșcani Sector (also spelled *Râșcani*) of Chișinău municipality of the Republic of Moldova (coordinates: 47°03'17"N 28°48'31"E);
- ✓ In the collection of *Purcari* = the village of residence of the commune with the same name in the district of Ștefan Vodă, Republic of Moldova. The commune also includes the village of Viișoara (coordinates: 46°32'13"N 29°51'37"E);
- ✓ In the collection of *Rădeni, Pîrlița* = Rădenii Vechi village in the Ungheni District of the Republic of Moldova (coordinates: 47°17'47"N 27°59'44"E);
- ✓ In the collection of *Sadovsc, Călărași* = Sadova, Călărași District of the Republic of Moldova (coordinates: 47°11'21"N 28°21'00"E);

- ✓ In the collection of *Slobozia, Izmailisc* = Slobozia Mare village in the Cahul District of the Republic of Moldova (coordinates: 45°34'30"N 28°10'21"E);
- ✓ In the collection of *Staro-Cozacie* = Starokozache, a village of the Starokozach village community of the Bilhorod-Dnistrovsky district of the Odesa Oblast in Ukraine (coordinates: 46°20'16"N 29°59'8"E 46°20'16.1"N 29°59'18"E);
- ✓ In the collection of *Talmaza* – is a village in the Ștefan Vodă District of the Republic of Moldova (coordinates: 46°37'32"N 29°39'04"E);
- ✓ In the collection of *Taşbunar* = Kamenka (Kam'yanka, until 1945 - Tashbunar), Izmail Raion of the Odesa Oblast of Ukraine; is a village of the Safyanivska rural (coordinates: 45°33'55"N 28°52'52"E);
- ✓ In the collection of Toporskaya Izmail = Toporskaya Datscha, 32 km north of Leova city;
- ✓ In the collection of Vilcovo, Izmail = Vylkove (Romanian – Vâlcov), a small city located in the Ukrainian part of the Danube Delta, Izmail Raion, Odesa Oblast, Ukraine (coordinates: 45°23'57"N 29°35'37"E).

The specimen identification was made according to external morphology using the identification of different keys IORGU & IORGU, 2008; HARZ, 1975; BEI-BIENKO, 1952, 1964.

The species nomenclature and classification were made according to the site Fauna Europaea (EADES et al., 2022) and Orthoptera of Europe (**). The Orthoptera of Europe.

RESULTS

As a result of the above-mentioned work, 371 specimens among Orthoptera insects from the “R. Stepanov” Entomological Collection stored in the National Museum of Ethnography and Natural History of The Republic of Moldova were analysed. These specimens belong to two suborders Ensifera with 92 specimens and Caelifera, 279 respectively (Table 1).

Table 1. List of Orthoptera specimens stored in the “R. Stepanov” collection, stored in the National Museum of Ethnography and Natural History of the Republic of Moldova.

Box No.	Species	Point of collection	Specimens	Collection data
Class Insecta Subclass Pterygota, infraclass Neoptera, Cohort Polyneoptera, superorder Orthopterida Order Orthoptera Suborder Ensifera Infraorder Tettigoniidae Superfamily Tettigonoidea Krauss, 1902 Family Tettigoniidae Krauss, 1902 Subfamily group Phaneropteridae Burmeister, 1838 Subfamily Phaneropterinae Burmeister, 1838 Tribe Phaneropterini Burmeister, 1838 Genus <i>Phaneroptera</i> Serville, 1831				
71	<i>Phaneroptera falcata</i> (Poda, 1761)	Leova (Leova, in the vicinity of the Prut River, Izmailu)	1	15.08.1911
71		Leova (Leova, in the vicinity of the Prut River, Izmailu)	1	16-17.07.1911
71		(Toporscaia, Izmailisc)	1	23.07.1911
71		Căpriană (Chiprianovsc, Chișinău)	4	29.07.1911
71		Căpriană (Chiprianovsc, Chișinău)	1	01-05.08.1911
Subfamily Bradyporinae Burmeister, 1838 Tribe Ehippigerini Brunner von Wattenwyl, 1878 Genus <i>Ehippiger</i> Berthold, 1827				
71	<i>Ehippiger ehippiger</i> (Fiebig, 1784)	Căpriană (Chiprianovsc, Chișinău)	1	28.07.1911
71		Căpriană (Chiprianovsc, Chișinău)	1	29.07.1911
71		Rădenii Vechi (Redeni, Pîrlița)	1	12-13.08.1911
71		Căpriană (Chiprianovsc, Chișinău)	1	15.10.1932
75		Hîrbovăț	1	13.06.1927
75		Durlești	1	01.05.1930
75		Durlești	1	10.07.1932
75		Cornești	1	14.06.1937
75		Cornești	1	21.07.1938
75		No data		3
Subfamily Conocephalinae Kirby & Spence, 1826 Tribe Conocephalini Kirby & Spence, 1826 Genus <i>Conocephalus</i> Thunberg, 1815				
71	<i>Conocephalus fuscus</i> (Fabricius, 1793) = <i>Anisoptera fuscus</i>	Leova (Leova, in the vicinity of the Prut River, Izmailu)	1	16-17.07.1911
71		Căpriană (Chiprianovsc, Chișinău)	2	29.07.1911
71		Căpriană (Chiprianovsc, Chișinău)	3	01-05.08.1911

Subfamily Tettigoniinae Krauss, 1902				
Tribe Decticini Herman, 1874				
Genus <i>Decticus</i> Serville, 1831				
71	<i>Decticus verrucivorus</i> (Linnaeus, 1758)	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	2	27.06.1911
71		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	4	24.06.1911
71		(Toporscaia, Izmailisc)	2	26.07.1911
71		Chișinău (Ciocana, forest)	4	10.08.1932
Tribe Onconotini Tarbinsky, 1940				
Genus <i>Onconotus</i> Fischer von Waldheim, 1839				
71	<i>Onconotus servellei</i> Fischer von Waldheim, 1846	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	24.06.1911
71		Talmază (Talmaz)	1	03.08.1933
Tribe Platycleidini Brunner von Wattenwyl, 1893				
Genus <i>Rhacocleis</i> Fieber, 1853				
71	<i>Rhacocleis germanica</i> (Herrich-Schäffer, 1840)	Sadova (Sadovsc, Călărași)	1	09.08.1911
Genus group <i>Platycleis</i> Brunner von Wattenwyl, 1893				
Genus <i>Platycleis</i> Fieber, 1853				
71	<i>Platycleis affinis</i> Fieber, 1853	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	26.06.1911
71		No data	1	No data
71		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	30.06.1911
71		Cahul	1	23.06.1911
71		Slobozia-Mare (Slobozia, Izmailisc)	1	20.06.1911
71		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	2	24.06.1911
71		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	26.06.1911
71		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	30.06.1911
71		(Toporscaia, Izmailisc)	1	26.07.1911
Genus <i>Tettigonia</i> Linnaeus, 1758				
71	<i>Tettigonia caudata</i> (Charpentier, 1845)	Kamenca (Tasbunari, Izmail)	2	11-12.06.1911
<p>Infraorder Gryllidea</p> <p>Superfamily Grylloidea Laicharting, 1781</p> <p>Family Gryllidae Laicharting, 1781</p> <p>Subfamily group Gryllinae Laicharting, 1781</p> <p>Subfamily Gryllinae Laicharting, 1781</p> <p>Tribe Gryllini Laicharting, 1781</p> <p>Subtribe Gryllina Laicharting, 1781</p> <p>Genus <i>Acheta</i> Fabricius, 1775</p>				
72	<i>Acheta domesticus</i> (Linnaeus, 1758)	Cahul	2	23.06.1911
72		Durlești	1	29.06.1932
72		Talmază (Talmaz)	1	20.06.1933
Genus <i>Gryllus</i> Linnaeus, 1758				
71	<i>Gryllus (Gryllus) campestris</i> Linnaeus, 1758	Durlești	1	19.06.1912
71		Chișinău	1	23.05.1916
71		Grinăuți	1	.1914
71		Talmază (Talmaz)	3	20.06.1933
Tribe Modicogryllini Otte & Alexander, 1983				
Genus <i>Eumodicogryllus</i> Gorochov, 1986				
71	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804) = <i>Modicogryllus bordigalensis</i>	Kamenca (Tasbunari, Izmail)	1	15.06.1911
71		Izmailisc, Dlinbul	1	13.06.1911
71		Izmailisc, Dlinbul	1	14.06.1914
71		Kamenca (Tasbunari, Izmail)	3	15.06.1911
Genus <i>Melanogryllus</i> Chopard, 1961				
71	<i>Melanogryllus desertus</i> (Pallas, 1771)	Purcari	2	11-10.04.1911
72		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	24.06.1911
Genus <i>Modicogryllus</i> Chopard, 1961				
71	<i>Modicogryllus (Modicogryllus) frontalis</i> (Fieber, 1844)	Izmail (Izmailisc)	3	05.06.1911
71		Căpriana (Chiprianovsc, Chișinău)	1	31.05.1912
71		Vilcovo, Izmail, Black Sea	1	01.06.1911
Subfamily Oecanthinae Blanchard, 1845				
Tribe Oecanthini Blanchard, 1845				
Genus <i>Oecanthus</i> Serville, 1831				
72	<i>Oecanthus pellucens</i> (Scopoli, 1763)	Căpriana (Chiprianovsc, mun. Chișinău)	1	10.07.1910
72		Leova (Leova, in the vicinity of the Prut River, Izmailu)	2	15.07.1911
72		Leova (Leova, in the vicinity of the Prut River, Izmailu)	1	16-17.07.1911
72		Leova (Leova, in the vicinity of the Prut River, Izmailu)	1	23.07.1911
72		Leova (Leova, in the vicinity of the Prut River, Izmailu)	2	14.07.1911

Superfamily Gryllotalpoidea Leach, 1815 Family Gryllotalpidae Leach, 1815 Subfamily Gryllotalpinae Leach, 1815 Genus <i>Gryllotalpa</i> Latreille, 1802				
72	<i>Gryllotalpa gryllotalpa</i> (Linnaeus, 1758)	Izmail	1	13.06.1911
72		Căpriană (Chiprianovsc, Chișinău)	2	07.06.1924
72		Căpriană (Chiprianovsc, Chișinău)	1	06.05.1924
72		No data	4	No data
Suborder Caelifera Infraorder Tridactylidea Superfamily Tridactyloidea Brullé, 183 Family Tridactylidae Brullé, 1835 Subfamily Tridactylinae Brullé, 1835 Genus <i>Xya</i> Latreille, 1809				
72	<i>Xya variegata</i> (Latreille, 1809)	Vilcovo, Izmail	11	31.05.1911
72		Vilcovo, Izmail, Black Sea	1	01.06.1911
Superfamily Tetrigoidea Rambur, 1838 Family Tetrigidae Rambur, 1838 Subfamily Tetriginae Rambur, 1838 Genus <i>Tetrix</i> Latreille, 1802				
72	<i>Tetrix bipunctata</i> (Linnaeus, 1758) = <i>Acrydium bipunctatum</i>	Ur. Beni	1	22.04.1911
72		Redenii Vechi (Redeni, Pirlita)	1	12-13.08.1911
72		Căpriană	1	20.04.1932
72		Căpriană	3	15.10.1932
72		Chițcani	1	08.04.1911
72		Purcari	3	09.04.1911
72		Purcari	3	12-15.04.1911
72		Ur. Beni	3	22.04.1911
Superfamily group Acridomorpha Superfamily Acridoidea MacLeay, 1821 Family Acrididae MacLeay, 1821 Subfamily Acridinae MacLeay, 1821 Tribe Acridini MacLeay, 1821 Genus <i>Acrida</i> Linnaeus, 1758				
72	<i>Acrida turrita</i> (Linnaeus, 1758)	Căpriană (Chiprianovsc, mun. Chișinău)	1	19.08.1912
		No data	1	No data
Subfamily Cyrtacanthacridinae Kirby, 1910 Tribe Cyrtacanthacridini Kirby, 1910 Genus <i>Anacridium</i> Uvarov, 1923				
75	<i>Anacridium aegyptiacum</i> (Linnaeus, 1764) = <i>Anacridium aegyptium</i>	No data	1	No data
Subfamily Calliptaminae Jacobson, 1905 Genus <i>Calliptamus</i> Serville, 1831				
75	<i>Calliptamus italicus</i> (Linnaeus, 1758)	(Toporscaia, Izmailisc)	1	26.07.1911
75		Sadova (Sadovsc, Calarași)	1	09.08.1911
75		No data	2	No data
75		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	02.07.1911
Subfamily Gomphocerinae Fieber, 1853 Tribe Arcypterini Bolívar, 1914 Genus <i>Arcyptera</i> Serville, 1838 Subgenus <i>Pararcyptera</i> Tarbinsky, 1930				
73	<i>Arcyptera microptera microptera</i> (Fischer von Waldheim, 1833) = <i>Arcyptera flavicosta</i>	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	3	24.06.1911
73		(Toporscaia, Izmailisc)	2	26.07.1911
2		Talmază	2	05.08.1932
73		Vilcovo, Izmail	3	31.05.1911
73		Vilcovo, Izmail (Danube)	8	03.06.1911
73		Vilcovo, Izmail (Black Sea)	1	01.06.1911
73		Vilcovo, Izmail (Danube)	2	03.06.1911
73		Vilcovo, Izmail	1	04.06.1911
73		Izmail (Izmailisc)	1	05.06.1911
Tribe Crysochrantini Brunner von Wattenwyl, 1893 Genus <i>Euchorthippus</i> Tarbinsky, 1926				
73	<i>Euchorthippus pulvinatus</i> (Fischer von Waldheim, 1846)	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	24.06.1911
73		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	26.06.1911
73		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	02.07.1911
73		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	24.06.1911
73		Leova (Leova, in the vicinity of the Prut River, Izmailu)	3	15.07.1911
73		(Toporscaia, Izmailisc)	2	23.07.1911

74		Chișinău (Ciocana, forest)	2	10.08.1932
Tribe Dociostaurini Mistshenko, 1974 Genus <i>Dociostaurus</i> Fieber, 1853 Subgenus <i>Kazakia</i> Bey-Bienko, 1933				
73	<i>Dociostaurus (Kazakia) brevicollis</i> (Eversmann, 1848)	Kamenca (Tasbunari, Izmail)	9	11-12.06.1911
73		Leova (Leova, in the vicinity of the Prut River, Izmailu)	1	15.07.1911
73		Leova (Leova, in the vicinity of the Prut River, Izmailu)	1	16-17.07.1911
73		(Toporscaia, Izmailisc)	1	26.07.1911
74		Chișinău (Ciocana, forest)	1	10.08.1932
Tribe Gomphocerini Fieber, 185, Genus <i>Chorthippus</i> Fieber, 1852 Subgenus <i>Chorthippus</i> Fieber, 1852				
73	<i>Chorthippus (Chorthippus) dorsatus</i> (Zetterstedt, 1821)	Leova (Leova, in the vicinity of the Prut River, Izmailu)	1	15.07.1911
73		(Toporscaia, Izmailisc)	2	26.07.1911
74	<i>Chorthippus (Chorthippus) loratus</i> (Fischer von Waldheim, 1846)	Kamenca (Tasbunari, Izmail)	3	11-12.06.1911
74		Leova (Leova, in the vicinity of the Prut River, Izmailu)	1	15.07.1911
74		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	5	24.06.1911
74		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	27.06.1911
74		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	30.06.1911
74		Chișinău (Ciocana, forest)	1	10.08.1932
74	<i>Chorthippus (Chorthippus) dichrous</i> (Eversmann, 1859)	Leova (Leova, in the vicinity of the Prut River, Izmailu)	2	15.07.1911
73	<i>Chorthippus (Chorthippus) albomarginatus</i> (De Geer, 1773)	Leova (Leova, in the vicinity of the Prut River, Izmailu)	1	16-17.07.1911
73		(Toporscaia, Izmailisc)	4	26.07.1911
73		Căpriană (Chiprianovsc, Chișinău)	1	01-05.08.1911
73		Cliscăuți, Hotinsc	2	16-17.08.1911
74		Căpriană (Chiprianovsc, Chișinău)	1	12.07.1912
74		Chișinău (Ciocana, forest)	1	10.08.1932
Subgenus <i>Glyptobothrus</i> Chopard, 1951				
72	<i>Chorthippus (Glyptobothrus) biguttulus</i> (Linnaeus, 1758)	Izmail (Izmaili, Danube)	2	08-09.06.1911
72		Slobozia-Mare (Slobozia, Izmailisc)	1	21.06.1911
72		(Toporscaia, Izmailisc)	1	23.07.1911
73		Kamenca (Tasbunari, Izmail)	2	11-12.06.1911
73		Cahul	1	23.06.1911
73		Căpriană (Chiprianovsc, Chișinău)	1	29.07.1911
73		Sadova (Sadovsc, Călărăși, Chișinău)	1	09.08.1911
73		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	24.06.1911
73		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	3	26.06.1911
73		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	30.06.1911
73		No data	1	No data
74		Izmail (Izmaili)	1	09.06.1911
74		Kamenca (Tasbunari, Izmail)	6	11-12.06.1911
74		Căpriană (Chiprianovsc, Chișinău)	1	21.07.1912
74		Căpriană (Chiprianovsc, Chișinău)	3	01-05.08.1911
74		Sadovsc., Calărăși, Chișinău	3	09.08.1911
74		Izmail (Izmailisc)	1	05.06.1911
74		Izmail (Izmaili, Danube)	3	08-09.06.1911
74		Izmail (Izmaili)	2	09.06.1911
74		Kamenca (Tasbunari, Izmail)	5	11-12.06.1911
74		Cahul	1	23.06.1911
74		(Toporscaia, Izmailisc)	5	26.07.1911
74	Căpriană (Chiprianovsc, Chișinău)	2	29.07.1911	
74	(Mlinchi)	1	06.08.1912	
74	Căpriană (Chiprianovsc, Chișinău)	2	06.08.1916	
74	Chișinău (Ciocana, forest)	3	10.08.1932	
74	Talmaza	1	15.07.1932	
75	Staro-Cozacie	1	04.08.1929	
75	Chișinău (Ciocana, forest)	1	02.10.1938	
75	Chișinău (Petricani)	2	10.09.1939	
75	Dișcova	2	13.07.1939	
75	No data	3	No data	
74	<i>Chorthippus (Glyptobothrus) mollis</i> (Charpentier, 1825)	Kamenca (Tasbunari, Izmail)	1	11-12.06.1911
74		(Toporscaia, Izmailisc)	3	26.07.1911
74		Căpriană (Chiprianovsc, Chișinău)	2	28.07.1911
74		Căpriană (Chiprianovsc, Chișinău)	2	29.07.1911
74		Căpriană (Chiprianovsc, Chișinău)	2	01-05.08.1911
74		Sadovsc., Calărăși, Chișinău	1	09.08.1911
74		Chișinău (Ciocana, forest)	3	10.08.1932
74		Căpriană (Chiprianovsc, Chișinău)	1	13.10.1932

Genus <i>Gomphocerippus</i> Roberts, 1941				
74	<i>Gomphocerippus rufus</i> (Linnaeus, 1758)	Căpriană (Chiprianovsc, Chișinău)	1	16-17.08.1911
74		Căpriană (Chiprianovsc, Chișinău)	2	12.07.1912
74		Căpriană (Chiprianovsc, Chișinău)	1	15.07.1912
74		Chișinău (Ciocana, forest)	2	10.08.1932
Genus <i>Myrmeleotettix</i> Bolívar, 1914				
73	<i>Myrmeleotettix (Omocestus) maculatus</i> (Thunberg, 1815)	Goian (Goiani)	1	21.09.1924
Genus <i>Pseudochorthippus</i> Defaut, 2012 Species group <i>parallelus</i>				
73	<i>Pseudochorthippus parallelus parallelus</i> (Zetterstedt, 1821)	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	4	24.06.1911
73		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	4	26.06.1911
73		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	2	27.06.1911
74		Chișinău (Ciocana, forest)	1	10.08.1932
Tribe Stenobothrini Harz, 1975 Genus <i>Omocestus</i> Bolívar, 1878 Subgenus <i>Omocestus</i> Bolívar, 1878				
73	<i>Omocestus (Omocestus) haemorrhoidalis</i> (Charpentier, 1825)	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	24.06.1911
73		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	27.06.1911
73	<i>Omocestus (Omocestus) petraeus</i> (Brisout de Barneville, 1856)	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	02.07.1911
73		Căpriană (Chiprianovsc, mun. Chișinău)	1	29.07.1911
74		Chișinău (Ciocana, forest)	1	10.08.1932
74		(Toporscaia, Izmailisc)	1	26.07.1911
72	<i>Omocestus (Omocestus) rufipes</i> (Zetterstedt, 1821)	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	2	23.07.1911
72		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	29.07.1911
72		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	16-17.08.1911
72		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	08.08.1911
Genus <i>Stenobothrus</i> Fischer, 1853				
72	<i>Stenobothrus lineatus</i> (Panzer, 1796)	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	7	24.06.1911
72		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	26.06.1911
72		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	15.07.1911
72		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	2	01.07.1911
72	<i>Stenobothrus nigromaculatus</i> (Herrich-Schäffer, 1840)	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	5	24.06.1911
72		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	27.06.1911
72		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	3	26.06.1911
72		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	30.06.1911
Subfamily Melanoplinae Scudder, 1897 Tribe Podismini Jacobson, 1905 Subtribe <i>Podisma</i> Jacobson, 1905 Genus <i>Podisma</i> Berthold, 1827				
75	<i>Podisma pedestris</i> (Linnaeus, 1758)	Talmaza	1	29.07.1932
Subfamily Oedipodinae Walker, 1871 Tribe Acrotolini Johnston, 1956 Genus <i>Acrotylus</i> Fieber, 1853				
75	<i>Acrotylus insubricus</i> (Scopoli, 1786)	Vilcovo, Izmail	2	31.05.1911
75		Izmail (Izmailisc)	3	05.06.1911
Tribe Epacromiini Brunner von Wattenwyl, 1893 Genus <i>Aiolopus</i> Fieber, 1853				
73	<i>Aiolopust halassinus</i> (Fabricius, 1781)	(Toporscaia, Izmailisc)	2	23.07.1911
Tribe Parapleurini Brunner von Wattenwyl, 1893 Genus <i>Mecostethus</i> Fieber, 1852				
73	<i>Mecostethus parapleurus</i> (Hagenbach, 1822) = <i>Parapleurus alliaceus</i>	Talmaza	2	05.08.1932
Tribe Oedipodini Walker, 1871 Genus <i>Celes</i> Saussure, 1884				
75	<i>Celes variabilis</i> (Pallas, 1771)	Izmail (Izmailisc)	1	05.06.1911
75		Cahul	1	23.06.1911
75		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	30.06.1911
75		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	6	02.07.1911
75		Toporscaia, Izmailisc	1	26.07.1911
75		Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	27.06.1911
Genus <i>Oedipoda</i> Latreille, 1829				
75	<i>Oedipoda caerulescens</i> (Linnaeus, 1758)	Leova, in the vicinity of the Prut River, Izmailu	1	14.07.1911
75		Leova, in the vicinity of the Prut River, Izmailu	6	15.07.1911
75		(Toporscaia, Izmailisc)	2	26.07.1911
75		Talmaza	1	16.07.1932

Tribe Locustini Kirby, 1825 Subtribe Locustina Kirby, 1825 Genus <i>Locusta</i> Linnaeus, 1758				
75	<i>Locusta migratoria</i> (Linnaeus, 1758)	Căpriană (Chiprianovsc, Chișinău)	1	06.08.1912
75		Căpriană (Chiprianovsc, Chișinău)	1	01.09.1912
75		No data	1	No data
Genus <i>Oedaleus</i> Fieber, 1853				
75	<i>Oedaleus decorus</i> (Germar, 1825)	Baurci-Moldoveni (Baurci-Moldovani, Izmail)	1	24.06.1911
75		Leova, in the vicinity of the Prut River, Izmailu	2	15.07.1911
74		Kamenca (Tasbunari, Izmail)	1	11-12.06.1911
Genus <i>Psophus</i> Fieber, 1853				
75	<i>Psophus stridulus</i> (Linnaeus, 1758)	Sadova (Sadovsc, Calarași)	2	09.08.1911

DISCUSSIONS

As a result of an analysis and determination of the 371 orthopteran specimens from the “R. Stepanov” Entomological Collection stored in the National Museum of Ethnography and Natural History of The Republic of Moldova, it was established that these belong to 47 species, included in 38 genera, 22 tribes, 15 Subfamilies, and 6 families: Tettigoniidae with (9 species), Gryllidae (5 species), Gryllotalpidae (1 species), Tridactylidae (1 species), Tetrigidae (1 species) and Acrididae with 30 species (Tables 1, 2).

Table 2. The numerical spectrum of the analysed Orthoptera specimens stored in the “R. Stepanov” Entomological Collection stored in the National Museum of Ethnography and Natural History of The Republic of Moldova.

No.	Family	Subfamily	No. of tribes	No. of genera	No. of species	No. of specimens		
						Republic of Moldova	Ukraine	No data
1.	Tettigoniidae	Phaneropterinae	1	1	1	8	0	-
2.		Bradyporinae	1	1	1	9	-	3
3.		Conocephalinae	1	1	1	6	-	-
4.		Tettigoniinae	3	5	5	25	0	2
5.	Gryllidae	Gryllinae	2	5	5	14	10	-
6.		Oecanthinae	1	1	1	7	-	-
7.	Gryllotalpidae	Gryllotalpinae	-	1	1	3	1	4
8.	Tridactylidae	Tridactylinae	-	1	1	-	12	-
9.	Tetrigidae	Tetriginae	-	1	1	12	4	-
10.	Acrididae	Acridinae	1	1	1	1	-	1
11.		Cyrtacanthacridinae	1	1	1	-	-	1
12.		Calliptaminae	-	1	1	3	-	2
13.		Gomphocerinae	5	9	18	150	49	4
14.		Melanoplinae	1	1	1	1	-	-
15.		Oedipodinae	5	8	8	31	7	1
TOTAL			22	38	47	270	83	18

As seen in table two, the biggest number of tribes are in the Acrididae family - thirteen and the Tettigoniidae family - with seven tribes.

Of 371 orthopteran specimens stored in the “R. Stepanov” Entomological Collection of the National Museum of Ethnography and Natural History of The Republic of Moldova, 270 are from the actual territories of the Republic of Moldova and 83 from the territories that currently belong to Ukraine, (Table 2). Also, we have 18 specimens about which nothing is known, because the labels with the collection date and place are missing.

CONCLUSIONS

1. As a result of the study of the Orthoptera group from the “R. Stepanov” entomological collection stored in the National Museum of Ethnography and Natural History of The Republic of Moldova, it was established that it is represented by 371 orthopteran specimens collected from the current territories of the Republic of Moldova and of Ukraine.

2. Following the analysis and determination of the specimens from this collection, 48 species were determined, that belong to 38 genera, 22 tribes, 15 Subfamilies, and 6 families.

3. The richest family in this collection is Acrididae – with 30 species.

REFERENCES

- BEI-BIENKO G. 1952. *Pryamokrylyie*. In: Fauna SSSR. Moskva-Leningrad: AN SSSR. 2(2). 385 pp. [In Russian].
 BEI-BIENKO G. 1964. *Pryamokrylyie*. In: Opredeliteli nasekomykh evropeyskoi chasti SSSR. Moscka-Leningrad: Nauka. 1: 205-285. [In Russian].

- EADES D. C., OTTE D. CIGLIANO M. M. BRAUN H. 2022. Orthoptera Species File. Version 5.0/5.0. Accessed February, 2022. <http://Orthoptera.SpeciesFile.org> (accessed: February 2, 2022).
- HARZ K. 1975. *Die Orthopteren Europas*. Seria Entomologia. Dr. W. Junk, B. V., Publ. The Hague. 2. 939 pp.
- IORGU I. & IORGU ELENA. 2008. *Bush-crickets, crickets and grasshoppers from Moldavia (Romania)*. Edit. PIM. Iași. 294 pp.
- ȚUGULEA (HACINA) CRISTINA, ȚUGULEA A., MOCREAC (STAHİ) NADEJDA, DERJANSCHI V. 2020. The Geometer Moths (Lepidoptera, Geometridae) from the „R. Stepanov” entomological collection. In: *Buletin Științific. Revista de Etnografie, Științele Naturii și Muzeologie (Serie Nouă)*. Chișinău. 32(45): 40-48.
- ȚUGULEA (HACINA) CRISTINA. 2021. Faunal diversity of Lepidoptera from the family Noctuidae (Lepidoptera) from the Entomological Collection „R. Stepanov”. *Contemporary perspectives in ethnology, museology and natural sciences. Program and summaries of communications*. Lexon-Prim. Chișinău. 32: 52.
- ***. The Orthoptera of Europe <http://www.ortheur.org/orthoptera/orthoptera/i000241.html>. (accessed: February 2, 2022).

Stahi Nadejda

Technical University of Moldova, 168, Ștefan cel Mare bd, Chișinău, MD-2004, Republic of Moldova.
Moldova State University (MSU) 60, Al. Mateevici str. MD-2009 Chișinău, Republic of Moldova.
E-mail: n_stahi@yahoo.com

Țugulea Cristina

Moldova State University (MSU) 60, Al. Mateevici str. MD-2009 Chișinău, Republic of Moldova.
National Museum of Ethnography and Natural History
Str. Mihail Cogălniceanu 82, Chișinău, Republic of Moldova.
E-mail: tuguleacristy@yahoo.com

Derjanschi Valeriu

Institute of Zoology, Academiei str. 1, 2028 Chișinău, Republic of Moldova.
E-mail: valder2002@yahoo.com

Received: April, 12, 2023

Accepted: August 1, 2023