

<i>Travaux du Muséum National d'Histoire Naturelle</i> «Grigore Antipa»	Vol. LI	pp. 443–462	© Novembre 2008
--	---------	-------------	--------------------

DATA ON THE APOID HYMENOPTERANS (HYMENOPTERA: APOIDEA) OF BUCUREȘTI AND ITS SURROUNDINGS

CRISTINA BAN-CALEFARIU, IOANA MATACHE

Abstract. The paper presents 207 apoid species belonging to 32 genera of 6 families, collected from București and the adjacent areas. Out of them, 49 species of 21 genera are reported for the first time in the studied area. The material was captured in 57 collecting sites, 25 of them being new reporting sites for the presence of apoidea.

Résumé. Le travail présente 207 espèces d'Apoïdes appartenant à 32 genres de 6 familles collectées de București et des zones limitrophes. De ce total, 49 espèces de 21 genres sont signalées pour la première fois dans la zone investiguée. Le matériel provient de 57 sites, dont 25 sont de nouveaux sites où la présence des Apoïdes est signalée

Key words: Apoidea, București (Bucharest) and the adjacent areas.

In the past, a large part of București (Bucharest) and Ilfov county was covered by Codrii Vlăsiei (Vlăsia Forest). Beginning with the 19th century these afforested areas were cut for creating agricultural lands and the capital districts. These transformations had also consequential effects on the wild bee fauna. Many species reported in literature were not found again during our studies.

MATERIAL AND METHOD

The present synthesis was made studying the specialized literature, the scientific collection of „Grigore Antipa” National Museum of Natural History (București) and on the material collected by the specialists of the museum during the period 1999 – 2007 from București and from the localities placed at about 50 km far from the capital.

Because most of the species cited in literature can be found in the scientific collection, in the paper there are mentioned only the authors who report the respective species.

For the updating of the scientific names of the representatives of the families Colletidae, Andrenidae, Halictidae, Anthophoridae and Apidae we used the papers signed by Gogala (1999), Pawlikowski (2001) and Polaszek (2005) and for Megachilidae, Banaszak and Romasenko's paper (2001).

The identification of the species was made according to the papers belonging to: Osychnyuk, Panfilov & Ponomareva (1978) for Colletidae and Andrenidae, Pesenko et al (2000) for Halictidae, Iuga (1958) and Osychnyuk, Panfilov & Ponomareva (op. cit.) for Anthophoridae, Banaszak & Romasenko (op. cit.) for Megachilidae and Knechtel (1955) for Apidae.

Families, subfamilies and genera are systematically presented and the species, alphabetically.

Species reported for the first time in the area are marked by *.

English translation by Mihaela Barcan Achim.

The material was collected from 57 sites from București and the surroundings:

Balta Bila (GR) - Manafu Forest	Daia (GR)
Bălteni (IF)	Dărăști (IF)
Brănești (IF) - Pasărea Forest	1 Decembrie (IF)
Brănești (IF) - Pustincu Forest	Dragomirești (IF)
București	Frățești (GR)
București - Floreasca District	Gulia (IF)
București - Militari District	Islaz (IF)
București - Fundeni	Izvorani (IF)
București - Botanical Garden	Mihăilești (GR)
București - Village Museum	Moara Domneasă (IF)
București - Cișmigiu Park	Mogoșoaia (IF)
București - Herăstrău Park	Odăile (PH)
București - Faculty of Agronomy Park	Padina Tătarului (GR)
București - Park of "Grigore Antipa" Museum	Comana Forest (GR) - Izvorul cu Nuci
București - Andronache Forest	Snagov Forest (IF)
București - Băneasa Forest	Tâncăbești Forest (IF)
București - Podul Ciurel (Lacul Morii)	Periș (IF)
Buda (GR)	Rădulești (IL)
Budești (CL)	Roșu (IF)
Budești (CL) - Oltenița	Săbăreni (GR)
Căldărușani (IF)	Schitu (GR) - Albele Forest
Cernica (IF)	Ștefănești (CL)
Chiajna (IF)	Ștefăneștii de Jos (IF)
Chitila (IF)	Țigănești (IF)
Ciolpani (IF)	Valea Gurbanului (GR)
Ciolpani (IF) - Țigănești Monastery	Videle (TR)
Comana (GR)	Vidra (IF)
Copăceni (GR)	Vlașin (GR) - Ogarca Forest
Copănița (GR)	

Abbreviations: counties: CL – Călărași, GR – Giurgiu, IF – Ilfov, IL – Ialomița, PH – Prahova.

RESULTS

The list includes 207 apoid species grouped in 6 families: Colletidae (10 species, 2 genera), Andrenidae (47 species, 1 genus), Halictidae (50 species, 6 genera), Megachilidae (35 species, 12 genera), Anthophoridae (51 species, 10 genera) and Apidae (14 species, 1 genus).

Family Colletidae

Subfamily Colletinae

* *Colletes cunicularius* (Linnaeus, 1761): 1 spec., Budești, 28.05.1954.

Subfamily Hylaeinae

* *Hylaeus bisinuatus* Foerster, 1871: 2 specs, București, Cișmigiu Park, 31.07.1943.

* *Hylaeus brevicornis* Nylander, 1852: 1 spec., București, Botanical Garden, 3.08.1943.

* *Hylaeus communis* Nylander, 1852: 3 specs, București, 27.05.1942, 1.08.1942; 8 specs, București, Cișmigiu Park, 31.07.1943.

* *Hylaeus difformis* (Eversmann, 1852): 1 spec., București, Botanical Garden, 13.06.1943; 1 spec., Snagov Forest, 25.06.1964.

* *Hylaeus gibbus* Saunders, 1850: 1 spec., Dărăști, 13.04.1949; 1 spec., Budești – Oltenița, 2.08.1956; 1 spec., București, 15.08.1958; 2 specs, Mogoșoaia, 26.05.1959; 2 specs, Periș, 18.06.1959, 19.06.1986.

* *Hylaeus punctatus* (Brullé, 1832): 3 specs, București, Cișmigiul Park, 31.07.1943; 1 spec., București, 15.08.1958.

* *Hylaeus punctulatifissima* Smith, 1842: 1 spec., București, Cișmigiul Park, 8.06.1943.

* *Hylaeus signatus* (Panzer, 1798): 1 spec., Comana, 8.06.1959.

* *Hylaeus sinuatus* (Schenck, 1853): 1 spec., București, 21.06.1950.

Family Andrenidae

Subfamily Andreninae

Andrena abbreviata osychniuki Warncke, 1973: cited by Warncke & Scobiola-Palade (1980), 1 spec., Budești, 26.06.1947.

* *Andrena aciculata* Morawitz, 1886: 2 specs, Roșu, 23.06.1950.

Andrena aeneiventris Morawitz, 1872: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Budești, 2.08.1956.

Andrena alfkenella Perkins, 1914: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., București, 21.06.1950; 1 spec., Rădulești, 27.06.1954; 1 spec., Căldărușani, 9.07.1956.

Andrena bicolor Fabricius, 1775: cited by Warncke & Scobiola-Palade (op. cit.), 2 specs, Ștefănești, 6.04.1954.

Andrena bimaculata (Kirby, 1802): cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Budești, 20.06.1947; 1 spec., Mogoșoaia, 15.04.1954.

Andrena chrysosceles (Kirby, 1802): cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Ilfov County.

Andrena cordialis Morawitz, 1878: cited by Warncke & Scobiola-Palade (op. cit.), 2 specs, Islaz, 17.05.1944; 1 spec., București, 21.06.1950; 1 spec., Budești, 28.05.1954; 2 specs, Ciolpani, 4.06.1957.

Andrena danuvia (Stöckhert, 1950): cited by Warncke & Scobiola-Palade (op. cit.) as *Andrena cineraria danuvia*, 3 specs, București, Cișmigiul Park, 10.05.1943, 26.04.1955.

Andrena dorsalis Brullé, 1832: cited by Warncke & Scobiola-Palade (op. cit.), 2 specs, Cernica, 28.05.1955.

Andrena dorsata (Kirby, 1802): cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., București, 8.07.1949; 1 spec., Comana, 5.07.1953; 2 specs, Mogoșoaia, 15.04.1954.

Andrena enslinella Stöckhert, 1924: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Cernica, 22.05.1955.

Andrena flavipes Panzer, 1799: cited by Warncke & Scobiola-Palade (op. cit.), 7 specs, București, Botanical Garden, 13, 16.06.1943, 28.05.1949; 2 specs, București, Cișmigiul Park, 31.07.1943; 1 spec., București, Herăstrău Park, 23.05.1948; 3 specs, Islaz, 17.05.1944, 8, 14.07.1945; 3 specs, Budești, 26.06.1947, 2.08.1956; 1 spec., Cernica, 28.05.1947; 6 specs, Frățești, 26, 27, 29, 30.07.1948, 4.08.1948; 1 spec., Periș, 8.04.1953.

Andrena floricola Eversmann, 1852: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Mogoșoaia, 15.04.1954.

Andrena fulvago (Christ, 1791): cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Băneasa Forest, 24.05.1954; 1 spec., Căldărușani, 31.05.1957.

Andrena fuscipes (Kirby, 1802): cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Periș, 8.04.1953; 2 specs, București, 28.04.1955; 1 spec., Ciolpani, 4.06.1957; 1 spec., Țigănești, 5.06.1957.

Andrena haemorrhoa (Fabricius, 1781): cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Mogoșoaia, 15.04.1954.

Andrena impunctata Pérez, 1895: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Roșu, 23.06.1950.

Andrena labiata Fabricius, 1781: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Budești, 5.05.1953; 3 specs, Cernica, 6.05.1955, 29.06.1956; 1 spec., Comana, 31.05.1956.

Andrena lepida Schenck, 1859: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Țigănești, 5.06.1957.

* *Andrena leucorhina* Morawitz, 1876: 1 spec., Budești, 26.06.1947.

Andrena limata Smith, 1853: cited by Warncke & Scobiola-Palade (op. cit.) as *Andrena nitida limata*, 1 spec., Budești, 24.06.1947; 1 spec., Periș, 19.06.1956; 1 spec., Căldărușani, 12.05.1958.

* *Andrena magna* Warncke, 1965: 1 spec., București, 21.06.1950.

Andrena magunta Warncke, 1965: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., București, 21.06.1950.

Andrena minutula (Kirby, 1802): cited by Warncke & Scobiola-Palade (op. cit.), 3 specs, București, 21.06.1950; 1 spec., Chitila, 27.04.1954; 1 spec., Mogoșoaia, 15.04.1954.

Andrena minutuloides Perkins, 1914: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Roșu, 23.06.1950; 1 spec., Țigănești, 5.06.1957.

Andrena mocsaryi Schmiedeknecht, 1883: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., București, 21.06.1950.

Andrena nasuta Giraud, 1863: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Islaz, 9.06.1944, 1971.

Andrena nitida (Müller, 1776): cited by Warncke & Scobiola-Palade (op. cit.), 10 specs, Ilfov County.

Andrena nitidiuscula Schenck, 1853: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Mogoșoaia, 27.04.1957.

Andrena niveata Friese, 1887: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Ciolpani, 4.04.1957.

* *Andrena numida* Lepeletier 1841: 1 spec., Cernica, 28.05.1955; 2 specs, Budești, 2.08.1956.

Andrena oralis Morawitz, 1876: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Budești, 29.05.1954.

Andrena ovatula (Kirby, 1802): cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., București, Cișmigiu Park, 31.07.1943; 1 spec., Islaz, 14.07.1945; 1 spec., Brănești, 7.08.1946; 1 spec., Budești, 26.06.1947, 1 spec., Oltenița, 29.05.1954; 1 spec., Periș, 7.08.1954; 1 spec., Comana, 31.05.1956; 2 specs, Țigănești, 5.06.1957; 1 spec., Copăceni, 29.05.1950; 1 spec., Băneasa Forest, 24.05.1964.

Andrena producta Warncke, 1973: cited by Warncke & Scobiola-Palade (op. cit.) as *Andrena gelriae producta*, 1 spec., Țigănești, 5.06.1957.

Andrena proxima (Kirby, 1802): cited by Warncke & Scobiola-Palade (op. cit.), 2 specs, Căldărușani, 31.05.1957.

Andrena schletterei Friese, 1896: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Chitila, 27.04.1954.

Andrena simontornyella Noskiewicz, 1939: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Chitila, 27.04.1954; 2 specs, București, Botanical Garden, 7, 24.04.1955; 1 spec., Săbăreni, 3.05.1955; 1 spec., Cernica, 6.05.1955; 1 spec., Snagov, 27.06.1957.

Andrena subopaca Nylander, 1848: cited by Warncke & Scobiola-Palade (op. cit.), 2 specs, Mogoșoaia, 27.04.1951, 12.06.1957.

Andrena symphyti Schmiedeknecht, 1883: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., București, Botanical Garden, 16.05.1943.

Andrena thoracica (Fabricius, 1775): cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Mogoșoaia, 15.04.1954.

Andrena trimmerana (Kirby, 1802): cited by Warncke & Scobiola-Palade (op. cit.), 2 specs, Mogoșoaia, 15.04.1954.

Andrena tringa Warncke, 1973: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., București, 21.06.1950.

Andrena ungeri Mavromoustakis, 1952: cited by Warncke & Scobiola-Palade (op. cit.), 2 specs, Periș, 7.08.1954; 1 spec., Andronache Forest, 28.08.1958.

Andrena variabilis Smith, 1853: cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Budești, 10.08.1948.

Andrena varians (Kirby, 1802): cited by Warncke & Scobiola-Palade (op. cit.), 1 spec., Mogoșoaia, 15.04.1954.

Andrena viridescens Viereck, 1916: cited by Warncke & Scobiola-Palade (op. cit.), Cernica, 29.05.1956.

Family Halictidae

Subfamily Halictinae

Halictus asperulus Pérez, 1895: cited by Scobiola-Palade & Osychnyuk (1974), 1 spec., Frățești, 29.07.1948; 1 spec., București, 8.07.1949; 1 spec., Moara Domneasă, 1.09.1951.

* *Halictus cochleareitarsis* (Dours, 1872): 1 spec., Islaz, 17.05.1944; 2 specs, Botanical Garden, 18.08.1953.

Halictus confusus Smith, 1853: cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus perkinsi*, 1 spec., Dărăști, 12.06.1949; 1 spec., Copăceni, 17.06.1951.

Halictus eurygnathus Blüthgen, 1931: cited by Scobiola-Palade & Osychnyuk (op. cit.), 2 specs, București, 17.08.1942; 1 spec., Islaz, 30.07.1944.

Halictus kessleri Bramson, 1879: cited by Scobiola-Palade & Osychnyuk (op. cit.), 2 specs, București, Floreasca District, 30.06.1950.

Halictus maculatus Smith, 1848: cited by Scobiola-Palade & Osychnyuk (op. cit.), 3 specs, Frățești, 6.08.1941, 29.07.1948; 10 specs, București, Botanical Garden, 8.06.1943, 28.09.1943, 28.05.1945, 13, 14.08.1953, 10.09.1953; 1 spec., București, Cișmigiu Park, 31.07.1943; 4 specs, București, 10.05.1942, 27.07.1942, 8.07.1949; 1 spec., București, Floreasca District, 18.07.1943; 10 specs, Islaz, 17.05.1944, 3.06.1944, 23, 30.07.1944, 8, 10.07.1945; 1 spec., Brănești, 5.08.1946;

5 specs, Budești, 16, 20, 26.06.1947, 10.08.1948; 1 spec., Cernica, 28.05.1947; 1 spec., Daia, 1.08.1948; 1 spec., Moara Domnească, 1.09.1951.

Halictus patellatus Morawitz, 1873: cited by Scobiola-Palade & Osychnyuk (op. cit.), 1 spec., București, Cișmigiu Park, 14.04.1943; 2 specs, București, Botanical Garden, 13.08.1943, 28.05.1949; 4 specs, Islaz, 23.07.1944, 10, 14.07.1945, 10.07.1946; 1 spec., București, Militari District, 1.05.1946; 1 spec., Budești, 23.06.1947; 3 specs, Cernica, 5.08.1948; 1 spec., Periș, 4.05.1953.

Halictus quadricinctus (Fabricius, 1776): cited by Scobiola-Palade & Osychnyuk (op. cit.), 16 specs, Islaz, 3, 9.06.1944, 23, 30.07.1944; 4 specs, Brănești, 5.08.1946; 5 specs, Frătești, 6.08.1948, 27, 29, 31.07.1948, 5.08.1948; 2 specs, Budești, 27.06.1947, 13.08.1948; 1 spec., Dărăști, 13.06.1949; 1 spec., Cernica, 15.08.1950; 1 spec., Moara Domnească, 15.06.1952; 1 spec., București, 14.07.1953; 1 spec., București, Botanical Garden, 14.08.1953.

Halictus scabiosae (Rossi, 1790): cited by Scobiola-Palade & Osychnyuk (op. cit.), 2 specs, Islaz, 9, 22.06.1944; 5 specs, București, 16.06.1942, 6.08.1946, 8.07.1949, 14.07.1953; 1 spec., Brănești, 6.08.1946; 1 spec., Copăceni, 17.06.1951.

Halictus seladonius (Fabricius, 1794): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus geminatus*, 1 spec., Budești, 26.06.1947.

Halictus sexcinctus (Fabricius, 1775): cited by Scobiola-Palade & Osychnyuk (op. cit.), 1 spec., București, Cișmigiu Park, 14.04.1943; 1 spec., București, Botanical Garden, 11.06.1943; 1 spec., București, 14.07.1953; 2 specs, Islaz, 17.05.1944, 9.06.1944; 2 specs, Brănești, 6.08.1946.

* *Halictus sexstrigatus* (Schenck, 1868): 2 specs, Budești, 12.08.1948, 3.05.1953; 1 spec., București, Botanical Garden, 28.05.1949.

Halictus simplex Blüthgen, 1923: cited by Scobiola-Palade & Osychnyuk (op. cit.), 1 spec., Budești, 11.08.1948; 2 specs, București, Cișmigiu Park, 15.05.1943, 31.07.1943; 21 specs, București, Botanical Garden, 16, 25.05.1943, 26.06.1943, 13.08.1943, 28.09.1943, 26.07.1947, 15.05.1953, 14.08.1953; 5 specs, București, 16.05.1942, 17.08.1942, 23.07.1953; 2 specs, Islaz, 16.05.1942, 3.06.1944, 30.07.1944; 2 specs, Frătești, 31.07.1948, 18.08.1948.

Halictus smaragdulus Vachal, 1895: cited by Scobiola-Palade & Osychnyuk (op. cit.), 1 spec., Islaz, 9.07.1946; 1 spec., Frătești, 30.07.1948.

Halictus subauratus (Rossi, 1792): cited by Scobiola-Palade & Osychnyuk (op. cit.), 14 specs, București, 1, 3, 9, 27.07.1942, 14, 23.07.1953; 9 specs, București, Botanical Garden, 16, 25.05.1943, 20.09.1943; 1 spec., București, Cișmigiu Park, 3.07.1943; 1 spec., Islaz, 9.07.1945; 2 specs, Budești, 26.06.1947, 20.07.1947; 1 spec., București, Herăstrău Park, 23.05.1948; 1 spec., București, Floreasca District, 30.06.1950; 1 spec., Roșu, 23.06.1950.

Halictus truncaticollis Morawitz, 1878: cited by Scobiola-Palade & Osychnyuk (op. cit.), 11 specs, Islaz, 9, 22.06.1944, 30.07.1944, 8, 9, 30.07.1945, 10.07.1946; 8 specs, Brănești, 5, 6.08.1946; 3 specs, Budești, 26.06.1947, 8.08.1948; 12 specs, Frătești, 31.07.1948, 4, 6.08.1948; 2 specs, Dărăști, 13.06.1949; 1 spec., București, 8.07.1949; 1 spec., Copăceni, 28.06.1953.

Halictus tumulorum (Linnaeus, 1758): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus fasciatus*, 1 spec., București, 1.08.1942; 1 spec., București, Cișmigiu Park, 15.05.1943; 1 spec., Budești, 14.08.1948.

Halictus varipes Morawitz, 1876: cited by Scobiola-Palade & Osychnyuk (op. cit.), 1 spec., București, Botanical Garden, 26.06.1943; 1 spec., Islaz, 10.07.1946.

Halictus vestitus Lepeletier, 1841: cited by Scobiola-Palade & Osychnyuk (op. cit.), 2 specs, Frățești, 3, 4.08.1948.

* *Lasioglossum albipes* (Fabricius, 1781): 1 spec., București, 20.07.1944.

Lasioglossum calceatum (Scopoli, 1763): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus calceatus*, 2 specs, București, Botanical Garden, 19.04.1943, 28.09.1943; 3 specs, București, Cișmigiu Park, 22.04.1943, 15.05.1943, 3.07.1943; 1 spec., Budești, 14.08.1948; 2 specs, București, Floreasca District, 30.06.1950.

Lasioglossum clypeare (Schenck, 1853): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus clypearis*, 1 spec., București, Botanical Garden, 10.09.1953.

Lasioglossum corvinum (Morawitz, 1876): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus corvinus*, 1 spec., Dărăști, 12.06.1949.

Lasioglossum costulatum (Kriechbaumer, 1873): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus costulatus*, 3 specs, București, Cișmigiu Park, 26.06.1943, 3.07.1943.

Lasioglossum crassepunctatum (Blüthgen, 1923): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus crassipunctatus*, 1 spec., București, Cișmigiu Park, 15.05.1943; 1 spec., București, Botanical Garden, 11.06.1943; 1 spec., Budești, 16.06.1947.

Lasioglossum discum (Smith, 1853): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus morbillosus*, 2 specs, București, 16.06.1942, 23.07.1953; 1 spec., București, Cișmigiu Park, 3.07.1943; 15 specs, Islaz, 3, 9.06.1944, 23, 30.07.1944, 10.05.1945, 30.07.1945; 2 specs, Brănești, 5, 7.08.1946; 2 specs, Cernica, 28.05.1947, 5.08.1948; 3 specs, Budești, 26, 27.06.1947; 12 spec., Frățești, 29, 30.07.1948, 4, 5, 6.08.1948; 2 specs, București, Floreasca District, 18.07.1943, 20.08.1950; 1 spec., Copăceni, 17.06.1951; 1 spec., Comana, 13.08.1954.

Lasioglossum holtzi (Schultz, 1906): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus holtzi*, 10 specs, București, Botanical Garden, 28.04.1943, 13, 8.09.1943, 14.08.1953, 10.09.1953; 2 specs, Budești, 10, 13.08.1948; 6 specs, București, 14, 23.07.1953.

Lasioglossum intermedium (Schenck, 1868): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus intermedium*, 1 spec., București, 8.07.1949.

Lasioglossum interruptum (Panzer, 1798): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus interruptus*, 1 spec., Islaz, 17.05.1944; 2 specs, Frățești, 29, 30.07.1948.

Lasioglossum laevigatum (Kirby, 1802): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus laevigatus*, 1 spec., Pasărea Forest, 24.04.1952.

Lasioglossum laticeps (Schenck, 1868): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus laticeps*, 4 specs, București, 24.05.1942, 13.06.1942, 23.04.1953; 9 specs, București, Botanical Garden, 19.04.1943, 13.08.1943, 28.05.1949, 15.05.1953, 10.09.1953; 8 specs, București, Cișmigiu Park, 22.04.1943, 15.05.1943, 3, 31.07.1943, 12.05.1953; 1 spec., București, Militari District, 1.05.1946.

Lasioglossum leucozonium (Schrank, 1781): : cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus leucozonius*, 1 spec., București, Cișmigiu Park, 26.06.1943; 3 specs, Islaz, 30.07.1945; 3 specs, Brănești, 6.08.1946; 2 specs, Budești, 18.06.1947; 10.08.1948; 1 spec., Frățești, 4.08.1948; 1 spec., Periș, 4.05.1953.

Lasioglossum lineare (Schenck, 1868): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus linearis*, 1 spec., Islaz, 9.06.1944; 1 spec., Frățești, 26.07.1948; 1 spec., Periș, 18.04.1953.

Lasioglossum lucidulum (Schenck, 1861): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus lucidulus*, 1 spec., Budești, 11.08.1948; Dărăști, 12.06.1949.

Lasioglossum majus (Nylander, 1852): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus major*, 2 specs, București, Cișmigiu Park, 15.05.1943, 26.06.1943.

Lasioglossum malachurum (Kirby, 1802): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus malachurus*, 1 spec., București, Cișmigiu Park, 14.04.1943; 1 spec., Islaz, 23.07.1944; 9 specs, Frățești, 27, 29, 31.07.1948, 4.08.1948; 4 specs, Budești, 9 - 11, 13.08.1948; 2 specs, București, Floresca District, 20, 26.08.1950; 2 specs, Roșu, 23.06.1950; 1 spec., Periș, 8.04.1953.

Lasioglossum marginatum (Brullé, 1832): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus marginatus*, 16 specs, București, Botanical Garden, 16.05.1943, 28.05.1949, 20.04.1953, 15.05.1953; 2 specs, București, Herăstrău Park, 18.04.1947; 3 specs, Cernica, 30.03.1947; 27 specs, Periș, 8.04.1953, 4.05.1953, 4.05.1955; 3 specs, București, Băneasa Forest, 15.05.1953; 1 spec., București, 23.04.1953; Ștefănești, 24.04.1953.

Lasioglossum morio (Fabricius, 1793): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus morio*, 1 spec., București, 27.07.1942; 1 spec., București, Botanical Garden, 19.04.1943; 2 specs, București, Cișmigiu Park, 3.07.1943; 1 spec., București, Floreasca District, 30.06.1950.

Lasioglossum nigripes (Lepelletier, 1841): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus nigripes*, 1 spec., București, Botanical Garden, 28.09.1943.

Lasioglossum pallens (Brullé, 1832): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus pallens*, 2 specs, București, Botanical Garden, 19.04.1943, 25.05.1943; 1 spec., București, Floreasca District, 8.04.1951; 1 spec., București, 23.04.1953.

Lasioglossum pauxillum (Schenck 1853): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus pauxillus*, 1 spec., București, Floreasca District, 28.05.1951.

Lasioglossum politum (Schenck 1853): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus politus*, 2 specs, București, Cișmigiu Park, 15.05.1943; 1 spec., București, without other data; 1 spec., Cernica, 28.05.1947; 2 specs, Budești, 21.06.1947; 1 spec., București, Herăstrău Park, 23.05.1948; Frățești, 5.08.1948.

Lasioglossum quadrisignatum (Schenck, 1853): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus quadrisignatus*, 4 specs, Ilfov County.

Lasioglossum sexnotatum (Kirby, 1802): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus nitidus*, 1 spec., București, Botanical Garden, 11.06.1943.

Lasioglossum villosulum (Kirby, 1802): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus villosulus*, 3 specs, București, Botanical Garden, 28.09.1943, 10.09.1953; 1 spec., Frățești, 29.07.1948.

Lasioglossum zonulum (Smith, 1848): cited by Scobiola-Palade & Osychnyuk (op. cit.) as *Halictus zonulus*, 1 spec., București, 16.06.1942, 27.03.1953; 1 spec., București, Botanical Garden, 13.08.1943; 5 specs, București,

Cișmigiu Park, 10.05.1943, 3.07.1943; 1 spec., Budești, 12.08.1948; 1 spec., Odăile, 9.06.1953.

* *Sphecodes pellucidus* Smith, 1845: Căldărușani, 31.05.1957.

* *Nomioides variegatus* (Olivier, 1789): 9 specs, Budești, 18.06.1947, 13.06.1948.

Subfamily Nomiinae

* *Nomia diversipes* (Latreille, 1806): 1 spec., Țigănești Forest, 9.08.1956.

Subfamily Rophitinae

* *Systropha curvicornis* (Scopoli, 1770): 1 spec., Mihăilești, 10.08.2006.

Family Megachilidae

Subfamily Lithurginae

Lithurgus chrysurus Fonscolombe, 1834: cited by Zanden & Matache (1986), 3 specs, Comana, 13.08.1954; 1 spec., Fundeni, 30.06.1964.

* *Lithurgus cornutus* (Fabricius, 1787): 7 specs, Brănești, 27.06.2007; 1 spec., București, 26.06.2007 (Fig. 1).

Subfamily Megachilinae

Paraanthidiellum lituratum (Panzer, 1801): cited by Zanden & Matache (op. cit.) as *Pseudoanthidium lituratum*, 1 spec., Chiajna, 6.07.1980; 2 specs, Mihăilești, 3.08.2004, 10.08.2006.

Anthidium florentinum (Fabricius, 1775): cited by Aftene (1972), without other data; Zanden & Matache (op. cit.), 10 specs, București, 16.06.1942, 8, 26.06.1943, 8.06.1947.

Anthidium manicatum (Linnaeus, 1758): cited by Zanden & Matache (op. cit.), 1 spec., Mogoșoaia, 9.05.1959; 1 spec., Brănești, 24.08.1967; 1 spec., București, Botanical Garden, 25.08.2005; 1 spec., Tâncăbești Forest, 16.06.2006; 1 spec., Mihăilești, 10.08.2006 (Fig. 2 A, B).

Anthidium oblongatum (Illiger, 1806): cited by Zanden & Matache (op. cit.), 1 spec., București, 26.06.1943, 8.07.1949.

Anthidiellum strigatum (Panzer, 1805): cited by Zanden & Matache (op. cit.), 4 specs, București, 16.06.1942, 26.06.1943, 31.07.1943.

Stelis breviscula (Klug, 1807): cited by Zanden & Matache (op. cit.), 1 spec., București, 9.07.1942.

Stelis jugae Noskiewicz, 1962: cited by Aftene (op. cit.), without other data; Zanden & Matache (op. cit.), 1 spec., București, 8.07.1949.

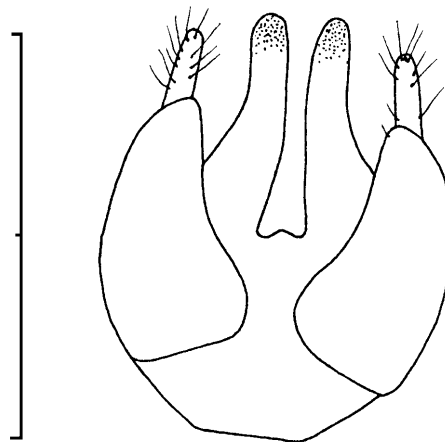


Fig. 1 – *Lithurgus cornutus* (Fabricius, 1787), dorsal view of male genitalia. Scale: 1 mm.

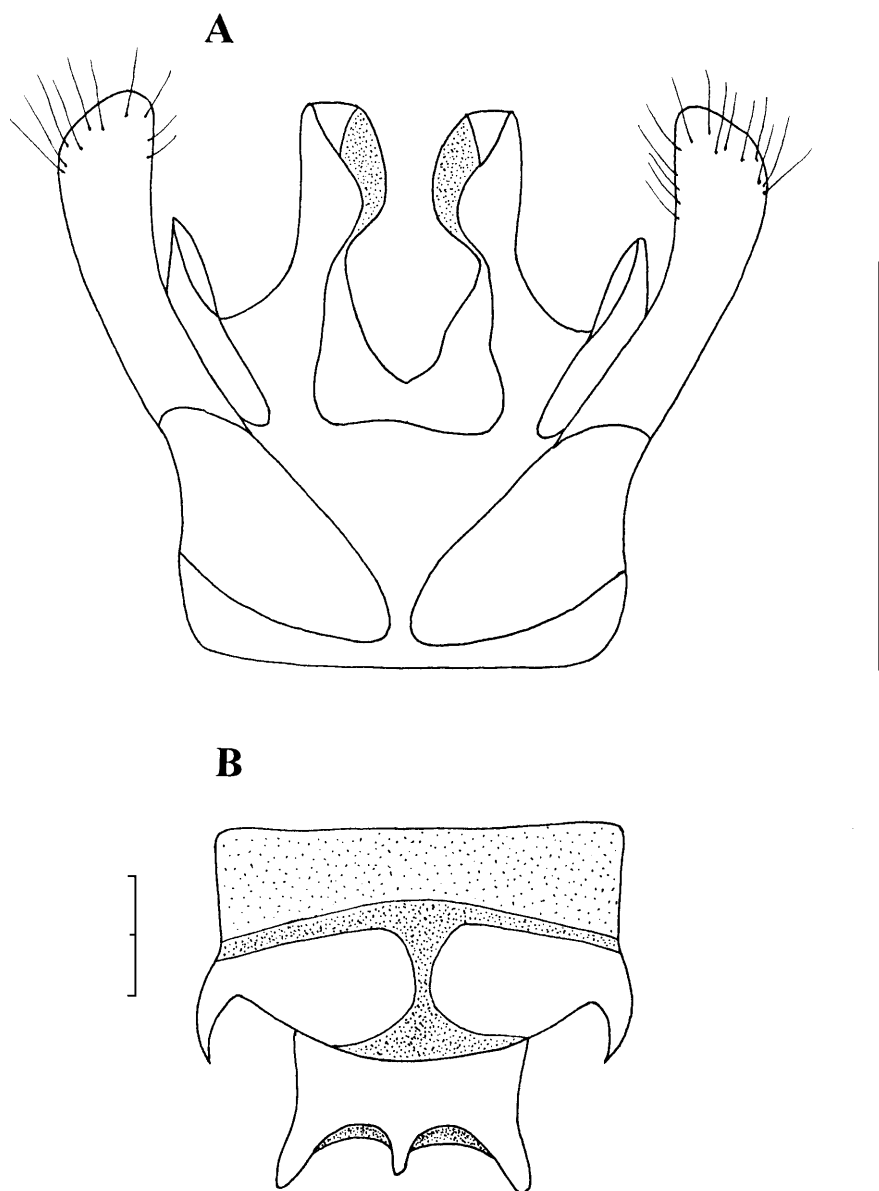


Fig. 2 – *Anthidium manicatum* (Linnaeus, 1758): A, dorsal view of male genitalia; B, abdominal terga 6-7. Scale: 1 mm.

Stelis ornatula (Klug, 1807): cited by Zanden & Matache (op. cit.), 1 spec., Periș, 7.08.1954.

Stelis punctulatissima (Kirby, 1802): cited by Zanden & Matache (op. cit.), 4 specs, București, 26.06.1943, 3.07.1943.

Stelis signata (Latreille, 1809): cited by Zanden & Matache (op. cit.), 1 spec., Pasărea Forest, 6.08.1962.

* *Chelostoma florissomne* (Linnaeus, 1758): 1 spec., Copănița, 17.05.2004, 2 specs, Comana Forest, 4.05.2006.

* *Heriades truncorum* (Linnaeus, 1758): 1 spec., Cernica, 29.04.2007.

Hoplitis leucomelana (Kirby, 1802): cited by Zanden & Matache (op. cit.), 2 specs, Budești, 26.06.1947, 28.06.1955.

Osmia aurulenta (Panzer, 1799): cited by Zanden & Matache (op. cit.), 2 specs, București, 25.05.1943, 22.05.1959; 1 spec., Islaz, 9.06.1944; 1 spec., Comana, 31.05.1956; 1 spec., Mogoșoaia, 9.05.1959; 1 spec., Cernica, 12.05.1963.

Osmia bicolor (Schrank, 1781): cited by Zanden & Matache (op. cit.), 1 spec., Periș, 8.04.1953; 1 spec., Ștefăneștii de Jos, 24.04.1953; 4 specs, Cernica, 29.05.1956, 9.06.1956; 3 specs, Țigănești, 5.06.1957, 26.04.1966; 1 spec., Băneasa, 23.04.1958; 2 specs, Căldărușani, 31.05.1957, 29.05.1965; 1 spec., Comana, 29.05.1965.

Osmia brevicornis (Fabricius, 1798): cited by Zanden & Matache (op. cit.), 1 spec., București, 16.05.1943; 4 specs, Budești, 16, 20.06.1947, 28.06.1955; 1 spec., Ciolpani, 4.06.1957.

Osmia caerulea (Linnaeus, 1758): cited by Zanden & Matache (op. cit.), 2 specs, București, 21.06.1950, 8.05.1953; 1 spec., Periș, 4.05.1953; 1 spec., Odăile, 9.06.1953; 1 spec., Copăceni, 28.06.1953; 1 spec., Săbăreni, 3.05.1955; 3 specs, Comana, 31.05.1956; 1 spec., Ciolpani, 4.06.1957; 1 spec., Cernica, 12.05.1963.

Osmia cerinthidis Morawitz, 1876: cited by Zanden & Matache (op. cit.), 4 specs, București, 8-26.06.1943; 2 specs, Țigănești, 5.06.1951; 1 spec., Pasărea Forest, 13.06.1999; 4 specs, Park of "Grigore Antipa" Museum, 5.04.2005; 1 spec., Comana Forest, 7.06.2006.

Osmia cornuta (Latreille, 1805): cited by Zanden & Matache (op. cit.), 6 specs, București, 14-15.04.1943, 3.04.1946, 4.04.1953, 28.04.1955; 4 specs, Periș, 8.04.1953; 1 spec., Budești, 3.05.1953; 3 specs, Mogoșoaia, 15.04.1954; 1 spec., Snagov Forest, 4.04.1957; 2 specs, Pasărea Forest, 19.05.1965; 1 spec., Cernica, 9.04.1981; 19 specs, Comana Forest, 10.04.2005; 5 specs, Park of "Grigore Antipa" Museum, 9.03.2005, 5.04.2005; 24 specs, București, Village Museum, 4.04.2006; 1 spec., Izvorani, 11.04.2006.

Osmia fulviventris (Panzer, 1798): cited by Zanden & Matache (op. cit.), 5 specs, București, 8, 26.06.1943, 3.07.1943; 1 spec., Islaz, 9.06.1944; 1 spec., Frățești, 29.07.1948; 1 spec., Ciolpani, 4.06.1957.

Osmia leaiana (Kirby, 1802): cited by Zanden & Matache (op. cit.), 1 spec., București, 8.06.1943; 1 spec., Periș, 18.06.1959; 1 spec., Cernica Forest, 26.08.2005.

Osmia rufa (Linnaeus, 1758): cited by Zanden & Matache (op. cit.), 3 specs, București, 14-15.04.1943, 2 specs, 4.04.1953, 1 spec., 23.06.1953, 1 spec., 26.02.1958; 8 specs, Pasărea Forest, 7.04.1946, 24.04.1952, 13.06.1999, 2.05.2006; 1 spec., Cernica, 30.03.1947; 2 specs, Periș, 4.05.1953; 4 specs, Comana, 31.05.1956; 1 spec., Căldărușani, 23.03.1957; 2 specs, Snagov Forest, 4, 25.04.1957; 2 specs, Țigănești, 4.05.1957, 24.04.1966; 2 specs, Mogoșoaia, 15.04.1954, 27.04.1957; 1 spec., Izvorani, 11.04.2006; 2 specs, București, Park of "Grigore Antipa" Museum, 5.04.2005, 17.04.2006; 1 spec., București, Village Museum, 4.04.2006; 2 specs, Comana Forest, Izvorul cu Nuci, 7.06.2006; 1 spec, Padina Tătarului, 4.05.2006; 3 specs, Dragomirești, 14.04.2006.

Chalicodoma ericetorum (Lepelletier, 1841): cited by Zanden & Matache (op. cit.), 8 specs, București, 18.07.1943, 31.07.1943, 13-15.08.1943; 5 specs, Islaz, 23.07.1944, 8.07.1945.

Megachile centuncularis (Linnaeus, 1758): cited by Zanden & Matache (op. cit.), 1 spec., Periș, 7.08.1954; 1 spec., Brănești – Pustincu Forest, 6.08.1969; 2 specs, Snagov Forest, 8.08.1980.

* *Megachile leucomalla* Gerstaecker, 1869: 1 spec., Podul Ciurel (Lacul Morii), 25.08.2005; 1 spec., Brănești, 27.06.2007.

* *Megachile lignisecca* (Kirby, 1802): 1 spec., Pasărea Forest, 5.06.2005; 1 spec., București, Village Museum, 4.04.2006; 1 spec., Comana Forest, 4.05.2006.

* *Megachile octosignata* Nylander, 1852: 1 spec., Ogarca Forest, 6.09.2006.

* *Megachile pilicrus* Morawitz, 1878: 1 spec., Brănești, 27.06.2007.

* *Megachile rotundata* (Fabricius, 1787): 1 spec., Brănești, 27.07.2006.

* *Megachile willughbiella* (Kirby, 1802): 1 spec., Țigănești Monastery, 16.06.2005; 1 spec., Brănești, 27.07.2006 (Fig. 3 A, B).

* *Coelioxys aurolimbata* Förster, 1853: 1 spec., Frățești, 16.05.2002; 1 spec., Balta Bila - Manafu Forest, 22.06.2006.

* *Coelioxys caudata* Spinola, 1838: 1 spec., Brănești, 27.06.2007.

* *Coelioxys mandibularis* Nylander, 1848: 1 spec., Pasărea Forest, 13.06.1999.

Family Anthophoridae

Subfamily Anthophorinae

* *Anthophora crassipes* Lepelletier, 1841: 1 spec., Pasărea Forest, 2.05.2006.

Anthophora crinipes Smith, 1854: cited by Iuga (1958), 3 specs, București, Botanical Garden, 8, 11, 16.06.1943; 1 spec., 1 Decembrie, 15.03.1951; 2 specs, Gulia, 14.04.2006.

Anthophora fulvitarsis Brullé, 1832: cited by Iuga (op. cit.), 1 spec., București, Cișmigiu Park, 15.05.1943; 1 spec., București, Botanical Garden, 11.06.1943.

Anthophora furcata (Panzer, 1798): cited by Iuga (op. cit.), 2 specs, București, 1, 24.04.1942; 3 specs, Periș, 7.08.1954; 1 spec., Snagov Forest, 26.06.1957; 1 spec., Țigănești, 5.06.1957; 2 specs, București, Botanical Garden, 29.06.2005.

Anthophora mucida Gribodo, 1873: cited by Iuga (op. cit.), 1 spec., Țigănești, 5.06.1957; 1 spec., Mogoșoaia, 27.04.1957.

Anthophora plagiata (Illiger, 1806): cited by Iuga (op. cit.) as *Anthophora parietina*, 1 spec., Periș, 14.05.1953.

Anthophora plumipes (Pallas, 1772): cited by Iuga (op. cit.) as *Anthophora acervorum*, 1 spec., București, Cișmigiu Park, 14.04.1943; 1 spec., Botanical Garden, 19.04.1943; 1 spec., 1 Decembrie, 15.03.1951; 1 spec., Mogoșoaia, 24.04.1956; 1 spec., Periș, 11.05.1953; 1 spec., Budești, 3.05.1955; 3 specs, Comana Forest, 10.04.2005, 4.05.2006; 5 specs, București, Park of "Grigore Antipa" Museum, 5.04.2005; 1 spec., București, Faculty of Agronomy Park, 15.04.2006; 2 specs, Pasărea Forest, 24.04.1952, 2.05.2006; 1 spec., Izvorani, 11.04.2006.

Anthophora pubescens (Fabricius, 1781): cited by Iuga (op. cit.), Periș, without other data.

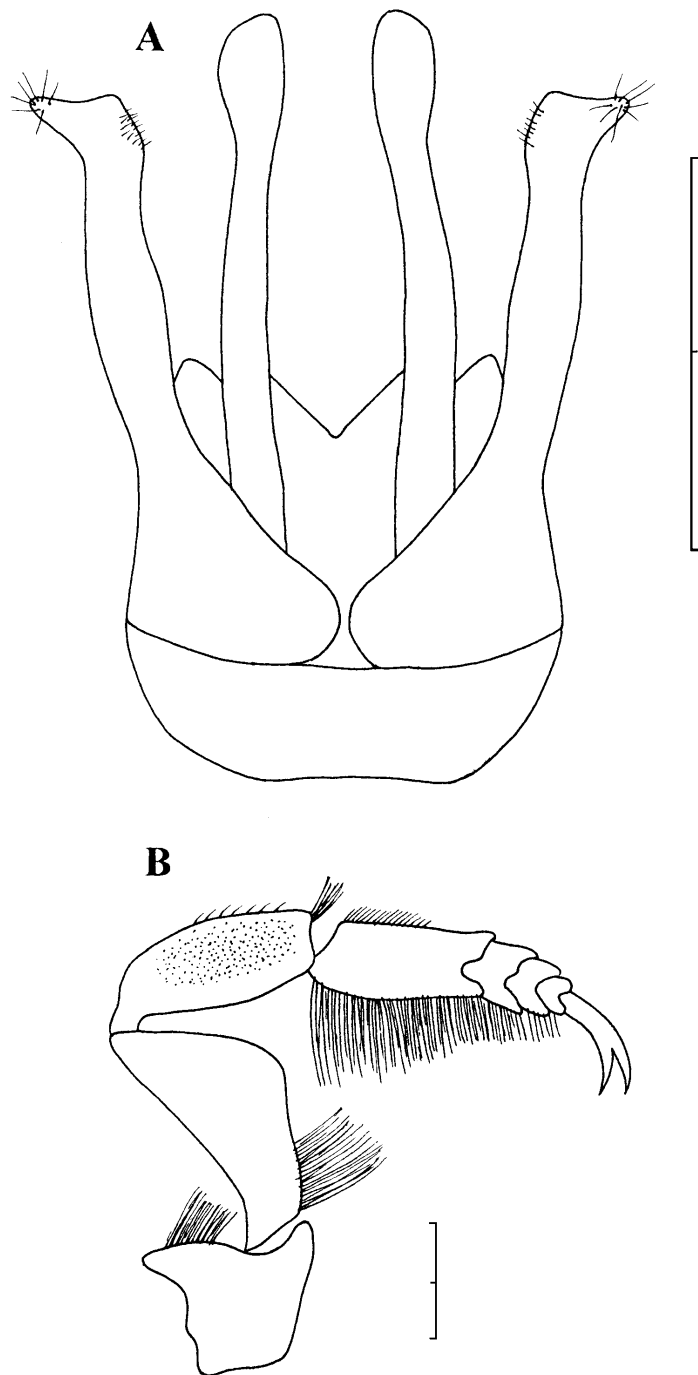


Fig. 3 – *Megachile willughbiella* (Kirby, 1802): A, dorsal view of male genitalia; B, fore leg of male. Scale: 1 mm.

Anthophora quadrimaculata (Panzer, 1806): cited by Iuga (op. cit.) as *Anthophora vulpina*, 1 spec., București, Botanical Garden, 19.04.1943.

Amegilla magnilabris (Morawitz, 1875): cited by Iuga (op. cit.), 1 spec., Budești, 26.06.1947.

Amegilla quadrifasciata Villers, 1789: cited by Iuga (op. cit.), 1 spec., București, Floreasca District, 20.08.1950.

Amegilla salviae (Morawitz, 1876): cited by Iuga (op. cit.), 1 spec., București, Cișmigiu Park, 3.07.1943.

Tetralonia dentata (Klug, 1835): cited by Iuga (op. cit.), Islaz, without other data; 1 spec., Cernica, 5.08.1948.

Tetralonia hungarica (Friese, 1895): cited by Iuga (op. cit.), București, without other data.

* *Tetralonia lyncea* Mocsáry, 1879: 3 specs, București, 14.07.1953.

Tetralonia nana (Morawitz, 1873): cited by Iuga (op. cit.), 1 spec., Budești, 14.08.1948, 1 spec., Oltenița, 2.08.1956.

Tetralonia ruficornis (Fabricius, 1804): cited by Iuga (op. cit.), 2 specs, Budești, 20.06.1947, 26.07.1948, 11, 15, 30.08.1948; 4 specs, Frățești, 4.08.1948; 1 spec., Cernica, 5.08.1948; 1 spec., Bălteni, 15.08.1951.

Tetralonia salicariae (Lepeletier, 1841): cited by Iuga (op. cit.), 2 specs, Budești, 8, 9.08.1948; 1 spec., Roșu, 23.06.1950; 1 spec., Vidra, 13.08.1954; 1 spec., Andronache Forest, 28.07.1958.

Tetralonia scabiosae Mocsáry, 1881: cited by Iuga (op. cit.), 5 specs, Vidra, 13.08.1954; 1 spec., Periș, 7.08.1954; Comana, without other data.

Tetralonia tricincta Erichson, 1835: cited by Iuga (op. cit.), 1 spec., Islaz, 30.07.1945; 1 spec., Copăceni, 28.06.1953.

Eucera atricornis Fabricius, 1793: cited by Iuga (op. cit.), Cernica, without other data.

Eucera cinerea Lepeletier, 1841: cited by Iuga (op. cit.), Budești, 16.06.1947.

Eucera clypeata Erichson, 1835: cited by Iuga (op. cit.), 2 specs, Budești, 23.06.1947; 1 spec., Rădulești, 27.06.1954; 1 spec., Islaz, 14.07.1954; 1 spec., Comana, 31.05.1956.

Eucera curvitaris Mocsáry, 1879: cited by Iuga (op. cit.), 1 spec., Islaz, 30.07.1945; 1 spec., Brănești, 5.08.1946.

Eucera dalmatica Lepeletier, 1841: cited by Iuga (op. cit.), 1 spec., Cernica, 28.05.1947; 1 spec., Copăceni, 28.07.1953; București, without other data.

Eucera helvola Klug, 1845: cited by Iuga (op. cit.), 1 spec., Budești, 27.06.1947.

Eucera interrupta Baer, 1850: cited by Iuga (op. cit.), 1 spec., București, 16.06.1942; 2 specs, București, Botanical Garden, 25.05.1943, 11.06.1943; 1 spec., București, Floreasca District, 30.06.1950; 1 spec., Mogoșoaia, 23.05.1954.

Eucera longicornis (Linnaeus, 1758): cited by Iuga (op. cit.), 1 spec., București, 16.06.1942; 1 spec., București, Botanical Garden, 8.06.1943; 1 spec., București, Floreasca District, 30.06.1950; 1 spec., Islaz, 9.06.1944; 4 specs, Țigănești Monastery, 16.06.2006.

Eucera nigrescens Pérez, 1879: cited by Iuga (op. cit.) as *Eucera tuberculata*, 1 spec., București, 12.06.1942; 3 specs, București, Cișmigiu Park, 15.05.1943, 10.05.1945; 3 specs, București, Botanical Garden, 11, 26.06.1943, 15.05.1953; 1 spec., București, Militari District, 27.04.1947; 1 spec., Islaz, 9.06.1944; 1 spec., Țigănești, 8.05.1949; 1 spec., Periș, 4.05.1953; 2 specs, Mogoșoaia, 23.05.1954, 10.05.1955; 1 spec., Budești – Oltenița, 27.05.1954; 2 specs, Cernica, 6.05.1955,

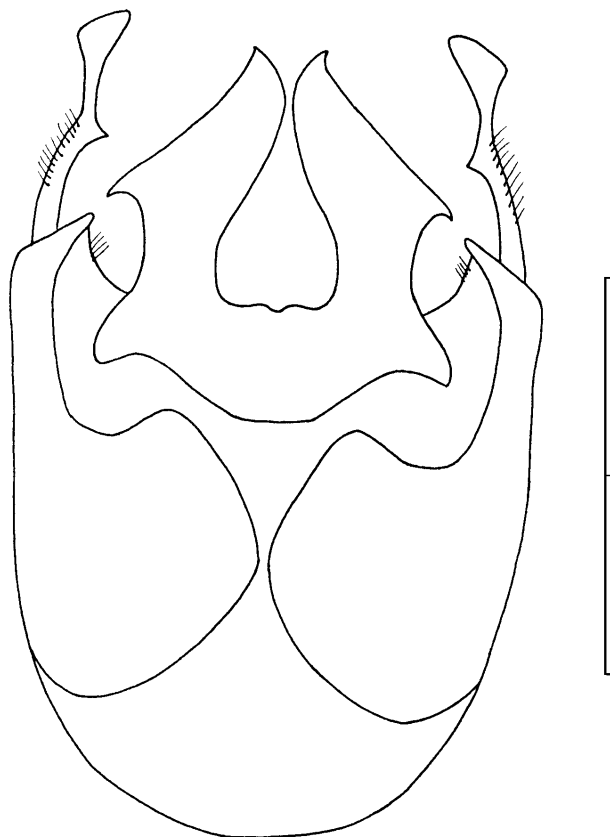


Fig. 4 – *Eucera nigrescens* Pérez, 1879, dorsal view of male genitalia. Scale: 1 mm.

29.05.1956; 2 specs, Pasărea Forest, 2.05.2006; 2 specs, Schitu - Albele Forest, 15.07.2007 (Fig. 4).

* *Eucera nigrifacies* Lepeletier, 1841: 1 spec., București, Cișmigiu Park, 10.05.1943; 3 specs, Islaz, 3, 9.06.1944.

Eucera nigrilabris Lepeletier, 1841: cited by Iuga (op. cit.), 2 specs, București, 12.08.2007.

Eucera nitidiventris Mocsáry, 1879: cited by Iuga (op. cit.), 1 spec., București, Botanical Garden, 25.05.1943; 1 spec., București, Herăstrău Park, 8.06.1947; 1 spec., București, Floreasca District, 28.05.1951; 1 spec., Cernica, 28.05.1955; 1 spec., Ciolpani, 4.06.1957; 2 specs, Frățești, 16.05.2002.

Eucera pollinosa Smith, 1854: cited by Iuga (op. cit.), 1 spec., Islaz, 30.07.1945; 1 spec., București, Floreasca District, 30.06.1950; 1 spec., Buda, 8.06.1953; 1 spec., Odăile, 9.06.1953; 1 spec., Chitila, 19.06.1954.

Eucera seminuda Brullé, 1832: cited by Iuga (op. cit.), 1 spec., București, Botanical Garden, 25.05.1943; 2 specs, Islaz, 14.07.1947.

Eucera taurica Morawitz, 1870: cited by Iuga (op. cit.), 2 specs, Islaz, 8, 14.07.1945; 1 spec., București, 23.06.1946; 1 spec., Brănești, 5.08.1946; 1 spec., București, Floreasca District, 28.05.1951; 1 spec., Odăile, 9.06.1953.

Melecta albifrons Forster, 1771: cited by Iuga (op. cit.) as *Melecta armata*, 1 spec., București, Botanical Garden, 19.04.1943; 2 specs, București, Cișmigiu Park, 12.05.1953.

Melecta luctuosa (Scopoli, 1770): cited by Iuga (op. cit.), 1 spec., București, Botanical Garden, 8.06.1943; 1 spec., Budești, 3.05.1953.

Thyreus affinis (Morawitz, 1874): cited by Iuga (op. cit.), 1 spec., Copăceni, 28.06.1953.

Thyreus histrionicus (Illiger, 1806): cited by Iuga (op. cit.), 1 spec., Budești, 23.06.1947; 1 spec., Frățești, 5.08.1948.

Biastes brevicornis (Panzer, 1798): cited by Iuga (op. cit.), 2 specs, Islaz, 23, 30.07.1944; 1 spec., Frățești, 26.07.1948; 1 spec., Rădulești, 27.06.1954.

Biastes emarginatus (Schenck, 1853): cited by Iuga (op. cit.), 2 specs, Frățești, 26.07.1948; 1 spec., București, Botanical Garden, 25.08.2005.

Subfamily Nomadinae

* *Nomada fabriciana* (Linnaeus, 1767): 1 spec., Pasărea Forest, 2.05.2006.

* *Nomada fucata* Panzer, 1798: 1 spec., Frățești, 16.05.2002; 2 specs, Pasărea Forest, 2.05.2006 (Fig. 5).

* *Nomada fulvicornis* Fabricius, 1793: 2 specs, Padina Tătarului, 4.05.2006; 1 spec., Comana Forest, 4.05.2006.

* *Nomada goodeniana* (Kirby, 1802): 5 specs, Pasărea Forest, 13.06.1999; 1 spec., Padina Tătarului, 4.05.2006 (Fig. 6).

* *Nomada mutica* Morawitz, 1872: 1 spec., Pasărea Forest, 13.06.1999.

* *Nomada sexfasciata* Panzer, 1799: 2 specs, Comana Forest, 10.04.2005.

Subfamily Xylocopinae

* *Ceratina cyanea* (Kirby, 1802): 1 spec., Vlașin - Ogarca Forest, 6.09.2006; 1 spec., Schitu - Albele Forest, 15.07.2007.

* *Ceratina gravidula* Gerstaecker, 1869: 1 spec., Schitu - Albele Forest, 15.07.2007 (Fig. 7).

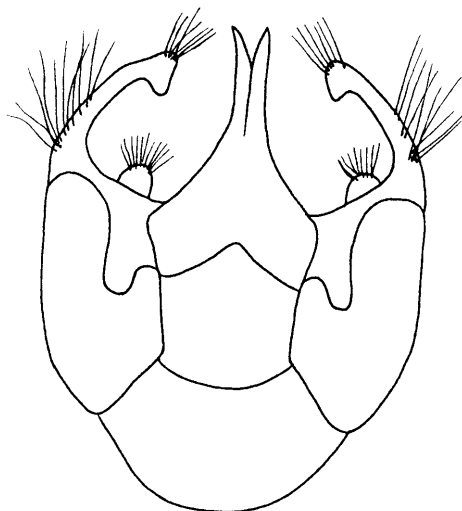


Fig. 5 – *Nomada fucata* Panzer, 1798, dorsal view of male genitalia. Scale: 1 mm.

Fig. 6 – *Nomada goodeniana* (Kirby, 1802), dorsal view of male genitalia. Scale: 1 mm.

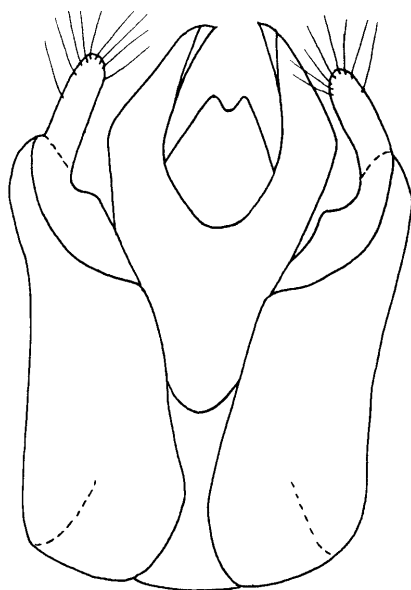
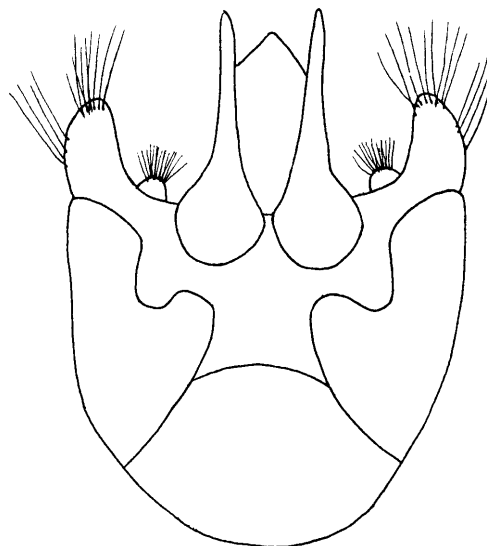


Fig. 7 – *Ceratina gravidula* Gerstaecker, 1869, dorsal view of male genitalia. Scale: 1 mm.

* *Xylocopa valga* Gerstaecker, 1872: 1 spec., București, Park of “Grigore Antipa” Museum, 5.08.2004; 1 spec., Mihăilești, 10.08.2004; 4 specs, Valea Gurbanului, 10.04.2005; 4 specs, Căldărușani Lake, 11.04.2006; 1 spec., Pasărea Forest, 2.05.2006; 2 specs, Comana Forest, 4.05.2006; 1 spec., București, 26.06.2007.

* *Xylocopa violacea* (Linnaeus, 1758): 1 spec., Comana, without other data; 2 specs, București, Park of “Grigore Antipa” Museum, 17.09.1943, 6.05.2007; 2 specs, Țigănești Monastery, 16.06.2005; 1 spec., București, Faculty of Agronomy Park, 15.04.2006; 2 specs, Pasărea Forest, 2.05.2006.

Family Apidae

Bombus argillaceus Scopoli, 1763: cited by Knechtel (1955), 2 specs, Islaz, 3.05.1944; 2 specs, Mogoșoaia, 24.04.1956, 29.04.1958; 6 specs, București, 04.1951, Botanical Garden, 19.04.1943, Militari District, 27.04.1944, Pustincu Forest, 29.04.1963; 1 spec., Chitila, 27.04.1954; 1 spec., Căldărușani, 12.06.1958; 1 spec., Pasărea Forest, 29.06.1962; 3 specs, Periș, 8.04.1953, 4.05.1959; 1 spec., Comana, without other data; Cernica; Brănești.

* *Bombus confusus* Schenck, 1859: 1 spec., Periș, 8.04.1953.

Bombus haematurus Kriechbaumer, 1870: cited by Knechtel (op. cit.), 2 specs, Băneasa, 22.06.1969; 2 specs, Mogoșoaia, 15.06.1962; 2 specs, Comana, without other data; 2 specs, Căldărușani, 12.06.-07.1958.

Bombus hortorum (Linnaeus, 1761): cited by Ban-Calefariu & Sárospataki (2007), 1 spec., București, Botanical Garden, 8.06.1943; 1 spec., București, 10.08.1961; 2 specs, Brănești, 5.08.1946; 3 specs, Islaz, 22.06.1944, 30.07.1944; 4 specs, Comana Forest - Izvorul cu Nuci, 10.04.2005; 1 spec., Pasărea Forest, 2.05.2006.

Bombus humilis Illiger, 1806: cited by Knechtel (op. cit.), 1 spec., București, 1.04.1952; 1 spec., București, Cișmigiu Park, 31.07.1943; 2 specs, Islaz, 9.06.1944, 30.07.1944.

Bombus mastrucatus Gerstäcker, 1869: cited by Knechtel (op. cit.), 2 specs, Mogoșoaia, 22.07.1943, 23.05.1954; 1 spec., Budești, 12.08.1948.

* *Bombus muscorum* (Linnaeus, 1758): 4 specs, Islaz, 23, 30.07.1944; 5 specs, Brănești, 6, 7.08.1946.

Bombus pascuorum (Scopoli, 1763): cited by Knechtel (op. cit.) as *Bombus agrorum*, by Ban-Calefariu & Sárospataki (op. cit.), 3 specs, Islaz, 9.06.1944; 9 specs, Brănești, 5.08.1946, 24.04.1964, 5.05.1966; 1 spec., Pasărea, 7.04.1946, 19.05.1965; 3 specs, Pustnicu Forest, 5.07.1962, 11.06.1970; 1 spec., Cernica, 10.04.1959; 1 spec., Mogoșoaia, 30.03.1961; 2 specs, Țigănești Forest, 26.04.1966; 1 spec., București, 21.04.1964, 3 specs, Botanical Garden, 11, 26.06.1943, 13.07.1943, 2 specs, Cișmigiu Park, 15.04.1943, 1 spec., Andronache Forest, 29.04.1955, 1 spec., Băneasa, 20.04.1962, 1 spec., Park of "Grigore Antipa" Museum, 5.04.2005; 2 specs, Căldărușani, 30.06.1959, 18.04.2004; 2 specs, Izvorani, 11.04.2006; 6 specs, Comana Forest, 10.04.2005, 4.05.2006; 1 spec., Manafu Forest, 22.06.2006.

Bombus pomorum (Panzer 1805): cited by Knechtel (op. cit.), 1 spec., București, Botanical Garden, 26.06.1943; 2 specs, Islaz, 9.06.1944, 30.07.1945; 2 specs, Brănești, 5.08.1946.

Bombus pratorum (Linnaeus, 1761): cited by Knechtel (op. cit.), 2 specs, Comana, without other data.

Bombus ruderarius (Müller, 1776): cited by Knechtel (op. cit.), 1 spec., București, Botanical Garden, 25.05.1943; 3 specs, Islaz, 9.06.1944, 30.07.1944, 14.07.1945; 2 specs, Periș, 4.05.1953, 7.08.1954; 2 specs, Căciulați, Căldărușani Forest, 9.07.1956; 1 spec., Pustnicu Forest, 7.07.1962; Brănești, Chitila, Pasărea Forest, without other data.

* *Bombus ruderatus* Fabricius, 1775: 2 specs, București, Botanical Garden, 11.06.1943, 3.06.1959; 2 specs, București, Floreasca District, 30.06.1950.

Bombus sylvarum (Linnaeus, 1761): cited by Ban-Calefariu & Sárospataki (op. cit.), 1 spec., Islaz, 9.06.1944; 1 spec., Brănești, 6.08.1946; 1 spec., București, Botanical Garden, 14.08.1953; 1 spec., Podul Ciurel (Lacul Morii), 25.08.2005.

Bombus terrestris (Linnaeus, 1758): cited by Ban-Calefariu & Sárosataki (op. cit.), 6 specs, București, 14.04.1946, 8.05.1951, 18.03.2005, 1 spec., Băneasa Forest, 11.05.1960, 1 spec., Park of “Grigore Antipa” Museum, 5.04.2005; 1 spec., Țigănești, 8.05.1948; 1 spec., Ștefănești, 24.04.1953; 1 spec., Mogoșoaia, 27.05.1954; 1 spec., Căldărușani, 23.03.1957; 1 spec., Videle, 13.08.1959; 1 spec., Pasărea Forest, 7.08.1964; 1 spec., Cernica Forest, 10.04.1959; 2 specs, Comana Forest, 10.04.2005.

DISCUSSIONS

The 207 species identified in the researched area represent an amount of 35% of all the known species from Romania. 49 of these species are reported for the first time in this area. The material was gathered from 57 collecting sites from București and the surrounding areas, 25 of which are new sites: Bălteni, București – Militari District, București – Village Museum, București – Herăstrău Park, București - Faculty of Agronomy Park, București - Park of “Grigore Antipa” Museum, București - Andronache Forest, Buda, Copănița, Daia, Dărăști, 1 Decembrie, Dragomirești, Gulia, Mihăilești, Moara Domnească, Padina Tătarului, Tâncăbești Forest, Rădulești, Roșu, Schitu - Albele Forest, Valea Gurbanului, Videle, Vidra, Vlașin - Ogarca Forest.

ACKNOWLEDGEMENTS

We want to thank to our colleagues Rodica Serafim and Dr. Melanya Stan from the “Grigore Antipa” National Museum of Natural History (București) for their support in the process of updating the names of localities, also, we want to thank Mrs. Petruța Dumitrică for tracing the drawings in China ink, as well as to anonymous scientific reviewers.

DATE PRIVIND HIMENOPTERELE APOIDE (HYMENOPTERA: APOIDEA) DIN BUCUREȘTI ȘI ZONELE LIMITROFE

REZUMAT

Această sinteză s-a realizat pe baza studierii literaturii, a colecției științifice a Muzeului Național de Istorie Naturală “Grigore Antipa” (București) și a materialului colectat de specialiștii muzeului în perioada 1999 – 2007 din București și zonele limitrofe. Majoritatea materialului din colecție, care a servit drept studiu, a fost colectat de renumiți specialiști ai muzeului, precum Victoria Iuga Raica și Xenia Scobiola-Palade, începând cu 1942 până în anii 1950-1969. Din 1999 a reînceput colectarea sistematică în zona cercetată.

Au fost identificate 207 specii de apoide din 32 genuri aparținând la 6 familii.

Materialul provine din 57 situri de colectare, în unele dintre ele revenindu-se după 50 - 60 de ani. Comparând colectările vechi cu cele mai recente se poate constata o reducere a numărului de specii. Explicația este dată de micșorarea sau dispariția zonelor verzi ale capitalei și ale zonelor limitrofe și, implicit creșterea gradului de poluare, apoidele fiind sensibile la modificarea biotopului.

LITERATURE CITED

- AFTENE, M., 1972 - Speciile familiei Megachilidae (Hymenoptera) citate în fauna României. Comunicări și Referate, Muzeul de Științele Naturii Ploiești: 263-276. (in Romanian)
- BAN-CALEFARIU, C., M. SÁROSPATAKI, 2007 - Contributions to the knowledge of *Bombus* and *Psithyrus* genera (Hymenoptera: Apidae) in Romania. Travaux du Muséum National d'Histoire Naturelle “Grigore Antipa”, 50: 239-258.
- BANASZAK, J., L. ROMASENKO, 2001 - Megachilid Bees of Europe, Second Edition. Bydgoszcz University of Kazimierz Wielki. 239 pp.
- GOGALA, A., 1999 - Bee Fauna of Slovenia: Checklist of species (Hymenoptera: Apoidea). Scopolia, 42: 1-79.

- IUGA, V. G., 1958 - Hymenoptera Apoidea, Fam. Apidae, Subfam. Anthophorinae. *In: Fauna R.P.R.*, București, 9 (3): 1-270. (in Romanian)
- KNECHTEL, W. K., 1955 - Hymenoptera, Subfamilia Apinae. *In: Fauna R.P.R.*, București, 9 (1): 1-111. (in Romanian)
- OSYCHNYUK, A. Z., D. V. PANFILOV, A. A. PONOMAREVA, 1978 - Nadsem. Apoidea – Pchelinye. Pp. 279-519. *In: G. S. Medvedeva (ed.), Opredelitel' nasekomyh Evropejskoj chasti SSSR*, 3, Pereponchatokrylye, pt. 1, Akademiya Nauk SSSR, Leningrad. 583 pp. (in Russian)
- PAWLIKOWSKI, T., 2001 - Computer checklist of Apoidea (Hymenoptera) in Poland. *Acta Universitatis Nicolai Copernici, Institute of Ecology & Environmental, Protection Biomonitoring Environments Laboratory*. Available online at: <http://ww.umk.pl/~pawlik/publ/95-2001.pdf>
- PESENKO, YU. A., J. BANASZAK, V. G. RADCHENKO, T. CIERZNIAK, 2000 - Bees of the family Halictidae (excluding *Sphecodes*) of Poland: taxonomy, ecology, bionomics. Bydgoszcz. 348 pp.
- POLASZEK, A., 2005 - Fauna Europaea. Apidae family. Available online at: www.faunaeur.org/full_results.php
- SCOBIOLA - PALADE, X., A. OSYCHNYUK, 1974 - Données concernant le genre *Halictus* (Hymenoptera, Halictidae) de Roumanie. *Travaux du Muséum d'Histoire Naturelle "Grigore Antipa"*, 15: 259-266.
- WARNCKE, K., X. SCOBIOLA - PALADE, 1980 - Données sur les Hyménoptères Andrenidae (Apoidea) de Roumanie. *Travaux du Muséum d'Histoire Naturelle "Grigore Antipa"*, 21: 163-175.
- ZANDEN, G., I. MATACHE, 1986 - Family Megachilidae (Hymenoptera) in the collections of the "Grigore Antipa" Natural History Museum. *Travaux du Muséum d'Histoire Naturelle "Grigore Antipa"*, 28: 65-78.

Received: March 12, 2008

Accepted: May 23, 2008

Muzeul Național de Istorie Naturală "Grigore Antipa"

Șos. Kiseleff nr. 1, 011341 București 2, România

e-mail: cristban@antipa.ro

imatache@antipa.ro