STUDIES ON STAPHYLINIDAE BELONGING TO THE GENUS *Carpelimus* LEACH, 1819 (COLEOPTERA: STAPHYLINIDAE: OXYTELINAE FLEMING, 1821) FROM BULGARIA

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Abstract. A review of the studies on the species from *Carpelimus* 1819 in Bulgaria is made. Twelve species, two of them new for the fauna of Bulgaria are reported – *C. despectus* BAUDI, 1870 and *C. politus* KIESSENW, 1850. The common incidence of the species is specified.

Keywords: Insecta, Coleoptera, Staphylinidae, Oxytelinae, *Carpelimus* LEACH.

Rezumat. Studii asupra genului *Carpelimus* LEACH, 1819 (Coleoptera: Staphylinidae: Oxytelinae FLEMING, 1821) din Bulgaria. Se face o analiză a studiilor asupra speciilor genului *Carpelimus* LEACH, 1819 din Bulgaria. S-au identificat douăsprezece specii, dintre care două sunt noi pentru fauna Bulgariei - *C. despectus* BAUDI, 1870 şi *C. politus* KIESSENW, 1850. Este specificată incidenţa comună a speciilor.

Cuvinte cheie: Insecta, Coleoptera, Staphylinidae, Oxytelinae, *Carpelimus* LEACH.

INTRODUCTION

According to the data of HERMAN (2001), 414 Staphylinidae species found in all continents but mainly in the Neotropical, Ethiopian and Palaearctic zoogeographical zones belong to *Carpelimus* LEACH, 1819 genus (also widely known under the synonym *Trogophloeus* MANNERHEIM, 1830).

The objective of this paper is to systematize the data currently known for the species composition and incidence from *Carpelimus* genus in Bulgaria, as the available information is fragmented and some of the species are reported with their synonyms.

MATERIAL AND METHODS

The species nomenclature and their incidence are presented in compliance with the latest data in the world catalogue of HERMAN (2001) group. Thus, some additional notes are necessary for this paper, as they are given at the end of the species list.

RESULTS AND DISCUSSIONS

Representatives of this genus for the Staphilinidae fauna in Bulgaria were mentioned for the first time by RAMBOUSEK (1909). He described 10 species from *Trogophloeus* genus – synonym of *Carpelimus.* It was the first fundamental work for our country, including representatives of this genus; however, some of the reported names later became synonyms.

The publication of SCHEERPELTZ (1937) followed with information about 3 species, but two of them were already described by RAMBOUSEK and these were all the data for the species of *Carpelimus* genus for Bulgaria.

Thus, according to the literature 10 species of the genus *Carpelimus*, had been reported for Bulgaria, to the present publication, as their habitats were found mainly in South Bulgaria and along the Black Sea coast.

After the explorations undertaken by the author for many years, mostly in the northern part of the country, 2 new species for our fauna belonging to this genus were found – marked with an asterisk in the text; thus, their total number for the country increased to 12 species, described below in alphabetical order:

1. ***Carpelimus bilineatus*** STEPH., 1834 – first reported by RAMBOUSEK (1909) as common for the country and by SCHEERPELTZ (1937) for the region of Varna. It was also found on Persina Island, near the town of Belene, the Danube River, near the Dead Swamp, with light trap at night, July 17-18, 1981, 4 specimens and June 25-27, 1982, 7 specimens; in the outflow of the Vit River near the village of Somovit, June 13, 1985, along the banks of the Danube River and the Vit River, 11 specimens.

Incidence – almost the entire Holarctic zone, further in Chile, Australia and New Zealand.

2. ***Carpelimus corticinus*** GRAV., 1806 – first reported in the collection of the Museum of Natural History in Sofia City - Coll. MHNS, then by RAMBOUSEK (1909) - common and ARNDT (1943) for the region of Plovdiv and Lakatnik railway station.

Incidence – almost entire Europe, North Africa, Russia, Turkey, Iran and North India, North and Central America.

3.* ***Carpelimus despectus*** BAUDI, 1870 – Found also on Persina Island, near the town of Belene, the Danube River, near the Dead Swamp, with light trap at night, July 17-18, 1981, 4 specimens and June 24-27, 1982, 11 specimens.

Incidence – entire Europe, Russia, the Caucasus, Turkey, Syria and Iran to Central Asia and Nepal.

Note - species *despectus* BAUDI, 1870 = *despectus* MULSANT and REY, 1870.

4. ***Carpelimus elongatulus*** ER., 1839 - reported by RAMBOUSEK (1909) - the vicinity of St. German Monastery.

Incidence – spread in entire Europe, including the Scandinavian Peninsula, Russia and Georgia - the Caucasus.

5. ***Carpelimus exiguus*** ER., 1839 – reported by RAMBOUSEK, 1909 for the area along the Tunja River and the region of Burgas. Found also on Persina Island, near the town of Belene, the Danube River, near the Dead Swamp, with light trap at night, July 17-18,1981, 7 specimens and June 25-27, 1982, 12 specimens.

Incidence – according to GILDENKOV (1998b) outside the frames of Palearctic zone, it could be met also in North and Central Africa, Indonesia, Malaysia and Australia.

6. ***Carpelimus gracillis*** MANNERH., 1830 – reported only by RAMBOUSEK (1909) for the area along the Tunja River.

Incidence – Europe, the Mediterranean area, Russia, the Caucasus, Mongolia and North America.

7. ***Carpelimus memnonius*** ER., 1840 – reported by RAMBOUSEK (1909) for the regions of Burgas, Varna, the area along the Tunja River and Stralja, and by ARNDT (1943) for the area along the Maritsa River, near the town of Plovdiv. Found also along the Vit River, the old riverbeds, near the village of Gradina, June 18, 1997, 3 specimens and the river valley between the villages of Tarnene and Yasen, July 23, 2001, on slimy riverside strips, 2 specimens.

Incidence – the entire Mediterranean zone, North Africa, Russia, the Caucasus, Uzbekistan, to the West India, North America and Mexico.

8. ***Carpelimus nitidus*** BAUDI, 1848 – reported by RAMBOUSEK (1909) only for the region of Varna. Found also on Persina Island, near the town of Belene, the Danube River, near the Dead Swamp, with light trap at night, July 17-18, 1981, 2 specimens and June 25-27, 1982, 3 specimens.

Incidence – Europe, excluding the Scandinavian Peninsula, the Mediterranean zone, North Africa, Russia, Ukraine and the Caucasus.

9. ****Carpelimus politus*** KIESSENW., 1850 – Found on Persina Island, near the town of Belene, the Danube River, near the Dead Swamp, with light trap at night, July 16-18, 1981, 18 specimens and June 24-27, 1982, 13 specimens.

Incidence – entire Europe and the Mediterranean zone, North Africa, the Caucasus, South-west and Central Asia to Mongolia.

10. ***Carpelimus punctipennis*** KIESSENW., 1850 – reported in HORION (1963) Catalogue for Bulgaria, without specifying the habitat.

Incidence - Europe, excluding the Scandinavian Peninsula, the Mediterranean zone, Russia, Ukraine and Uzbekistan.

11. ***Carpelimus pusillus*** GRAV., 1802 – reported by RAMBOUSEK, 1909 only for the vicinities of Sofia City.

Incidence - entire Europe and the Mediterranean zone, Russia, Ukraine and the Caucasus, North Africa, Turkey, New Zealand and North America.

12. ***Carpelimus rivularis*** MOTCH., 1860 – reported by RAMBOUSEK, 1909 for the vicinities of the town of Sliven and by SCHEERPELTZ (1937) for the region of Varna.

Incidence – according to HORION (1963) in the entire Palaearctic zone. It was reported by CASEY (1889) for the USA, too – North Carolina as a new species of *Troglophloeus spretus* CASEY 1889, which later was derived by BERNHAUER & SCHUBERT (1911) as a synonym of *rivularis* MOTCH., 1860.

CONCLUSIONS

The species of *Trogophloeus* (*Carpelimus) bodemeyeri* BERNH., 1902 – reported by SCHEERPELTZ (1937) for Mount Yumrukchal, 1 400 m altitude was reassigned (HERMAN, 1970) to the genus *Thinodromus* KRAATZ, 1857, i.e. at present it is *Thinodromus bodemeyeri* BERNH., 1902.

The species of *Trogophloeus dilatatus* ER., 1839 reported by RAMBOUSEK (1909) for Pancharevo was reassigned too in the genus *Thinodromus* – published by HERMAN, 1970, i.e. at present it is *Thinodromus dilatatus* ER., 1839.

REFERENCES

ARNDT W.1943. *Beitrage zur Kenntnis des Susswacerfaune Bulgarien.* Annals of the Institute of Natural History. Sofia. **16**: 214-218.

BERNHAUER M. & SCHUBERT K. 1911. *Staphylinidae II.* In S. Schenkling, Coleopterum Catalogus. Berlin: Junk. **5**(29): 87-190.

CASEY T. L. 1889. *A preliminary monograph of the North American species of Trogophloeus.* Annals of the New York Academy of Sciences. **4**: 322-383.

GILDENKOV M. I. 1998. *Carpelimus minimus (Kraatz, 1859) as a proprius species with a key to the Oriental species of the subgenus Troginus (Coleoptera, Staphylinidae, Carpelimus).* Russian Entomological Journal. 7: 127-128.

HERMAN H. LEE. 2001. *Catalog of the Staphylinidae (Insecta, Coleoptera) 1758 to the End of the Second Millennium, t. III, Oxytelinae group.* Bulletin of the American Museum of Natural History. New York: 1307-1805.

RAMBOUSEK F. 1909. *Sur les staphylinides de Bulgarie.* Vestnik Kral. Cesk. Spol. Nauk v Prahe. **2**(4): 1-23.

SCHEERPELTZ O. 1937. *Wissenschäftlische Ergebnisse einer von Herrn Hofrat F. Scheübert, seinem Sohne Herrn cand. Phil. F. Scheübert und Herrn Prof. K. Mandl im Sommer 1935 (1936) nach Bulgarien unternemmenen Studienreise.* Annals of the Institute of Natural History. Sofia. **10**: 283-292.

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