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CHECKLIST OF ROMANIAN ORTHOPTERA (INSECTA) AND THEIR DISTRIBUTION BY ECO-REGIONS

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Abstract. The Orthoptera fauna of Romania is represented by 182 species, 94 belonging to the Ensifera suborder and 88 species belonging to the Caelifera suborder. Four of these species are each represented by two subspecies (*Isophya modesta modesta*, *I. m. longicaudata*, *Platypleis albopunctata albopunctata*, *P. a. grisea*, *Tetrix bipunctata bipunctata*, *T. b. kraussi*, *Miramella ebneri ebneri* and *M. e. carpathica*); also, the presence of a interspecific hybrid (*Chorthippus albomarginatus* × *oschei*) in the North-eastern part of the country was very interesting to find. Nine species are endemic to Romania and represent important values that should be protected: *Isophya dobrogensis*, *I. harzi*, *Callimenus montandoni*, *Odontopodisma carpathica*, *O. acuminata*, *O. montana*, *Zubovskya banatica*, *Podismopsis transsylvanica* and *Chorthippus acroleucus*.

Résumé. La faune d'Orthoptères de Roumanie est représentée par 182 espèces, dont 94 appartiennent au Sous-Ordre des Ensifera et 88 au Sous-Ordre des Caelifera. Quatre de ces espèces sont représentées chacune par deux sous-espèces (*Isophya modesta modesta*, *I. m. longicaudata*, *Platypleis albopunctata albopunctata*, *P. a. grisea*, *Tetrix bipunctata bipunctata*, *T. b. kraussi*, *Miramella ebneri ebneri* et *M. e. carpathica*); on a trouvé aussi un intéressant hybride interspécifique (*Chorthippus albomarginatus* X *oschei*) dans le Nord-Ouest du pays. Neuf espèces sont endémiques en Roumanie, représentant des valeurs importantes qui doivent être préservées: *Isophya dobrogensis*, *I. harzi*, *Callimenus montandoni*, *Odontopodisma carpathica*, *O. acuminata*, *O. montana*, *Zubovskya banatica*, *Podismopsis transsylvanica* et *Chorthippus acroleucus*.

Key words: Orthoptera, checklist, Romania, eco-regions.

INTRODUCTION

Orthoptera order has a significant ecological importance in the economy of terrestrial habitats because acridids can consume a considerable percent of the annual primary production of grasslands, being considered primary herbivores in many of them. Also, Orthoptera contribute to the diet of many animals such as reptiles, birds, mammals and other arthropods. Another important aspect is that Orthoptera species are habitat specific and the study of Orthoptera assemblages are used as indicators for conservation purposes.

The Orthoptera fauna from Romania has been studied since the year 1853 by many scientists, like: Fuss (1853, 1855), Brunner von Wattenwyl (1882), Frey-Gessner (1897), Burr (1899), Zottu (1903, 1904, 1909), Müller (1925-1926, 1931-1932), Ramme (1942, 1951), Mîndru (1958, 1960, 1980), Mîndru & Kis (1967), Vasiliu (1960, 1961), Kis & Vasiliu (1968, 1970, 1972), Kis (1960, 1962, 1963, 1964, 1967, 1976, 1978, 1993, 1994), Kis & Sangheli (1971), Sangheli (1977, 1980).

In the Orthoptera volume from the series “*Fauna României*” (“Romania Fauna”) (by Knechtel and Popovici-Bâznoșanu - 1959) 142 Orthoptera species are described. In 1970, Kis and Vasiliu published a synthesis of the Orthoptera from

Romania, revealing 170 species and in 1976-1978, Kis publishes a key to the Romanian Orthoptera, with a total number of 174 species.

The present paper represents the latest updated synthesis on Romanian Orthoptera comprising 180 species with a total number of 185 taxa, belonging to 80 genera and nine families. An updated nomenclature, taxonomical classification and distribution of the Orthoptera species in Romania according to nine historical regions and 21 eco-regions are also given.

MATERIAL AND METHOD

The present paper is a centralization of literature data and personal observations regarding the Orthoptera species, completing their number and elaborating their distribution in the historical and eco-regions. For comparing the Orthoptera species from Romania, we used their repartition in 21 eco-regions found in Romania (Doniță et al., 2005). Many of the historical regions of Romania have more than one eco-region, as shown in table 1. The distribution map in figure 1 shows both the ecological and historical regions of Romania (the map was elaborated according to Doniță et al., op.cit.).

The species nomenclature and classification were made, in most cases, according to Orthoptera species file (<http://www.Orthopteraonline.org>), online version at 01.03.2008.

RESULTS AND DISCUSSION

At present, there are 182 Orthoptera species known in Romania. Some species and subspecies were not mentioned in the former Romanian checklists and represent new reports for the Romanian fauna. The species *Miramella alpina* is mentioned by Galvagni (1987) as present in Banat, at Mehadia - studying the material collected by Brunner von Wattenwyl. In the same paper, Galvagni mentions the subspecies *Miramella ebneri carpathica* from Rodna Mountains. Recently, *Miramella ebneri carpathica* was also found in several other mountain masives from Oriental Carpathians: Rodna, Călimani and Vrancea Mountains (C. Iusan, personal observations). The species *Pseudopodisma transilvanica* has been described by Galvagni and Fontana in 1993, relying on the material collected by Ramme at Zărnești (Brașov), in 1942.

The species *Isophya dobrogensis* (1994), *Gryllotalpa unispina* (1993) and *Platypygius crassus* (1993) are mentioned recently by Kis in the Romanian fauna, *Isophya dobrogensis* being a new species described from Popina Island. In 1997, Marin et al. mentions the species *Stenonemobius gracilis* as a new report for Romania from Babina and Cernovca islands – the Danube Delta.

Recent researches and observations revealed that the species *Isophya kraussii* was misidentified with *Isophya pyrenea* and found at Adâncata (Suceava) (I. Iorgu, personal observation). Also, the species *Chorthippus oschei* replaces the species *Chorthippus albomarginatus* from almost all the country, except the North-eastern part of Romania - where the hybrid between the two species can be encountered (I. Iorgu, 2008). *Chorthippus albomarginatus* has been found only in the central and northern parts of the Oriental Subcarpathians.

Metrioptera oblongicollis has been recently found in Southern Dobrogea.

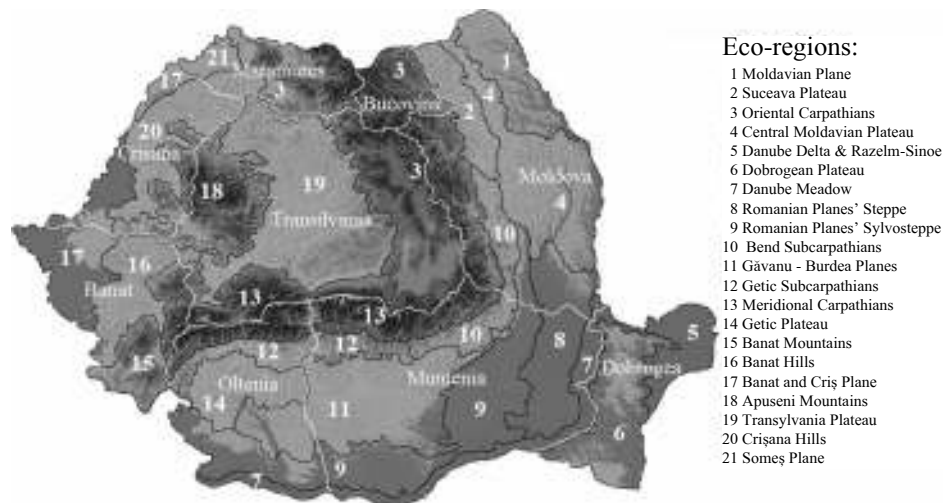


Fig. 1 – Map of Romania with eco - and historical regions.

Table 1

The eco-regions for each historical region in Romania and the total number of Orthoptera species.

Historical Regions	Eco-Regions																	Total species/historical regions				
	Moldavian Plane	Suceava Plateau	Oriental Carpathians	Central Moldavian Plateau	Danube Delta & Razelm-Sinoe	Dobrogean Plateau	Danube Meadow	Romanian Planes' Steppe	Romanian Planes' Sylvosteppe	Bend Subcarpathians	Găvanu - Burdea Planes	Getic Subcarpathians	Meridional Carpathians	Getic Plateau	Banat Mountains	Banat Hills	Banat and Criș Plane		Apuseni Mountains	Transylvanian Plateau	Crișana Hills	Someș Plane
Moldavia	+	+	+	+	-	-	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	126
Bucovina	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72
Dobrogea	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	113
Muntenia	-	-	+	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	118
Oltenia	-	-	-	-	-	-	+	+	+	-	+	+	+	+	+	-	-	-	-	-	-	114
Banat	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	+	+	+	+	+	+	108
Transylvania	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	+	-	+	+	+	+	109
Crișana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	+	92
Maramures	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	102
Total species/eco-regions	75	79	85	89	79	104	70	69	82	68	80	75	77	85	91	86	63	68	93	79	75	-

Zeuneriana amplipennis is a new genus and species for Romanian fauna, being found in the Danubian Plane at Cernavodă (Ct.) (unpublished data, I. Iorgu).

There are nine endemic species in Romania: *Isophya dobrogensis*, *I. harzi*, *Callimemus montandoni*, *Podismopsis transsylvanica*, *Odontopodisma carpathica*, *O. acuminata*, *O. montana*, *Zubovskya banatica* and *Chorthippus acroleucus*.

Some of the Orthoptera from Romania are rare species that can be considered endangered because they have either a very small number of populations (in some cases only one) with few individuals or they live in small populations in habitats that are threatened such as: *Phaneroptera gracilis spinosa*, *Leptophyes boscii*, *L. punctatissima*, *L. laticauda*, *Ancistrura nigrovittata*, *Saga campbelli gracilis*, *Platycleis albopunctata albopunctata*, *P. striata*, *Eupholidoptera chabrieri*, *Callimemus longicollis*, *Onconotus servillei*, *Nemobius sylvestris*, *Paratettix meridionalis*, *Asiotmethis limbatus*, *Miramella irena*, *Bryodemella tuberculatum*, *Arcyptera microptera*, *Myrmeleotettix antennatus* etc.

Considering the researches made so far regarding the distribution of Orthoptera species the most rich in species is Moldavia with 126 species followed by Muntenia with 118 species, Oltenia with 114 species and Dobrogea with 113 species. The poorest historical region is Bucovina with 72 species being also the smallest of the nine historical regions (Fig. 2 A).

The richest eco-region in species is the Dobrogean Plateau with 104 species, followed by Transylvanian Plateau (93 species) and Banat Mountains (91 species). The lowest number of Orthoptera species is found in the Banat and Criș Plane (only 63 species) (Fig. 2 B).

In table 2, the Orthoptera species present status in Romania, with their distribution in the ecological regions of the country.

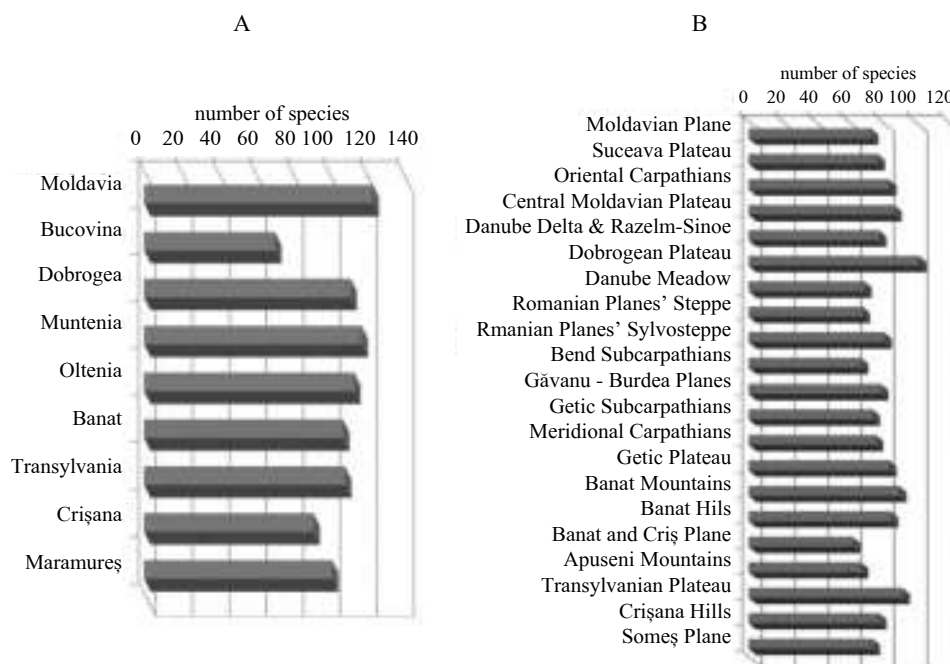


Fig. 2 - Orthoptera species distribution in Romania: A, historical regions; B, ecological regions.

Table 2 (continued)

Crt. no.	Taxon	Eco-Regions																			
		MP	SuP	OC	CMP	DDRS	DoP	DaM	RPS	RPSS	BS	GBP	GS	MC	GP	BM	BH	BCP	AM	TP	CH
65.	<i>Platycleis (Tessellana) veyseli</i> (Kocak, 1984)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+
66.	<i>Platycleis (Tessellana) nigrosignata</i> (Costa, A., 1863)	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
67.	<i>Eupholidoptera chabrieri</i> (Charpentier, 1825)	-	-	-	-	-	-	-	-	o	-	-	-	-	-	-	-	-	-	-	-
68.	<i>Pholidoptera frivaldskyi</i> (Herman, 1871)	-	+	+	-	-	-	-	-	+	+	-	+	+	-	-	-	+	+	-	-
69.	<i>Pholidoptera griseoptera</i> (De Geer, 1773)	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
70.	<i>Pholidoptera littoralis similis</i> (Brunner von Wattenwyl, 1861)	-	+	+	+	-	+	+	+	+	+	+	+	+	+	+	-	-	+	-	-
71.	<i>Pholidoptera fallax</i> (Fischer, 1853)	-	+	+	+	-	+	-	-	-	+	+	+	+	+	+	+	+	+	+	+
72.	<i>Pholidoptera transsylvanica</i> (Fischer, 1853)	-	-	+	-	-	-	-	-	-	-	-	+	-	+	+	-	+	+	+	-
73.	<i>Pholidoptera aptera</i> (Fabricius, 1793)	-	-	+	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-
74.	<i>Bucephaloptera bucephala</i> (Brunner von Wattenwyl, 1882)	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
75.	<i>Rhacocleis germanica</i> (Herrich-Schaffer, 1840)	-	-	-	+	+	+	+	+	+	+	-	-	+	+	-	-	-	-	-	-
76.	<i>Pachytrachis gracilis</i> (Brunner von Wattenwyl, 1861)	+	+	+	+	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+
TRIBE ONCONOTINI																					
77.	<i>Onconotus servillei</i> Fischer von Waldheim, 1846	+	-	-	+	-	+	-	-	+	-	+	-	-	-	-	-	-	-	-	-
SUBFAMILY BRADYPORINAE																					
TRIBE BRADYPORINI																					
78.	<i>Bradyporus dasypus</i> (Illiger, 1800)	o	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	
79.	<i>Callimenus macrogaster longicollis</i> (Fieber, 1853)	o	-	-	-	-	o	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80.	<i>Callimenus montandoni</i> Burr, 1898	-	-	-	-	-	-	-	-	e	-	e	-	-	e	-	-	-	-	-	-
TRIBE EPHIPPIGERINI																					
81.	<i>Ephippiger ephippiger</i> (Fiebig, 1784)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SUPERFAMILY GRYLLOIDEA																					
FAMILY GRYLLIDAE																					
SUBFAMILY GRYLLINAE																					
TRIBE GRYLLINI																					
82.	<i>Gryllus campestris</i> Linnaeus, 1758	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
83.	<i>Acheta domesticus</i> (Linnaeus, 1758)	+	+	-	+	-	+	+	+	+	+	+	-	+	-	+	+	-	+	+	+
84.	<i>Melanogryllus desertus</i> (Pallas, 1771)	+	+	-	+	+	+	+	+	+	+	+	-	+	-	+	+	-	+	+	+

Table 2 (continued)

Crt. no.	Taxon	Eco-Regions																				
		MP	Sup	OC	CMP	DDRS	DoP	DaM	RPS	RPSS	BS	GBP	GS	MC	GP	BM	BH	BCP	AM	TP	CH	SoP
INFRAORDER ACRIDIDEA SUPERFAMILY TETRIGOIDEA FAMILY TETRIGIDAE SUBFAMILY TETRIGINAE																						
99.	<i>Depressotetrix depressa</i> (Brisout de Barneville, 1848)	-	-	-	+	-	+	+	+	+	-	+	-	-	+	-	-	-	-	-	-	-
100.	<i>Uvarovitettix transsylvanicus</i> (Bazyluk & Kis, 1960)	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
TRIBE TETRIGINI																						
101.	<i>Paratettix meridionalis</i> (Rambur, 1839)	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
102.	<i>Tetrix ceperoi</i> (Bolivar, I., 1887)	-	-	-	-	+	+	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-
103.	<i>Tetrix subulata</i> (Linnaeus, 1758)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
104.	<i>Tetrix bolivari</i> Saulcy, 1901	-	-	-	-	+	+	-	+	+	-	+	-	+	+	+	+	-	+	+	-	-
105.	<i>Tetrix tuerki</i> (Krauss, 1876)	-	+	+	+	-	+	-	+	+	+	+	+	+	+	+	+	-	-	+	-	-
106.	<i>Tetrix tenuicornis</i> (Sahlberg, 1891)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
107.	<i>Tetrix undulata</i> (Sowerby, 1806)	+	+	+	+	-	-	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-
108.	<i>Tetrix bipunctata kraussi</i> Saulcy, 1888	-	+	+	+	-	-	-	-	-	-	-	+	-	+	-	-	+	-	-	-	-
109.	<i>Tetrix bipunctata bipunctata</i> (Linnaeus, 1758)	+	+	+	+	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+
SUPERFAMILY ACRIDOIDEA FAMILY PAMPHAGIDAE SUBFAMILY PRIONOTROPISINAE																						
110.	<i>Asiotmethis limbatus</i> (Charpentier, 1845)	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FAMILY ACRIDIDAE SUBFAMILY CATANTOPINAE TRIBE PEZOTETTIGINI																						
111.	<i>Pezotettix giornae</i> (Rossi, 1794)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SUBFAMILY CALLIPTAMINAE TRIBE CALLIPTAMINI																						
112.	<i>Paracaloptenus caloptenoides</i> (Brunner von Wattenwyl, 1861)	+	-	-	+	+	+	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-
113.	<i>Calliptamus italicus</i> (Linnaeus, 1758)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
114.	<i>Calliptamus barbarus</i> (Costa, O.G., 1836)	-	-	-	-	+	+	+	+	+	-	+	-	-	+	-	-	-	-	-	+	-
SUBFAMILY MELANOPLIINAE TRIBE PODISMINI																						
115.	<i>Podisma pedestris</i> (Linnaeus, 1758)	-	-	+	-	-	-	-	-	-	-	-	-	+	-	+	-	-	+	-	-	-

Table 2 (continued)

Crt. no.	Taxon	Eco-Regions																				
		MP	SuP	OC	CMP	DDRS	DoP	DaM	RPS	RPSS	BS	GBP	GS	MC	GP	BM	BH	BCP	AM	TP	CH	SoP
116.	<i>Miramella (Capraiuscola) ebneri ebneri</i> (Galvagni, 1953)	-	-	+	-	-	-	-	-	-	-	-	+	-	+	-	-	+	-	-	-	-
117.	* <i>Miramella (Capraiuscola) ebneri carpathica</i> (Cejchan, 1958)	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
118.	* <i>Miramella (Kisella) alpina</i> (Kollar, 1833)	-	-	-	-	-	-	-	-	-	-	-	-	-	o	-	-	-	-	-	-	-
119.	<i>Miramella (Kisella) irena</i> (Fruhstorfer, 1921)	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
120.	<i>Pseudopodisma fieberi</i> (Scudder, S.H., 1897)	-	+	+	+	-	-	-	-	+	-	+	+	-	+	+	-	+	+	+	+	-
121.	<i>Pseudopodisma transilvanica</i> Galvagni & Fontana, 1993	-	-	+	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
122.	<i>Odontopodisma decipiens</i> Ramme, 1951	+	-	-	+	-	+	+	-	+	-	+	-	+	+	+	-	-	-	-	-	-
123.	<i>Odontopodisma carpathica</i> Kis, 1961	-	-	e	-	-	-	-	-	-	-	-	e	-	-	-	-	-	-	-	-	-
124.	<i>Odontopodisma rubripes</i> (Ramme, 1931)	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	-
125.	<i>Odontopodisma acuminata</i> Kis, 1962	-	-	-	-	-	-	-	-	-	-	-	-	-	-	e	-	e	e	e	e	-
126.	<i>Odontopodisma montana</i> Kis, 1962	-	-	-	-	-	-	-	-	-	-	e	e	-	e	-	-	-	e	-	-	-
127.	<i>Zubovskya banatica</i> Kis, 1965	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-
SUBFAMILY ACRIDINAE																						
TRIBE ACRIDINI																						
128.	<i>Acrida ungarica</i> (Herbst, 1786)	+	+	+	+	+	+	+	+	+	-	+	-	-	+	-	+	+	-	+	+	+
SUBFAMILY OEDIPODINAE																						
TRIBE LOCUSTINI																						
129.	<i>Locusta migratoria</i> (Linnaeus, 1758)	+	-	-	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+
130.	<i>Oedaleus decorus</i> (Germar, 1817)	-	-	-	+	+	+	+	+	+	-	+	-	-	+	-	+	+	-	+	+	+
131.	<i>Psophus stridulus</i> (Linnaeus, 1758)	-	+	+	+	-	-	-	-	+	-	+	+	+	+	+	+	-	+	+	+	-
TRIBE OEDIPODINI																						
132.	<i>Celes variabilis</i> (Pallas, 1774)	+	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+
133.	<i>Oedipoda caerulescens</i> (Linnaeus, 1758)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
134.	<i>Oedipoda germanica</i> (Latreille, 1804)	-	-	-	-	-	+	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-
TRIBE BRYODEMINI																						
135.	<i>Bryodemella tuberculatum</i> (Fabricius, 1775)	-	-	o	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRIBE SPHINGONOTINI																						
136.	<i>Sphingonotus caerulans</i> (Linnaeus, 1767)	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	-	+	+	+

Table 2 (continued)

Crt. no.	Taxon	Eco-Regions																				
		MP	SuP	OC	CMP	DDRS	DoP	DaM	RPS	RPSS	BS	GBP	GS	MC	GP	BM	BH	BCP	AM	TP	CH	SoP
180.	* <i>Chorthippus (Chorthippus) albomarginatus</i> × <i>oschei</i> [Vedenina & Helversen, O. von, 2003]	+	+	+	+	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
181.	<i>Chorthippus (Chorthippus) loratus</i> (Fischer von Waldheim, 1846)	-	-	-	-	+	+	+	+	+	-	+	-	-	+	-	-	-	-	-	-	-
182.	<i>Chorthippus (Chorthippus) dichrous</i> (Eversmann, 1859)	-	-	-	-	+	+	+	+	+	-	+	-	-	+	+	+	+	-	+	+	+
183.	<i>Chorthippus (Chorthippus) dorsatus</i> (Zetterstedt, 1821)	-	+	+	+	-	-	-	-	-	+	-	+	+	+	+	+	+	+	+	+	+
184.	<i>Chorthippus (Chorthippus) montanus</i> (Charpentier, 1825)	-	+	+	-	-	-	-	-	-	+	-	+	+	-	-	-	-	+	+	-	+
185.	<i>Chorthippus (Chorthippus) parallelus</i> (Zetterstedt, 1821)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
186.	<i>Euchorthippus pulvinatus</i> (Fischer von Waldheim, 1846)	+	+	-	+	+	+	+	+	+	-	+	-	-	+	-	+	-	-	-	+	-
187.	<i>Euchorthippus declivus</i> (Brisout de Barneville, 1848)	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Abbreviations: MP - Moldavian Plane; SuP - Suceava Plateau; OC - Oriental Carpathians; CMP - Central Moldavian Plateau; DDRS - Danube Delta & Razelm-Sinoe; DoP - Dobrogean Plateau; DaM - Danube Meadow; RPS - Romanian Planes' Steppe; RPSS - Romanian Planes' Sylvosteppe; BS - Bend Subcarpathians; GBP - Găvanu-Burdea Planes; GS - Getic Subcarpathians; MC - Meridional Carpathians; GP - Getic Plateau; BM - Banat Mountains; BH - Banat Hills; BCP - Banat and Criș Plane; AM - Apuseni Mountains; TP - Transylvanian Plateau; CH - Crișana Hills; SoP - Someș Plane.

Legend: + = present; - = absent; o = old literature data (possibly extinct - needs further investigations); e = endemic species; * = see the remarks at end of table.

Remarks on table 2:

**Isophya kraussii* Brunner von Wattenwyl, 1878 - was misidentified in the past with *I. pyrenaea* in many countries, but the range of *I. pyrenaea* is actually restricted to Northern Spain and Southern France (Heller et al., 2004). B. Nagy (2005) reports *I. kraussii* from the Romanian part of the Carpathian Basin. Kis (1970) cited the species *I. pyrenaea* only from Northern Moldavia (Adâncata - Suceava), outside the Carpathian Basin. Later on, we have observed the species in the same area and identified it clearly as *I. kraussii*, both by morphological traits and by stridulation.

**Metrioptera (Vichetia) oblongicollis* (Brunner von Wattenwyl, 1882) - a new species for Romanian fauna, has been recently found in two forests from Southern Dobrogea: Dumbrăveni and Strunga.

**Zeuneriana amplipennis* (Brunner von Wattenwyl, 1882) - a new genus and species for Romanian fauna, found in the Danubian Plane, near Cernavodă. It is possible that this species occurrence to be all over the Danube's meadow in Romania.

**Modicogryllus truncatus* (Tarbinsky, 1940) - the species *M. chopardi* Kis, 1967 = *M. geticus* Vasiliu, 1968, mentioned in the former checklist of Romanian Orthoptera species has been synonymised with *M. truncatus* (Tarbinsky, 1940).

**Miramella alpina* (Kollar, 1833) - This species was collected by B. von Wattenwyl at Mehadia (brachypteran form individuals), but Kis & Vasiliu (1970) considered that B. von Wattenwyl has mistaken the identification. Galvagni (1987) studied the material collected by B. von Wattenwyl and has compared it with the topotype from Schneeberg and specimens from Vienna and Tyrol. He concluded that the species collected by B. von Wattenwyl at Mehadia is actually *M. alpina*. So this species may occur in Banat, but the material is very old and further investigations are needed.

**Miramella (Capraiuscola) ebneri carpathica* (Cejchan, 1958) - Galvagni mentions it from Rodna Mountains (1987), the authors found it in Rodna, Călimani and Vrancea Mountains (C. Iusan, personal observations). The Bend Carpathians are the southernmost point of this subspecies areal.

**Podismopsis transsylvanica* Ramme, 1951 - was described by Ramme (1951) from Suru Peak - Făgăraș Mountains, and cited by Kis & Vasiliu (1970) from several peaks from the same mountains. Recently we found in "Grigore Antipa" National Museum of Natural History (Bucharest) collections several specimens from Bucegi Mountains.

**Chorthippus albomarginatus* × *oschei* [Vedenina & Helversen, O. von, 2003] - the interspecific hybrid was found so far in Ukraine and Rep. Moldova by Vedenina and von Helversen in 2003. In Romania this hybrid was found only in the North-eastern part (I. Iorgu, 2008).

**Chorthippus oschei* Helversen, O. von, 1986 - this species replaces the species *Chorthippus albomarginatus* in Romania (excepting the northern and central parts in the Oriental Subcarpathians), but the distribution area of this species needs further investigation because the hybrid area between the two species is proven to be much bigger than expected (Iorgu, 2008). The main difference between the two species is the male's courtship song.

LISTA REVIZUITĂ A ORTOPTERELOR DIN ROMÂNIA (INSECTA) ȘI RĂSPÂNDIREA LOR ÎN REGIUNILE ECOLOGICE

REZUMAT

Fauna de ortoptere a României cuprinde 182 specii, 94 dintre acestea aparținând subordinului Ensifera și 88 specii aparținând subordinului Caelifera. Patru dintre aceste specii prezintă fiecare câte două subspecii (*Isophya modesta modesta*, *I. m. longicauda*, *Platycleis albopunctata albopunctata*, *P. a. grisea*, *Tetrix bipunctata bipunctata*, *T. b. kraussi*, *Miramella ebneri ebneri* și *M. e. carpathica*); de asemenea este interesantă și prezența unui hibrid interspecific în zona de nord-est a țării (*Chorthippus albomarginatus* × *oschei*). Nouă specii sunt endemice pentru România și constituie valori demne de ocrotit: *Isophya dobrogensis*, *I. harzi*, *Callimemus montandoni*, *Odontopodisma carpathica*, *O. acuminata*, *O. montana*, *Zubovskya banatica*, *Podismopsis transsylvanica* și *Chorthippus acroleucus*.

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