

ON THE SPECIES OF BRACHININI (COLEOPTERA: CARABIDAE: BRACHININAE: BRACHININI) IN ROMANIAN MUSEUM COLLECTIONS

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Abstract. The paper presents twelve Brachinini species from Romanian fauna. *Brachinus nigricornis* Gebler and *B. brevicollis* Motschulsky are firstly recorded in Romania. Distribution maps, based on the examined material, were made for each species. For seven *Brachinus* species, photos of the median lobe are given. Specimens preserved in the collections of “Grigore Antipa” National Museum of Natural History and Brukenthal National Museum were studied. Besides specimens collected from Romania, all the specimens/species which were sampled in other countries of Europe, Northern Africa and Indonesia (Java) are presented.

Résumé. Le travail présente douze espèces de Brachinini de la faune de Roumanie. *Brachinus nigricornis* Gebler et *B. brevicollis* Motschulsky sont enregistrées en Roumanie pour la première fois. Des cartes de distribution basée sur le matériel examiné ont été faites pour chaque espèce. Les photos du lobe médian sont données pour sept espèces de *Brachinus*. Les exemplaires conservés dans les collections du Muséum National d'Histoire Naturelle «Grigore Antipa» et le Muséum National Brukenthal ont été étudiés. En plus on présente des exemplaires collectés en Roumanie ainsi que des spécimens/espèces collectés dans d'autres pays d'Europe, d'Afrique du Nord et en Indonésie (Java).

Key words. *Brachinus*, *Aptinus*, *Mastax*, collections, Romania.

INTRODUCTION

In Romania, the Brachinini tribe is represented by three genera: *Aptinus* Bonelli, *Brachinus* Weber and *Mastax* Fischer von Waldheim. The species of the Brachinini tribe have been very poorly studied in Romania. There are old faunistical lists containing records of Brachinini, such as Bielz (1887), Fleck (1905), Montandon (1887, 1906), Jonesco (1911), Petri (1912, 1925-1926), Marcu (1929), Negru (1957), Săvulescu & Popescu-Gorj (1964), Negru & Roșca (1967), Ieniștea (1968, 1974, 1975). Besides these, there are few articles dealing with ecological and zoogeographical aspects, recording *Brachinus explodens* Duft. and *B. crepitans* (L.) as the most frequent species in Romanian fauna. Recently, a checklist of Brachinini tribe, with seven species, was published by Nitzu (2007a).

MATERIAL AND METHODS

The paper presents data on the species/specimens preserved in the collections of the „Grigore Antipa” National Museum of Natural History, Bucharest and the Brukenthal National Museum, Sibiu. MGAB collections: *Palaeartic Coleoptera* collection, Dr. Nicolae Săvulescu collection and the collection organized by the corresponding author; the last collection is presented below as the examined material. BNM collections: *Transylvanian Society* collection, *Karl Petri* collection, *Eugen Worell* collection, *Rolf Weyrauch* collection and *Eckbert Schneider* collection. The specimens were sampled in Romania, Austria, Croatia, France, Germany, Greece, Italy, Kazakhstan, Portugal, Republic of Moldova, Spain, Ukraine, Algeria and Egypt. The collecting site is mentioned in part of the material, the rest having only generic information:

Frankreich, Österreich, Siebenbürgen. The specimens were collected between 1858 (*Transylvanian Society* collection) and 1971 (*Eckbert Schneider* collection).

The identification was made on the basis of both outer and inner morphological features, using Hürka's (1996) and Baehr's (2004) identification keys. All the specimens of *Brachinus* from both MGAB and BNM collections were studied/revised by the corresponding author. The specimens of *Aptinus*, *Mastax* and part of *Brachinus crepitans* and *B. explodens* of MGAB collections were identified by the coauthor.

The photos were taken using the stereomicroscope Stemi 2000-C and the digital camera Nikon D700, with Nikon 105 mm F2.8 lens.

Abbreviations:

Mt./Mts. - Mountain/s; spec. (s) - specimen/s; coll. - collection; MGAB - "Grigore Antipa" National Museum of Natural History; BNM - Brukenthal National Museum.

Abbreviations for the county names in Romania:

AB - Alba; AR - Arad; B - București; BR - Brăila; BV - Brașov; BZ - Buzău; CJ - Cluj; CL - Călărași; CS - Caraș Severin; CT - Constanța; DJ - Dolj; GL - Galați; GR - Giurgiu; HD - Hunedoara; IF - Ilfov; IL - Ialomița; MH - Mehedinți; MM - Maramureș; MS - Mureș; OT - Olt; PH - Prahova; SB - Sibiu; SJ - Sălaj; SM - Satu Mare; SV - Suceava; TL - Tulcea; TR - Teleorman; VL - Vâlcea; VN - Vrancea; VS - Vaslui.

RESULTS AND DISCUSSIONS

In Romania, the genera *Aptinus* and *Mastax* are each represented by only one species, *Aptinus bombardata* Illiger, respectively *Mastax thermarum thermarum* (Steven). The genus *Brachinus* contains ten species. Twelve species of *Brachinini* collected from Romania were identified in the MGAB collections and six species of *Brachinus* from Romania were identified in the BNM collections.

The genera, subgenera and species are presented alphabetically. The classification of species in subgenera follows the site <http://carabidae.org>. The number of specimens, sex, the collecting sites alphabetically grouped by counties, the collecting data and the collector's name are mentioned for each species.

Besides the species present in Romanian fauna, in the MGAB collections there are several additional foreign species: *Aptinus displosor* (L. Dufour), *A. pyrenaicus* Dejean, *Brachinus boeticus* Rambur, *B. italicus* Dejean, *B. pecoudi* Puel, *B. sclopeta* (Fabricius), *B. exhalans* (P. Rossi), *B. humeralis* Ahrens, *Pheropsophus africanus* (Dejean) and *P. javanus* (Dejean). Additional foreign species are also present in BNM collections: *Brachinus andalusiacus* Rambur, *B. boeticus* Rambur, *B. pygmaeus* Dejean, *B. bellicosus* L. Dufour, *B. italicus* Dejean, *B. sclopeta* (Fabricius), *B. exhalans* (P. Rossi), *B. humeralis* Ahrens, *B. quadriguttatus* Gebler, *B. lethierryi* Reiche and *B. oblongus* (Dejean).

Genus *Aptinus* Bonelli, 1810

Aptinus bombardata Illiger, 1800

(Fig. 1 A)

Examined material: 1 spec., Băile Herculane, 14.07.1960, leg. N. Săvulescu; Moldova Nouă: 1 spec., 26.05.1971; 2 specs., 27.05.1971; 2 specs., 28.05.1971, leg. N. Săvulescu; Oravița (Marila): 2 specs., 15.07.1959; 1 spec., 1.07.1963; 3 specs., 1.07.1971; 1 spec., 2.07.1971; 1 spec., 3.07.1971, leg. N. Săvulescu (CS); 1 spec., Comana, 16.06.1955, leg. N. Săvulescu (GR); 9 specs., Periprava, 29.07.1967, leg. N. Săvulescu (TL).

Palaeartic collection: 1 ♂, Buștenari, leg. R. Canisius (PH).

Records: Cluj-Napoca (Bielz, 1887), Bazna, Sighișoara (Petri, 1912), Cheile Turzii (Ruicănescu, 1992), Bârnova forest (Iași), (Varvara, 2004), Gidint forest,

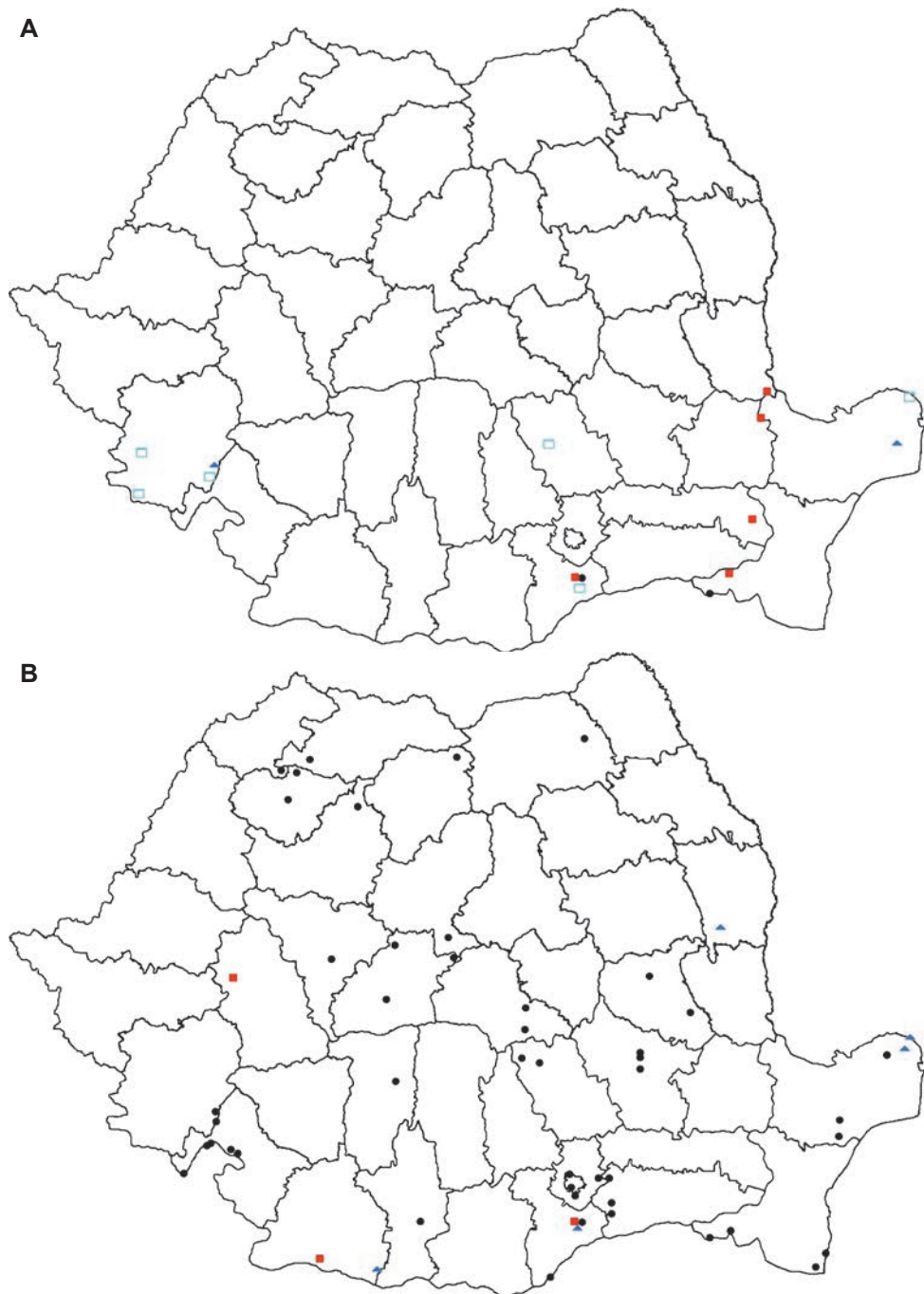


Fig. 1 - Distribution in Romania of *Aptinus bombarda* (empty blue squares), *Brachinus bayardi* (black bullets), *B. bipustulatus* (red squares), *Mastax thermarum thermarum* (bleu triangles) (A) and *Brachinus crepitans* (black bullets), *B. ejaculans* (red squares), *B. plagiatus* (bleu triangles) (B) based on examined material.

Potoci (Neamț) (Varvara & Zugravu, 2006), Sic-Păstăraia (Nitzu, 2007b), Vaslui (Varvara, 2009).

Genus *Brachinus* Weber, 1801
Subgenus *Brachinus* Weber, 1801
Brachinus crepitans (Linnaeus, 1758)
(Figs. 1 B; 4 A)

Examined material: București, Băneasa forest: 1 ♂, leg. R. Canisius; 1 ♀, 29.03.1951; 1 ♂, 28.05.1954; 1 ♂, 2 ♀♀, 7.05.1955, leg. N. Săvulescu; 1 ♀, 08.1964, leg. A. Roșca; 1 ♂, 20.09.1964, leg. Vl. Brădescu; 2 ♀♀, 1991, leg. Ș. Procheș (B); 1 ♂, Brașov, 700 m asl, 20.06.1954, leg. I. Ceianu (BV); 1 ♂, Cernătești, archaeological site, 31.08.2005, leg. D. Kurzeluk; Vizereanu hill (Beceni, Izvoru Dulce): 2 ♀♀, 18.04.2002, leg. D. Kurzeluk; 1 ♂, 1 ♀, 16.04.2005, leg. V. Ungureanu; 1 ♂, Balauru hill (on the west of Izvoru Dulce), 4.05.2005, leg. V. Ungureanu (BZ); Budești: 1 ♂, 15.05.1974, leg. M. Weinberg; 1 ♀, 25.05.1979, leg. M. Weinberg; 1 ♀, 7.09.1979, leg. A. Dumitru; 1 ♂, Vasilați, 18.05.1988, leg. R. Serafim; 1 ♀, Belciugatele, 13.07.2005, leg. V. Ungureanu (CL); Canaraua Fetii: 1 ♂, 1 ♀, 29.06.1956; 1 spec., 16.05.1962, leg. N. Săvulescu; Comorova forest: 7 ♂♂, 2 ♀♀, 3.06.1962, leg. N. Săvulescu; 2 ♂♂, 2 ♀♀, 23.04.1965, leg. Șt. Negru; Esecioi forest: 3 ♂♂, 18.06.1960; 1 ♂, 25.05.1962, leg. N. Săvulescu; 1 ♀, Hagieni forest, 21-22.04.1965, leg. Șt. Negru (CT); Comana forest: 1 ♀, leg. A. L. Montandon; 1 ♀, 30.05.1954, leg. N. Săvulescu; 1 ♀, 18.09.1964, leg. A. Roșca; 1 ♀, 23.05.1967, leg. N. Săvulescu; 3 ♂♂, Cama islet, 7-16.06.2004, leg. M. Stan (GR); Pasărea forest: 1 ♂, 2.04.1950; 1 ♂, 28.04.1955, 1 ♂, 19.06.1959; 2 ♀♀, 7.06.1960, leg. N. Săvulescu; 1 ♀, 18.09.1964, leg. A. Roșca; 1 ♀, 23.05.1967, leg. N. Săvulescu (IF); 1 ♂, Mireșu Mare, 06.1942, leg. E. Váradi (MM); 1 ♂, Breznița-Ocol, 5.05.1962, leg. N. Săvulescu; Drobeta Turnu Severin: 1 ♀, 12.07.1962; 1 ♀, 1.08.1962, leg. N. Săvulescu; Eșelnița: 1 ♀, 15.08.1965, leg. X. Scobiola Palade; 3 ♀♀, 10.08.1966 (under logs), leg. Șt. Negru; 1 ♀, 5.08.1967, leg. Șt. Negru; 1 ♀, Orșova (Grațca), 30.03.1967 (under stone), leg. Șt. Negru; 1 ♀, Șvinița, 28.03.1970, leg. N. Săvulescu (MH); 1 ♂, 1 ♀, Pestra, Drăgănești-Olt, 6.04.1980, leg. G. Andrei (OT); 1 ♀, Valea Doftnei, Paltinu Lake, 6.06.1982, leg. M. Taloi; 7 ♂♂, 2 ♀♀, Sinaia, 27.06.1963, leg. A. Roșca (PH); 1 ♂, Sibiu, 29.06.1961, leg. I. Nemeș (SB); 1 ♀, Suceava, 15.07.1959, leg. I. Nemeș (SV); 1 ♂, Babadag-Codru forest, 13.09.1967, leg. Șt. Negru; 1 ♂, Lunca, 31.05.1977, leg. G. Andrei; 1 ♀, Maliuc, mila 26, 7.08.1991, leg. R. Serafim (TL); 1 ♀, Olănești, 9.09.1982, leg. A. Popescu-Gorj (VL); Răstoaca, Putna: 2 ♀♀, 9.09.1975; 1 ♂, 1 ♀, 13.09.1975, leg. N. Săvulescu; 1 ♂, Vidra, 23.07.1962, leg. A. Roșca (VN); 1 ♂, 1 ♀, Ineu Mt. (Rodna Mts), 28.06.1955, leg. E. Schneider. *Palaeartic* collection: București: 1 ♀, leg. R. Canisius; 1 ♂, leg. A. L. Montandon, named *Brachinus psophia* Serv. (B); 1 ♂, Jilava, leg. A. L. Montandon (IF); 1 ♀, Besançon, France, coll. A. L. Montandon.

Transylvanian Society collection: 1 ♂, 1 ♀, Banat, Birthler, 1895; Siebenbürgen (Transylvania): 2 ♂♂, Birthler, 1895; 1 ♀, Kronstädter Gbg., leg. F. Deubel (BV); Hermannstadt (Sibiu): 3 ♂♂ (without other data), 1 ♂, 1887; 1 ♂, 1891; 1 ♂, 1895; 1 ♀, R. Albrecht; 2 ♂♂, 3.07.1889 (SB); 1 ♂, Zilah (Zalău), dr. Kiss; 1 ♀, Sz.-Cseh (Szilágycseh) (Cehu Silvaniei), dr. Kiss (SJ); 1 ♂, 3 ♀♀, Hadad (Hodod), dr. Kiss (SM); 2 ♂♂, 1 ♀, Osterreich (Austria), A. F., 07.1890; 2 ♂♂, Frankreich (France), E. A. Bielz, 1858 (named *B. psophia* Serv. and *B. explodens* var. *glabratus* Dej).

Karl Petri collection: 1 ♂, Dees (Dej), 1890, leg. K. Petri (CJ); Schassburg (Sighișoara): 1 ♂, 1 ♀, 1884, leg. K. Petri; 1 ♀, 05.1899, leg. K. Petri (MS); 1 ♀, Baassen (Bazna), 07.1909 (SB).

Eugen Worell collection: Sibiu: 5 ♂♂ (without other data); 1 ♂, 2 ♀♀, 04.1925; 1 ♀, Karlsburg (Alba Iulia), named *Brachinus ganglbaueri* Afb. (AB); Chişinău (Republic of Moldova): 2 ♂♂, 2 ♀♀, 06.1936; 5 ♂♂, 2 ♀♀, 05.1937; 3 ♀♀, Pola (Croatia), without other data, named *Brachinus immaculicornis* Dej.

Rolf Weyrauch collection: Herkulesbad (Băile Herculane): 1 ♀, 19.05.1956; 1 ♂, 08.06.1969, 1 ♀, 17.05.1970; 2 ♂♂, Domogled, 18.06.1969 (CS); Hendorf (Brădeni): 2 ♂♂, 4 ♀♀, 23.05.1954; 3 ♀♀, 15.05.1955, leg. R. Weyrauch (SB).

Records: Mangalia (Montandon, 1887), Agnita, Bistriţa, Braşov, Cincu, Cluj-Napoca, Dej, Deva, Făgăraş, Geaca, Haţeg, Mediaş, Prejmer, Reghin, Săcele, Sibiu, Sighişoara (Bielz, 1887), Iglîţa, Mangalia (Fleck, 1905), Comana (Montandon, 1906), Iaşi (Jonesco, 1911), Bahna (Marcu, 1929), Comorova (Negru, 1957, Negru & Roşca, 1967), Ieşelniţa valley (Ieniştea, 1975), Hagieni (Negru & Roşca, 1967, Nitzu, 2001), Singureni (Fiera et al., 2013).

Brachinus ejaculans Fischer von Waldheim, 1828

(Figs. 1 B; 4 C, D)

Examined material: 1 ♀, Bistreţ, 23-25.06.1981, leg. D. Dumitrescu (DJ); Comana: 2 ♂♂, 1 ♀, 30.05.1954; 1 ♂, 1 ♀, 8.05.1955; 1 ♂, 14.05.1955; 1 ♂, 1 ♀, 23.05.1955; 1 ♂, 3.06.1955, leg. N. Săvulescu (GR); 1 ♀, Dobra, 20.05.1970, leg. I. Ceianu (HD).

Karl Petri collection: 1 ♂, 1 ♀, Sebastopol, Krim (Crimea), 8.05.1906, leg. & det. W. Pliginskyi.

Records: Nitzu, 2007a (without collecting data).

Brachinus elegans Chaudoir, 1842

(Figs. 2 A; 5 A)

Examined material: Herăstrău Park, Bucureşti: 1 ♀, 30.05.1991, leg. H. Tănase; 1 ♀, 14.06.1991, leg. H. Tănase (B); 2 ♂♂, Budeşti, 25.05.1979, leg. M. Weinberg; 1 ♀, Ceianu Nou islet, km 342 on the Danube River, 26.05.2008, leg. M. Stan (CL); 1 ♀, Băile Herculane, 28.06.1958, leg. N. Săvulescu (CS); 1 ♀, Canaraua Feti, 29.06.1956, leg. N. Săvulescu (CT); 1 ♂, Bistreţ, 25.06.1981, leg. R. Serafim; Panaghia forest, Radovan: 1 ♂, 14.06.1984, leg. G. Andrei; 1 ♂, 15.06.1984, leg. M. Andrei; 1 ♂, Gătanu islet, 16.05.2004, leg. O. Popa (DJ); Comana: 1 ♀, 30.05.1954, leg. N. Săvulescu; 3 ♂♂, 1 ♀, 8.05.1955; 3 ♂♂, 7 ♀♀, 14.05.1955; 5 ♂♂, 3 ♀♀, 23.05.1955, leg. N. Săvulescu; 1 ♂, 3.06.1955, leg. N. Săvulescu; 1 ♂, 18.09.1964, leg. A. Roşca; 1 ♀, 9.06.1965, leg. N. Săvulescu; 1 ♀, 28.03.1977, leg. G. Andrei; 1 ♂, 1 ♀, Cama islet, km 510 on the Danube River, 7-16.06.2004, leg. M. Stan (GR); 1 ♀, Mogoşoia, 27.06.1961, leg. A. Roşca; 1 ♂, Pasărea forest, 3.06.2001, leg. C. Pârvu (IF); 2 ♀♀, Jupalnic, 20.04.1968, leg. Şt. Negru; 2 ♂♂, 3 ♀♀, Mraconia, 31.03.1970, leg. Şt. Negru; 1 ♀, Strehăia, 10.05.1982, leg. R. Serafim (MH); 1 ♂, Sighetu Marmaţiei, 23.07.1953, leg.? (MM); 1 ♀, Palanca forest, Nicolae Titulescu, 23.06.1980, leg. I. Matache (OT); 1 ♂, Lunca, 31.05.1977, leg. G. Andrei (TL); 1 ♂, Marburg, Hessen (Germany), coll. I. Ceianu; 1 ♂, Gallia, Reitter, coll. I. Ceianu.

Palaeartic collection: 1 ♂, Also-Rákos (Racoşul de Jos), coll. F. Deubel, named *Brachinus crepitans* (L.) (BV); 1 ♂, 2 ♀♀, Dordogne, France, coll. A. L. Montandon, named *B. psophia* Serv.

Transylvanian Society collection: Banat: 1 ♂, 2 ♀♀, Birthler, 1895; 1 ♂, 13.05.1884, Birthler, 1885; 1 ♂, 1 ♀, Neusiedler See (Austria), Cl. Splichal; 1 ♂, Italien (Italy), E. A. Bielz, 1858 (all the specimens as *B. psophia* Serv.)

Karl Petri collection: Schassburg (Sighişoara): 1 ♂, 1884 (named *Brachinus psophia* Serv.); 1 ♂, 1 ♀, 1889; 3 ♀♀, 1890 (named *B. psophia* Serv.); 1 ♀, 1891 (MS);

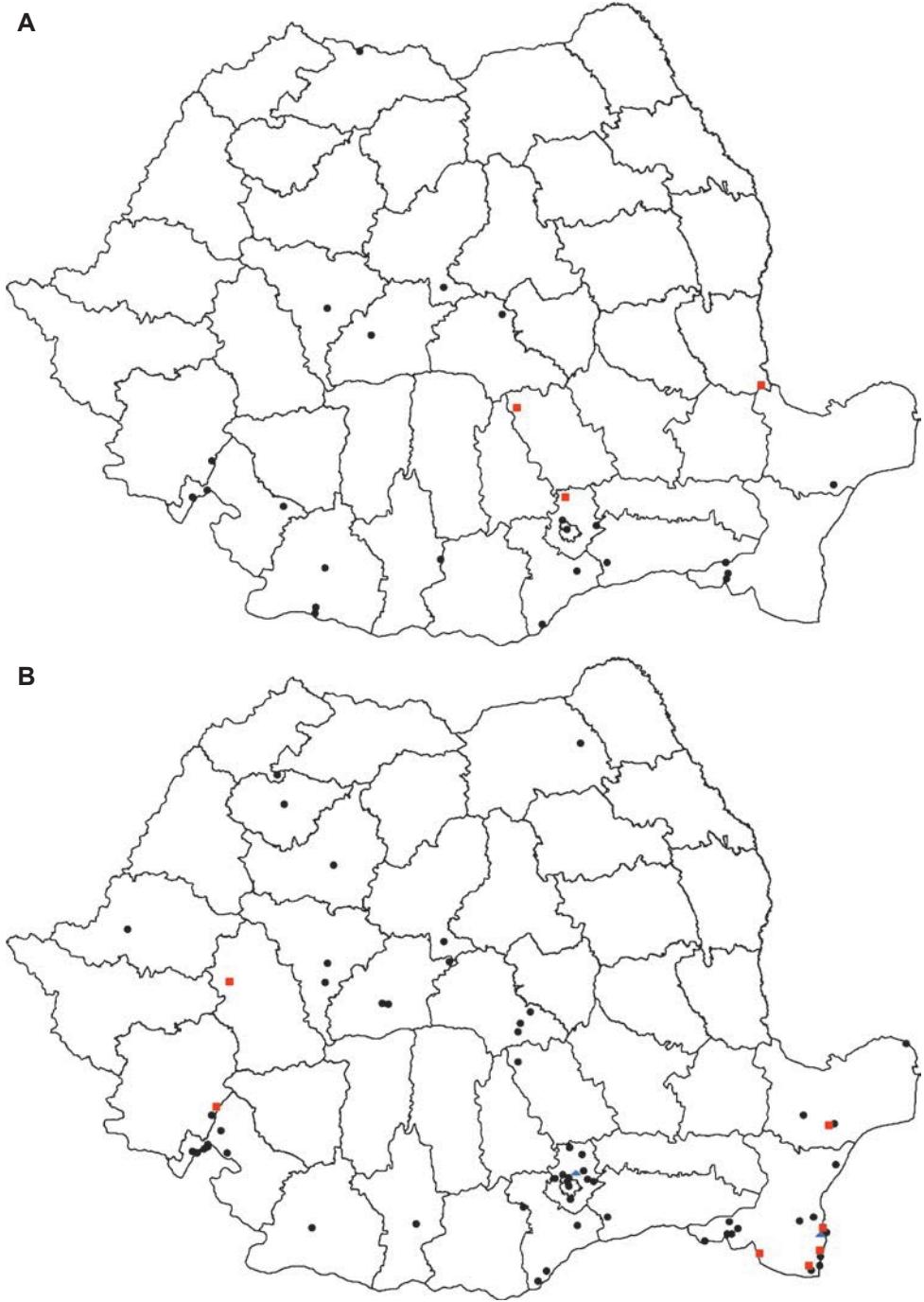


Fig. 2 - Distribution in Romania of *Brachinus elegans* (black bullets), *B. psophia* (red squares) (A) and *B. brevicollis* (red squares), *B. explodens* (black bullets), *B. nigricornis* (blue triangles) (B) based on examined material.

Karlsburg (Alba Iulia): 2 ♂♂, 1 ♀, 1899, leg. K. Petri (named *B. psophia* Serv.); 2 ♂♂, 2 ♀♀, 07.1912 (AB); 1 ♀, Neusiedler See (Austria); 1 ♂, 1 ♀, Marburg (Germany), Weber; 1 ♂, Sebastopol, Krim (Crimea), 29.07.1901, leg. W. Pliginskyi.

Eugen Worell collection: 3 ♀♀, Banat, 04.1927 (as *B. psophia* Serv.); 3 ♂♂, 2 ♀♀, Carmen Sylva (Eforie Sud), 06.1931 (CT); 1 ♂, 3 ♀♀, Chişinău (Republic of Moldova), 05.1937, as *Brachinus crepitans* (L.); 2 ♀♀, Neusiedler See (Austria), as *B. psophia* Serv.; 1 ♂, Marburg (Germany), Weber.

Rolf Weyrauch collection: Canaraua Fetii: 1 ♂, 22.06.1974, 1 ♂, 3 ♀♀, 15-18.05.1975, named *Brachinus crepitans* (L.) (CT); 1 ♀, Salzburg (Ocna Sibiului), 5.06.1956, named *B. explodens* Dufts., leg. R. Weyrauch (SB).

Eckbert Schneider collection: 1 ♀, Iortmac valley, 25-27.04.1971, leg. E. Schneider, named *B. psophia* Serv. (CT).

Records: Alba Iulia, Sighişoara (Petri, 1925-1926), Mraconia valley (Ieniştea, 1975), Cheile Turzii (Ruicănescu, 1992), Casian, Cheia, Gura Dobrogei cave (Nitzu, 2001). All records are named *Brachinus ganglbaueri* Afb.

Brachinus plagiatus Reiche, 1868

(Figs. 1 B; 4 B)

Examined material: Romania: 1 ♂, Dăbuleni, 5.06.1986, leg. I. Ceianu (DJ); Comana: 1 ♂, 30.05.1954; 1 ♂, 1 ♀, 23.05.1955; 1 ♀, 3.06.1955, leg. N. Săvulescu; 1 ♂, 19.07.1963, leg. A. Popescu-Gorj (GR); Periprava: 2 ♂♂, 6 ♀♀, 8.05.1964, leg. X. Scobiola (det. M. Al. Ieniştea); 2 ♂♂, 8 ♀♀, 9.05.1964, leg. M. Weinberg & X. Scobiola (det. A. Roşca, Şt. Negru, M. Al. Ieniştea); 1 ♀, 19.04.1966, leg. Şt. Negru (det. M. Al. Ieniştea); 1 ♀, Letea forest, 20.07.1966, leg. Şt. Negru (det. M. Al. Ieniştea) (TL); 1 ♂, Bârlad, 20.08.1969, leg. A. Roşca (VS); Italy: 6 ♂♂, 3 ♀♀, Commachio, Ferrara, 11.03.1968, leg & det. P. Garagnani.

Transylvanian Society collection: 2 specs., Frankreich (France), E. A. Bielz, 1858.

Karl Petri collection: Sebastopol, Krim (Crimea): 1 ♀, 07.03.1906, 1 ♀, 20.02.1908, 1 ♀ (without other data), leg. & det. W. Pliginskyi.

Eugen Worell collection: 1 ♂, Cartagena (Spain).

Records: Letea forest, Periprava (Ieniştea, 1968).

Brachinus psophia Audinet-Serville, 1821

(Figs. 2 A; 5 B)

Examined material: 1 ♂, Brateş Lake, 2.06.1952, leg. N. Săvulescu (GL); 1 ♀, Cocioc, 11.05.1991, leg.? (IF); 2 ♂♂, Sinaia, 27.06.1963, leg. A. Roşca (PH).

Records: Dej, Deva, Dobra, Haţeg, Mediaş (Bielz, 1887), Măcin (Fleck, 1905), Bucureşti, Comana (Montandon, 1906), Maliuc, Mila 26 (Popovici, 1992), Sic-Păstăraia (Nitzu, 2007b).

Subgenus *Brachynolomus* Reitter, 1919

Brachinus brevicollis Motschulsky, 1844

(Figs. 2 B; 3 A; 5 D)

Examined material: Romania: 1 ♀, Băile Herculane, 15.06.1952, leg. N. Săvulescu (CS); Agigea: 1 ♂, 1 ♀, 24.04.1963, leg. Şt. Negru; 1 ♀, 30.08.1963, leg. A. Roşca; 1 ♂, 12.06.1964, leg. N. Săvulescu; 1 ♂, 29.06.1964, leg. Şt. Negru; 2 ♂♂, Comorova forest, 31.08.1963, leg. A. Roşca; Hagieni forest: 2 ♂♂, 1 ♀, 29.04.1964, leg. Şt. Negru; 1 ♂, 9.05.1965, leg. N. Săvulescu; 1 ♀, Dumbrăveni, 23.05.1963, leg. N. Săvulescu (CT); 1 ♀, Dobra, 20.05.1970, leg. I. Ceianu (HD); Babadag-Codru forest:

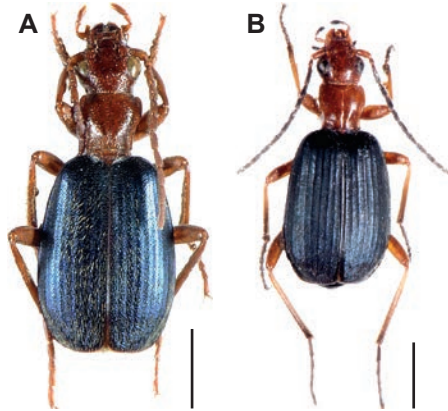


Fig. 3 - Habitus: *Brachinus brevicollis* Motschulsky, male (A) and *Brachinus nigricornis* Gebler, female (B). Scale: 2 mm. (photos: G. Năzăreanu)

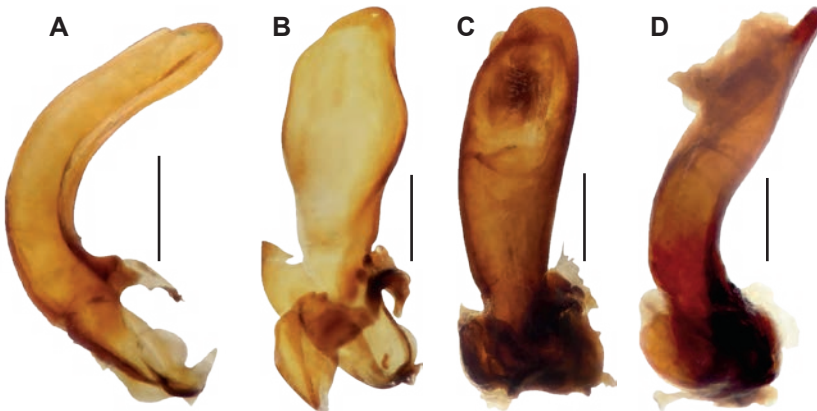


Fig. 4 - Median lobe: *Brachinus crepitans* (lateral view) (A), *B. plagiatus* (ventral view) (B), *B. ejaculans* (ventral and lateral views) (C, D). Scale: 1 mm. (photos: G. Năzăreanu)



Fig. 5 - Median lobe: *Brachinus elegans* (lateral view) (A), *B. psophia* (lateral view) (B), *B. explodens* (lateral view) (C), *B. brevicollis* (ventral view) (D). Scale: 1 mm. (photos: G. Năzăreanu)

6 ♂♂, 2 ♀♀, 20.06.1963, leg. X. Scobiola; 1 ♂, 2 ♀♀, 4.10.1975; 2 ♂♂, 7.10.1975; 3 ♂♂, 2 ♀♀, 8.10.1975, leg. N. Săvulescu (TL); Bulgaria: 1 ♀, Albena, 5.08.1974, leg. & det. Z. Sustek.

Remarks: New record for Romania.

Brachinus explodens Duftschmid, 1812
(Figs. 2 B; 5 C)

Examined material: 1 ♂, Şiria, 11.07.1954, leg.? (AR); Bucureşti: 2 ♂♂, Băneasa, 29.03.1951, leg. N. Săvulescu; 1 ♂, Botanical Garden, 5.05.1991, leg. H. Tănase; Herăstrău Park: 1 ♀, 10.05.1991; 1 ♀, 5.06.1991, leg. H. Tănase; 1 ♀, 1991, leg. Ş. Procheş (B); Budeşti: 1 ♂, 15.05.1958, leg. A. Roşca; 1 ♂, 25.05.1979, leg. G. Andrei; 8 specs., 7.06.1979, leg. A. Dumitru (CL); 1 spec., Băile Herculane, 15.06.1952, leg. N. Săvulescu (CS); 1 ♀, Băneasa forest, 15.07.1961, leg. N. Săvulescu; Canaraua Fetii: 2 ♀♀, 29.06.1956, leg. N. Săvulescu; 3 ♂♂, 15.07.1961, leg. N. Săvulescu; 1 spec., 1.05.1965, leg. X. Scobiola; 1 ♀, 1.10.1965, leg. Şt. Negru; Comorova forest: 1 ♀, 1.07.1955, leg. N. Săvulescu; 2 ♂♂, 1 ♀, 3.06.1962, leg. N. Săvulescu; 1 ♂, Eforie Sud, 22.06.1952, leg. N. Săvulescu; Esecchioi: 3 ♀♀, 18.06.1960; 1 ♀, 25.05.1962, leg. N. Săvulescu; Hagieni forest: 1 spec., 29.04.1964, leg. Şt. Negru; 1 ♂, 25.09.1965, leg. Şt. Negru; 12 specs., Murfatlar, 8.10.1951, leg. N. Săvulescu; 1 ♀, Negureni forest, 20.05.1994, leg. G. Andrei; 1 ♀, Oltina forest, 13.05.1958, leg. N. Săvulescu; Valu lui Traian: 1 ♀, 19.10.1953; 2 ♀♀, 25.10.1953, leg. X. Scobiola (CT); Perişor forest: 1 ♂, 20.06.1982, leg. D. Dumitrescu; 13 specs., 22-23.09.1982, leg. I. Drăghia; 1 ♂, 23.09.1982, leg. G. Andrei (DJ); 1 ♂, Chitila forest, 10.05.1958, leg. A. Roşca; 1 ♂, Moara Domnească, 9.07.2008, leg. M. Stan; Mogoşoia: 1 ♀, 15.04.1954, leg. X. Scobiola; 1 ♀, 4.07.1957, leg. I. Sienkiewicz; 1 ♀, 9.05.1959, leg. V. Iuga; Pasărea forest: 5 specs., 28.04.1955, leg. N. Săvulescu; 1 ♂, 7.06.1959; 1 ♀, 18.05.1967, leg. N. Săvulescu; 1 ♂, Snagov, 25.04.1957, leg. A. Roşca; 1 ♂, Ştefăneşti, 31.10.1953, leg. X. Scobiola; 2 ♂♂, 7 ♀♀, Ţigăneşti forest, 9.02.1955, leg. X. Scobiola (IF); 1 ♂, Cetătuia, km 516 on the dike, 26.04.2004, leg. C. Pârvu; Comana forest: 4 ♂♂, 5 ♀♀, 8.05.1955; 1 ♂, 29.05.1955; 2 ♂♂, 3.06.1955; 2 specs., 9.07.1959; 2 specs., 18.07.1959, leg. N. Săvulescu; 3 ♀♀, 18.09.1964, leg. A. Roşca; 1 ♀, Malu, km 508 on the dike, 27-29.04.2004, leg. M. Stan (GR); 1 ♀, Brezniţa-Ocol, 5.05.1962, leg. N. Săvulescu; 1 ♀, Cireşu, 7.07.1965, leg. N. Săvulescu; 3 specs., Eşelniţa, 12.08.1966 (under logs), leg. Şt. Negru; 4 specs., Jupalnic, 28.03.1967 (under stones), leg. Şt. Negru; 1 ♂, 4 ♀♀, Mraconia, 31.03.1970, leg. Şt. Negru; 1 ♂, 2 ♀♀, Ogradena, 5.06.1968, leg. X. Scobiola; Orşova: 30 specs., 30.03.1967 (under stones); 1 ♀, 27.04.1968; 1 ♀, 3.04.1969, leg. Şt. Negru; Strehaia: 1 ♀, 10.05.1982, leg. R. Serafim; 1 ♀, 16.05.1982, leg. D. Dumitrescu (MH); Pestra, Drăgăneşti-Olt: 1 spec., 4.04.1980; 1 spec., 6.04.1980, leg. G. Andrei (OT); 1 ♀, Sinaia, 27.06.1963, leg. A. Roşca (PH); 1 ♂, Suceava, 23.05.1959, leg. I. Nemeş (SV); Babadag-Codru forest: 1 spec., 20.06.1958, leg. N. Săvulescu; 5 specs., 14.09.1967, leg. Şt. Negru; 9 specs., 15.09.1967, leg. Şt. Negru; 1 ♀, Periprava, 4.08.1965, leg. Şt. Negru (TL); 3 ♀♀, Zăvestreni forest, 20.06.1978, leg. R. Serafim (TR); 1 spec., Corfu, Greece, leg. A. Hetschko, coll. I. Ceianu; 1 ♀, Majevica Mts, Bosnia & Herzegovina, leg. Vl. Zoufal, coll. I. Ceianu.

Palaearctic collection: 1 ♂, Bucureşti, leg. R. Canisius (B); 1 ♀, Honigberg (Hărman), coll. Fr. Deubel; 1 ♀, Braşov Mts, coll. Fr. Deubel (BV); 1 ♂, Mangalia, leg. R. Canisius (CT); 1 ♂, Jilava, coll. Ed. Fleck (IF); 3 ♂♂, 3 ♀♀, Cicurova, coll. Ed. Fleck (TL).

Transylvanian Society collection: 1 ♀, Kapellenberg (Tâmpa Mt.), leg. F. Deubel (BV); Banat: 1 ♀, 23.04.1885, Birthler, 1895; 1 ♂, 2 ♀♀, Birthler, 1895; 2

♀♀, Schassburg (Sighișoara), 1889, leg. K. Petri (MS); Hermannstadt (Sibiu): 1 ♀, 1883; 1 ♀, 06.1889; 1 ♀, 07.1889; 3 ♂♂, R. Albrecht; 1 ♀, without other data (SB); 1 ♂, 1 ♀, Zilah (Zalău), dr. Kiss (SJ); 1 ♂, 2 ♀♀, Hadad (Hodod), dr. Kiss (SM); 1 ♂, Siebenburgen (Transylvania), E. A. Bielz, 1858; 1 ♂, 2 ♀♀, Croația, Dobiasoh?, Birthler, 1895.

Karl Petri collection: Karlsburg (Alba Iulia): 1 ♀, 1893; 1 ♂, 4 ♀♀, 07.1907, leg. K. Petri (AB); 1 ♀, Klausenburg (Cluj Napoca), leg. Marrloff (CJ); Schassburg (Sighișoara): 1 ♂, 4 ♀♀ (without other data); 1 ♀, 1884, leg. K. Petri; 2 ♀♀, 1889, leg. K. Petri; 1 ♀, 1910, leg. K. Petri (MS); 2 ♂♂, 1 ♀, Sebastopol, Krim (Crimea), 06.04.1908, leg. & det. W. Pliginskyi; 1 ♂, Dalmatien, Spalato (Croatia), 1894, leg.?

Eugen Worell collection: 2 ♂♂, Băile Herculane, 06.1949 (CS); 2 ♀♀, Carmen Sylva (Eforie Sud), 06.1931 (CT); Sibiu: 2 ♂♂, 2 ♀♀ (without other data); 3 ♂♂, 05.1932, E. Worell; Neppendorf (Turnișor): 1 ♀, 31.03.1948; 2 ♂♂, 28.04.1948 (SB); Chișinău (Republic of Moldova): 3 ♂♂, 4 ♀♀, 1934; 4 ♂♂, 3 ♀♀, 05.1936; 1 ♂, 4 ♀♀, Pola (Croatia).

Rolf Weyrauch collection: 3 ♀♀, Petersdorf (Petrești), 10.04.1955 (AB); 1 ♂, 1 ♀, Hendorf (Brădeni), 23.05.1954; 1 ♂, Bungard, 1.06.1969 (SB).

Eckbert Schneider collection: 1 ♀, Histria, 1-5.05.1971, leg. E. Schneider (CT).

Records: Brașov, Cătina, Cincu, Dej, Geaca, Hațeg, Mediaș, Prejmer, Reghin, Sibiu, Sighișoara (Bielz, 1887), Babadag, București, Ciucurova (Fleck, 1905), Mangalia (Montandon, 1887, 1906, Nitzu, 2001), Iași (Jonesco, 1911), Alba Iulia, Cluj-Napoca, Hărman, Sighișoara (Petri, 1912), Comorova, Hagieni (Negru, 1957, Negru & Roșca, 1967), Orșova, Mraconia valley (Ienistea, 1975), Movile karstic area (Nitzu, 1997), Agighiol, Babadag, Canaraua Fetei (Nitzu, 2001).

Brachinus nigricornis Gebler, 1829

(Figs. 2 B; 3 B)

Examined material: 1 ♀, București, Băneasa forest, 7.05.1955, leg. N. Săvulescu (B).

Transylvanian Society collection: 1 ♀, Algier, Birthler, 1895; 1 ♀, Frankreich (France), E. A. Bielz, 1858.

Eugen Worell collection: 1 ♀, Carmen Sylva (Eforie Sud), 06.1931 (CT); 1 ♀, Algier (Algeria), without other data.

Karl Petri collection: 2 ♀♀, Gallia, Béziers (France); 1 ♀, Russia mer., Uralsk (Oral, Kazakhstan).

Remarks: This is a new record for Romanian fauna.

Subgenus *Cnecostolus* Reitter, 1919

Brachinus bayardi Dejean, 1831

(Fig. 1 A)

Examined material: 1 ♀, Esehioi, 18.06.1960, leg. N. Săvulescu (CT); Comana forest: 1 ♂, 1 ♀, 8.05.1955; 2 ♂♂, 3 ♀♀, 14.05.1955; 3 ♂♂, 2 ♀♀, 23.05.1955; 1 ♂, 3.06.1955; 1 ♀, 12.05.1965, leg. N. Săvulescu (GR).

Nicolae Săvulescu collection: Comana forest: 1 ♀, 8.05.1955; 1 ♂, 14.05.1955; 2 ♀♀, 3.06.1955, leg. N. Săvulescu (GR).

Records: Comana (Montandon, 1906, Săvulescu & Popescu-Gorj, 1964), Esehioi (Săvulescu & Popescu-Gorj, 1964).

Brachinus bipustulatus Quensel, 1806

(Fig. 1 A)

Examined material: 1 ♂, 2 ♀♀, Smârdanul Nou, 29.05.1955, leg. N. Săvulescu (BR); 4 specs., Oltina Lake, 27.07.1954, leg. N. Săvulescu (CT); 1 ♀, Brateş Lake, 1.06.1952, leg. N. Săvulescu (GL); Comana forest: 1 ♂, 1 ♀, 30.05.1954; 1 ♂, 8.05.1955; 1 ♂, 3 ♀♀, 14.05.1955; 1 ♂, 3.06.1955, 1 ♂, 12.05.1965, leg. N. Săvulescu (GR); 2 ♀♀, Saltava Lake, 20.06.1965, leg. N. Săvulescu (IL).

Palaeartic collection: 2 ♀♀, Comana, coll. A. L. Montandon (GR).

Transylvanian Society collection: 1 ♂, 1 ♀, Banat, 22.04.1885, Birthler.

Karl Petri collection: 1 ♀, Russia mer., Uralsk (Oral, Kazakhstan)

Eugen Worell collection: 2 ♀♀, Attica (Greece), coll. Ed. Reitter; 1 ♀, Chişinău (Republic of Moldova), 06.1936.

Records: Mangalia, Comana (Montandon, 1906).

Genus *Mastax* Fischer von Waldheim, 1828*Mastax thermarum thermarum* (Steven, 1806)

(Fig. 1 A)

Examined material: 1 spec., Băile Herculane, 27.05.1982, leg. Nicolae Săvulescu (CS); Caraorman: 21 specs., 6.07.1968, leg. Şt. Negru & A. P. Gorj & N. Săvulescu (det. M. Al. Ieniştea, Şt. Negru); 56 specs., 3.10.1968; 27 specs., 4.10.1968; 1 spec., 7.10.1968; 11 specs., 4.10.1969, leg. X. Scobiola; 3 specs., 25.06.1991, leg. G. Andrei (TL).

Records: Caraorman, surroundings of Siutghiol Lake (Ieniştea, 1974).

Taking into account the examined material, we estimate that *Brachinus psophia* Serv. occurs more rarely than *B. elegans* Chaud., the majority of specimens identified as *B. psophia* belonging in fact to *B. elegans*. *Brachinus plagiatus* Reiche recorded from Periprava, Letea forest, 1966 was published by Ieniştea, in 1968. *Brachinus brevicollis* Motsch., a new record for Romania, is known from neighboring countries such as: Bulgaria, Republic of Moldova and Ukraine. *Brachinus nigricornis* Gebler, also a new record for Romanian fauna, is known only in south and southeastern Romania. Regarding the BNM collections, we conclude that the specimens identified as *Brachinus crepitans* (L.) collected from Canaraua Fetii (southeastern Romania) are actually *Brachinus elegans* Chaud., all the specimens identified as *Brachinus psophia* Serv. are *Brachinus elegans* Chaud. and the specimens identified as *Brachinus immaculicornis* Dej. (Pola/Croatia and Banat/Romania, 1895) are *Brachinus crepitans* (L.)

Other Brachinini species preserved in the MGAB and BNM collections (not present in Romanian fauna)

We used the site carabidae.org for the classification into subgenera.

Aptinus (Aptinidius) displosor (L. Dufour, 1811)

Palaeartic collection (MGAB): 2 ♂♂, Pyrénées-Orientales (France), coll. A. L. Montandon.

Aptinus (Aptinus) pyrenaeus Dejean, 1825

Palaeartic collection (MGAB): 3 ♂♂, Bagnères-de-Luchon (France), coll. A. L. Montandon (det. Leseleuc, 1878); 2 ♀♀, Pyrénées-Orientales (France), coll. A. L. Montandon.

Brachinus (Brachinoaptinus) andalusiacus Rambur, 1837
Transylvanian Society collection (BNM): 1 ♀, Spain, E. A. Bielz, 1858.

Brachinus (Brachinoaptinus) bellicosus L. Dufour, 1820
Karl Petri collection (BNM): 1 ♂, Portugal (without other data).

Brachinus (Brachinoaptinus) boeticus Rambur, 1837
Nicolae Săvulescu collection (MGAB): 1 ♂, 3 ♀♀, Albergo de la Universidad, Sierra Nevada (Spain), leg & det. H. Franz.
Karl Petri collection (BNM): 1 ♂, 2 ♀♀, Andalusia, P. Plateria (Spain).
Eugen Worell collection (BNM): 2 ♂♂, Andalusia, P. Plateria, 27.06.1895 (Spain).

Brachinus (Brachinoaptinus) italicus Dejean, 1831
Palaeartic collection (MGAB): 1 ♂, 1 ♀, Ponte Galeria, Roma (Italy), 2.04.1975, leg. & det. S. Bruschi.
Karl Petri collection (BNM): 2 ♂♂, Rome (Italy) (without other data).

Brachinus (Brachinoaptinus) lethierryi Reiche, 1868
Karl Petri collection (BNM): 1 ♂, 1 ♀, Bône (Annaba, Algeria).

Brachinus (Brachinoaptinus) pecoudi Puel, 1925
Nicolae Săvulescu collection (MGAB): 2 ♀♀, Picos de Europa Mt., surroundings of Peña Vieja (Spain), leg. & det. H. Franz.

Brachinus (Brachinoaptinus) pygmaeus Dejean, 1826
Karl Petri collection (BNM): 1 ♂, 1 ♀, Tarifa, Andalusia (Spain), leg. G. Schramm.
Eugen Worell collection (BNM): 1 ♂, Tarifa, Andalusia (Spain), leg. G. Schramm.

Brachinus (Brachynolomus) oblongus Dejean, 1825
Karl Petri collection (BNM): 1 ♂, 1 ♀, Alexandria (Egypt).

Brachinus (Brachynolomus) sclopeta (Fabricius, 1792)
Palaeartic collection (MGAB): 3 specs., Brioni [Brijuni] (Croatia), leg. R. Canisius; 1 spec., Maine-Loire (France), leg. A. L. Montandon; 1 ♀, Maine-Loire (France), coll. A. L. Montandon (named *Brachinus bombardia* Dej.).
Transylvanian Society collection (BNM): 3 ♀♀, France, E. A. Bielz, 1858; 1 ♀, Gallia, Merkl.
Karl Petri collection (BNM): 2 ♂♂, Gallia merid. (without other data).
Eugen Worell collection (BNM): 30 specimens, without collecting data.

Brachinus (Cnecostolus) exhalans (P. Rossi, 1792)
Palaeartic collection (MGAB): 3 ♀♀, La Tour Carbonniere, Gard, Saint-Laurent-d'Aigouze (France), 18.04.1962, leg. & det. G.M.?
Transylvanian Society collection (BNM): 1 ♀, France, E. A. Bielz, 1858.
Karl Petri collection (BNM): 2 ♀♀, Gallia, Bordeaux (France).
Eugen Worell collection (BNM): 1 ♂, France, without other data.

Brachinus (Cnecostolus) quadriguttatus Gebler, 1829
Karl Petri collection (BNM): 1 ♀, Russia mer., leg. Kelecsenyi.

Brachinus (Dysbrachinus) humeralis Ahrens, 1812

Palaeartic collection (MGAB): 2 specs., Pollensa, Mallorca (Spain), 19.05.1895, donated by Auguste Puton, det. A. Puton as *Brachinus causticus* Serv.

Transylvanian Society collection (BNM): 1 spec., France, E. A. Bielz, 1858.

Pheropsophus (Stenaptinus) africanus (Dejean, 1825)

Palaeartic collection (MGAB): 1 spec., Gafsa, 04.1873; 1 spec., Kairouan, 10.04.1873; 1 spec. Ludien, 29.04.1873 (Tunisia), leg. Abdul Kerim, det. & donated by Raffaello Gestro.

Pheropsophus (Stenaptinus) javanus (Dejean, 1825)

Exotic collection (MGAB): 2 specs., Java (Indonesia), 1894, det. & donated by Theodor Adensamer.

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ASUPRA SPECIILOR DE BRACHININI (COLEOPTERA: CARABIDAE:
BRACHININAE: BRACHININI) DIN CÂTEVA COLECȚII MUZEALE

REZUMAT

În fauna României, se cunosc pe baza surselor bibliografice zece specii ce aparțin tribului Brachinini: *Aptinus bombarda* Illiger, *Brachinus crepitans* (Linnaeus), *B. ejaculans* Fischer von Waldheim, *B. elegans* Chaudoir, *B. plagiatus* Reiche, *B. psophia* Audinet-Serville, *B. explodens* Duftschmid, *B. bayardi* Dejean, *B. bipustulatus* Quensel și *Mastax thermarum thermarum* (Steven). Au fost studiate exemplarele aparținând colecțiilor de coleoptere din două muzee de științele naturii, cu cele mai mari colecții: Muzeul National de Istorie Naturală "Grigore Antipa", București și Muzeul National Brukenthal, Sibiu. În urma studiului exemplarelor din aceste colecții, alte două specii de *Brachinus* se adaugă celor cunoscute: *Brachinus brevicollis* Motschulsky și *B. nigricornis* Gebler. Pe baza materialului studiat au fost realizate hărți de distribuție pentru toate cele 12 specii. Sunt prezentate fotografii ale habitusului celor două specii semnalate prima dată în fauna României și sunt prezentate fotografii ale lobului median pentru șapte specii de *Brachinus*. Pe lângă exemplarele colectate din România, lucrarea prezintă și exemplare/specii care provin din diverse alte țări europene, dar și din nordul Africii și chiar Indonezia (Java).

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