

The genus *Pachybrachis* Chevrolat (Coleoptera, Chrysomelidae) in Romania

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Abstract

Pachybrachis genus is represented in Romania by 12 species and 4 chromatic varieties, identified after personal analyse, specialized literature and the collections of Oltenia and Banat museums. There are presented general and national distribution, and also some biological and ecological notes of these species.

Key words: *Pachybrachis*, Chrysomelidae, Romania, biological and ecological notes.

Introduction

From a taxonomic point of view, *Pachybrachis* genus belongs to the Cryptocephalinae subfamily, including species that live in different biotopes: from the dry steppes, the wet environments from the water's surroundings to the high mountain areas, on different plants belonging to different botanical families.

Some faunistic notes regarding the species of this genus in different parts of the country were published in work, among together with other species of leaf-beetles or other beetles or sometimes with other orders of insects.

Syntheses more complex concerning this genus at national level were never realized up to the present moment.

Material and methods

The work includes localization of the species, which resulted from both personal analyse and specialized literature or the consultation of the collections of certain museums. The identification of species, systematics, nomenclature, general distribution of leaf-beetles in the holarctic region are based on certain papers (KIPPENBERG & DOBERL 1994; KASZAB 1962; WINKLER 1930; WARCHALOWSKI 1991).

The species are published in alphabetical order and in brackets there are the author's name and the year when the species were mentioned.

Results

Following the performed researches, in Romania *Pachybrachis* genus includes 12 species and 4 chromatic varieties.

Genus *Pachybrachis* Chevrolat 1837

Pachybrachis carpathicus Rey, 1883

General distribution: Romania and Moldova

Distribution in Romania: Sinaia (FLECK 1905); Sighișoara, Ratoșnea (PETRI 1912); Broșteni (MONTANDON 1906).

Biological and ecological notes: relatively common species, found in high hilly zones (the beech tree stage) and mountains (the fir stage).

Mesophyll-mesohygrophyll species.

Pachybrachis fimbriolatus fimbriolatus Suffrian, 1848

General distribution: southern and central Europe, Asia Minor

Distribution in Romania: Mts. Baraolt (SZEL & all. 1995) Mangalia (NEGRU & ROȘCA 1967); Sulina Veche (CRIȘAN 1994); Hațeg, Șura Mare, Gorăslău, Marpod, Geaco, Zau de Câmpie, Sighișoara, Brașov (PETRI 1912); Sighișoara (idem) - ab. *varanensis* Pic; Sovata, Hunedoara - ab. *varanensis* Pic (PETRI 1926); Fânațele Clujului (NISTOR & all. 2000); Craiova (ILIE 2002); Agigea (SERAFIM & MAICAN 2004); Bihor (ILIE 2006); Oltenia (ILIE 2005).

Biological and ecological notes: host plants are *Salix* sp., *Onobrychis viciifolia* Scopoli or other plants from Fabaceae family.

Relatively frequent species, found in the dry and salty steppes and the beech tree stage; some time could climb up to the fir stage, but there is rare. Xeromesophyll species.

Pachybrachis flexuosus Weise, 1882

General distribution: south-eastern Europe

Distribution in Romania: Apateu (KASZAB 1962), Banat (WARCHALOWSKI 1991).

Biological and ecological notes: Host plant-*Quercus pubescens* L. Rare species, found in forest steppe area, sporadic in steppe area and common oak stage. Xerophyll species.

Pachybrachis hieroglyphicus hieroglyphicus Laicharting, 1781

General distribution: Europe, eastern Siberia.

Distribution in Romania: Arcalia (CRIȘAN & BONEA 1995), Coșula, Suceava, Lepșa, Bacău, different places of Bacău county (TĂRĂBUTĂ & all.1999), Harghita (ROZNER 1996), Saschiz (SZEL & all. 1995), Ponoare (DĂNILĂ 1970), Mangalia (NEGRU & ROȘCA 1967) - ab. *tristis* Laicharting; Azuga, Bucovina (FLECK 1904), Valea Drăganului (CRIȘAN 1997), Bumbești-Jiu (ILIE 2002), Cărbunești (ILIE & CHIMIȘLIU 1999), Hațeg, Sibiu, Șura Mare, Gorăslău, Brașov, Mediaș, Sighișoara, Reghin, Ratoșnea (BIELZ 1887), Borsec (PETRI 1912) - ab. *ictericus* Weise; Broșteni (MONTONDON 1906); Buzău (JAQUET 1902); Fânațele Clujului (NISTOR & all 2000); Caraula (ILIE 2002); Rodna (CSIKI 1951), Bârsana, Leordina (MAICAN & SERAFIM 2004); Agigea (SERAFIM & MAICAN 2004), Tinca (ILIE 2003), Bihor (ILIE 2006).

Biological and ecological notes: frequent species, found in all the vegetation stage, on different species of *Salix* L. or *Crataegus monogyna* Jacqard. Mesophyll-mesohygrophyll species.

Pachybrachis hippophaes Suffrian, 1848

General distribution: mountains of Europe (Alps, Pyrenees, Carpathians)

Distribution in Romania: Lăculeț (FLECK 1904); Făgăraș, Brașov (BIELZ 1887); Ponoare (DĂNILĂ 1970); Carpați (MARCUS 1982); Cheile Turului (CRIȘAN & TEODOR 1996); Arcalia (CRIȘAN & BONEA 1995); Sf. Gheorghe (CRIȘAN 1995); Valea Drăganului (CRIȘAN 1997); Călimănești (ILIE 2002); Oltenia (ILIE 2005).

Biological and ecological notes: Host plant is *Hippophae rhamnoides* L. Common species, typical to mountain area, could to descend to more low altitudes, at plain, but here is rare. Mesophygrophyll species.

Pachybrachis limbatus Ménériés, 1836

General distribution: Balkan peninsula, Asia Minor.

Distribution in Romania: Cibin (BIELZ 1887), southern Romania (WARCHALOWSKI 1991).

Biological and ecological notes: Host plants be-

longing to the *Quercus* L. genus. Mesophyll species, found up to the beech tree stage.

Pachybrachis pallidulus suturalis Weise, 1882

General distribution: central and southern Europe

Distribution in Romania: Târnăveni (PETRI 1926); Ardeal (KASZAB 1962).

Biological and ecological notes: rare species, host plant unknown.

Pachybrachis picus Weise, 1882

General distribution: western and central Europe.

Distribution in Romania: Ardeal (PETRI 1912); Brașov (PETRI 1926); Periteașca (CRIȘAN 1995).

Biological and ecological notes: Host plants are *Corylus avellana* L. and *Rosa canina* L. Rare species, found up to the beech tree stage, mesophyll-mesohygrophyll species.

Pachybrachis scriptidorsum Marseul, 1875

General distribution: Bulgaria, Romania, Asia.

Distribution in Romania: Romania (WARCHALOWSKI 2003) without other specifications. The species needs reconfirmations for the national territory.

Biological and ecological notes: host plants unknown.

Pachybrachis scripticollis Faldermann, 1837

General distribution: western and central Asia, eastern Europe.

Distribution in Romania: Buzău (JAQUET 1902).

Biological and ecological notes: host plant unknown.

The presence of the species in country needs reconfirmations.

Pachybrachis sinuatus Mulsant et Rey, 1859

General distribution: central Europe, Balkan Peninsula and Asia minor.

Distribution in Romania: Cheile Turului (CRIȘAN & TEODOR 1995); Arcalia (CRIȘAN & BONEA 1995); Harghita (ROZNER 1997); Saschiz (SZEL & all 1995); Floreasca-București (OCHS 1922); Baziaș (IENIȘTEA & NEGRU 1975); Azuga, Bucovina, Plăinești (Fleck 1904); Valea Drăganului (CRIȘAN 1997); Periteașca (CRIȘAN 1995); Putna (MARCUS 1928)-ab. *rufimanus* Weise; Lainici (ILIE 2002); Racovița, Cărbunești (ILIE & CHIMIȘLIU 2000); Hațeg, Petroșani, Brașov, Sighișoara, Aiud, Ratoșnea, Mts. Rodnei, Prejmer (PETRI 1912); Hațeg (PETRI 1912)-ab. *rufimanus* Weise; Turnu Roșu (PETRI 1926); Mts. Rodnei, Sighișoara (PETRI 1926)- ab. *rufimanus* Weise; Gheorghieni (IENIȘTEA 1931); Mofleni (ILIE 2002);

Strâmtura, Bârsana, Ieud, Chalet Repede, Ocna Șugatag, chalet Plesca, Desești (MAICAN & SERAFIM 2001); the confluence of Târnave (CRIȘAN & DRUGUȘ 2001); Banat (Banatului Museum); the Arieș upper basin (CRIȘAN & TEODOR 2002); Bârsana, Bistra, Poienile de sub Munte, Leordina, Repede, Dragomirești (MAICAN & SERAFIM 2004), the Arieș lower basin (CRIȘAN & TEODOR 2005), Oltenia (ILIE 2005), Bihor (ILIE 2006).

Biological and ecological notes: host plants: *Myricaria germanica* L. and *Salix* L.

Frequent species, typical to mountain area, rarely could descend to the plain area. Mesohygrophyll-hygrophyll species.

Pachybrachis tessellatus Olivier, 1791

General distribution: central and southern Europe, till the Caspian Sea.

Distribution in Romania: Cheile Turzii (CRIȘAN 1992); Cheile Turului (CRIȘAN & TEODOR 1996); Arcalia (CRIȘAN & BONEA 1995); Harghita (ROZNER 1997); Gilău (MARCUS 1957); Baziaș (IENIȘTEA 1974); București (Fleck 1904); Beștepe, forest Letea (CRIȘAN 1994); Hațeg, Sibiu, Șura Mare, Brașov, Mediaș, Reghin. Dej (BIELZ 1887), Sibiu, Cluj, Turnu Roșu, Sighișoara (PETRI 1912); the confluence of Târnave (CRIȘAN & DRUGUȘ 2001).

Biological and ecological notes: Host plants belong to the *Quercus* L. genus. Relatively common species, typical to the high hilly and mountain areas more rarely found at plain.

Mesophyll-mesohygrophyll species.

Discussions

After having analyzed the results, the following consideration has been ascertained:

For the species *Pachybrachis hippophaea* Suffrian Sfântu Gheorghe (The Danube Delta) can be considered as being the south-eastern limit of the specific spreading area of a specimen.

Two species: *Pachybrachis scriptiodorsum* Marseul, *Pachybrachis scripticollis* Faldermann need reconfirmation for the national territory, their presence is possible.

From an ecological preferences point of view, the majority of species are mesophyll-mesohygrophyll, only two species being xero-or xeromesophyll.

Also, referring to the distribution of those species on the vertical, it has been found the preference for the high altitudes, over 1000m.

Conclusions

In Romania, *Pachybrachis* genus includes 12 species and 4 chromatic varieties, the majority

mesophyll-mesohygrophyll. They are distributed in different biotopes, feeding themselves with different host-plants.

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