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**CONTRIBUTIONS TO THE KNOWLEDGE OF APOID  
HYMENOPTERANS (HYMENOPTERA: MEGACHILIDAE,  
ANTHOPHORIDAE, APIDAE) FROM MARAMUREŞ (ROMANIA).  
PART I**

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Abstract. Data on apoid hymenopteran fauna from Maramureş are presented. From the 11 reported genera with 34 species, 9 genera and 25 species are new reports for the studied area.

Résumé. On présente des données sur la faune de hyménoptères apoïdes de Maramureş. Des 11 genres avec 34 espèces mentionnées, 9 genres et 25 espèces sont des nouveaux rapports pour le secteur étudié.

Key words: Hymenoptera, Megachilidae, Anthophoridae, Apidae, Maramureş (Romania).

Information on the apoid hymenopterans from Maramureş were given by Frivaldszky (1871), Szilády (1914), Zilahi-Kiss (1915), Pascu (1979), the only 8 reported species demonstrating a very reduced knowledge of the group in the area.

During 1995-1998 and 2003-2004, the team of “Grigore Antipa” National Museum of Natural History from Bucharest made intensive studies on the fauna of Maramureş, collecting a rich material and publishing numerous faunistic lists from different taxonomical groups.

In this paper I present a first list of the apoid hymenopterans collected during the above mentioned periods, from 41 collecting sites, placed on the hydrographical basins of Iza, Săpânța, Vișeu, Mara, Pietrosul Rodnei Reservation, Gutâi Mountains, Vaser Valley.

*MATERIAL AND METHOD*

By mowing the vegetation with the entomological net 6,680 hymenopteran specimens were collected, and then dried.

The identification at the species level was made according to the external morphology and to genitalia, using the papers signed by Knechtel (1955), Iuga (1958), Osychnyuk, Panfilov & Ponomareva (1978).

The systematical order, nomenclature, geographical distribution and ecology are according to Knechtel (1955), Iuga (1958), Michener (1993), Dylewska (1997), Banaszak & Romasenko (2001).

Families and genera are systematically ordered, and the species, alphabetically.

Most of the species from the list are mentioned together with the data regarding the collecting sites and dates, number of the specimens, collector's name, ecologia and their distribution.

Collecting sites are presented in figure 1.

Abbreviations:

Mt./Mts – Mountain/Mountains

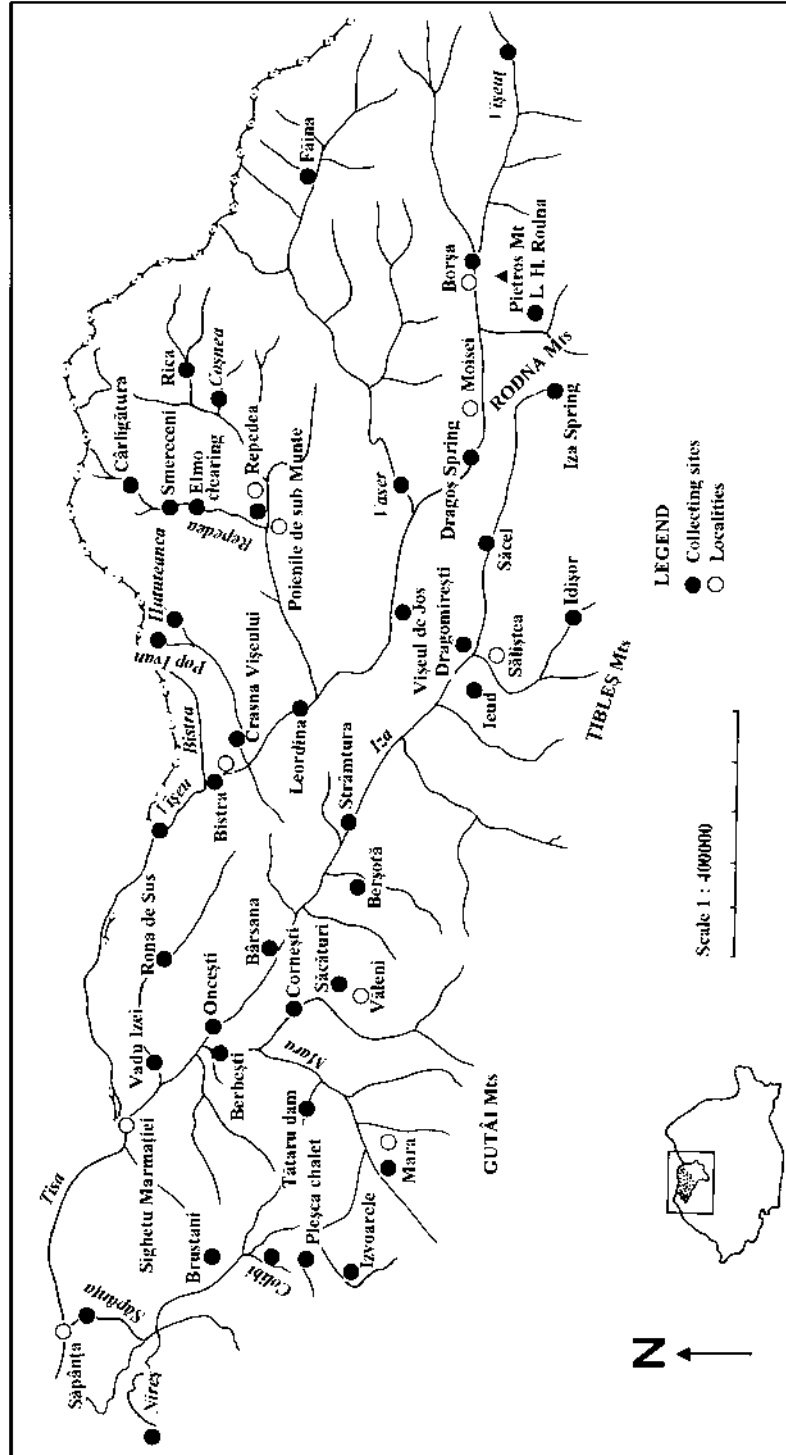


Fig. 1 – The map of the collecting sites in Maramures.

Collectors' names: A.S. – Aurora Stănescu, A.V. – Adriana Văraru, C.P. – Corneliu Pârnu, C.H. – Cristina Hoinic, C.B. – Cristina Ban, E.R. – Elena Rusu, G.C. – Gabriel Chișamera, I.M. – Ioana Matache, M.S. – Melanya Stan, Mi.S. – Mihai Stănescu, R.S. – Rodica Serafim.

The species reported from the studied area for the first time are marked with \*.

#### RESULTS

The 6,680 hymenopteran specimens belong to the groups: Symphyta (672 specimens; 10 %), Parasitica (2414 specimens; 36 %) and Aculeata (3594 specimens; 54 %).

From Aculeata, Apiformes (2540 specimens; 70 %) are prevalent, followed by Vespoidea (851 specimens; 24 %) and Spheciformes (203 specimens; 6 %) (Tab. 1, fig. 2).

Most of the Apiformes belong to the family Halictidae (1,669 specimens). Family Apidae is represented by 485 specimens (19.9 %), followed by the families Andrenidae (167 specimens; 6.57 %), Colletidae (124 specimens; 4.88 %),

Table 1

Aculeate hymenopterans collected during 1995-1998 and 2003-2004.

Superfamily		Number of the specimens	Share (%)
Vespoidea		851	24
Apoidea	Spheciformes	203	6
	Apiformes	2540	70
TOTAL		3594	100

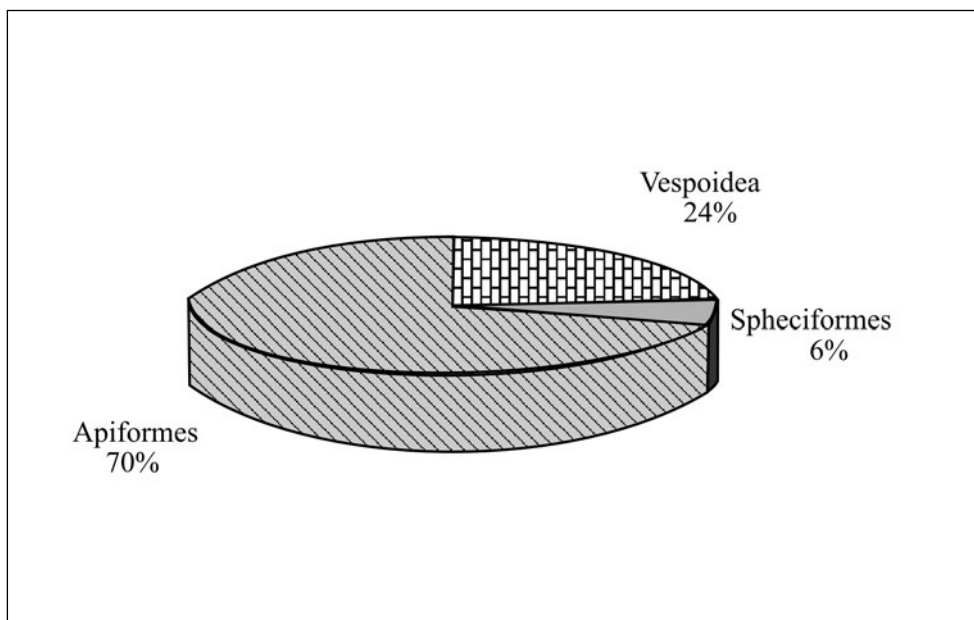


Fig. 2 – The share of the 3 Aculeate groups.

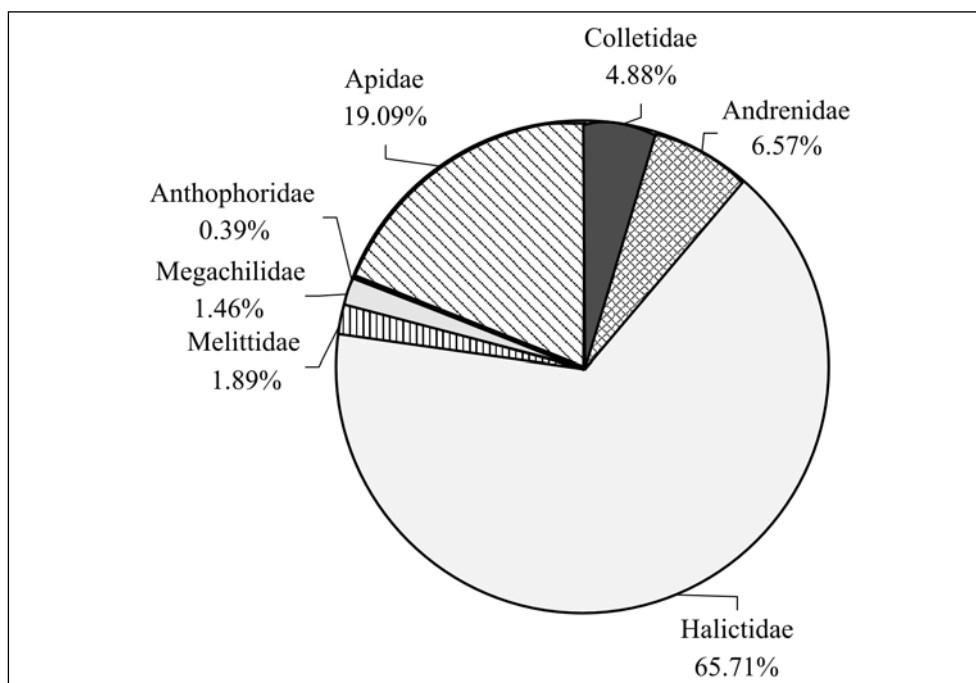


Fig. 3 – The share of the 7 Apiformes families.

Melittidae (48 specimens; 1.89 %), Megachilidae (37 specimens; 1.46%), and Anthophoridae (10 specimens; 0.39 %). This taxonomical distribution could be correlated with the collecting time, climatic conditions, food source. (Fig. 3).

The material was partially studied, the taxonomical list including 532 apoid specimens of 34 species, belonging to 3 families: Megachilidae (12 species), Anthophoridae (5 species) and Apidae (17 species).

Taxonomical list  
 Superfamily Apoidea  
 Family Megachilidae  
 Subfamily Megachilinae  
 Tribe Anthidiini  
*Trachusa* Panzer, 1804

\* *Trachusa byssina* (Panzer, 1798)

*Material*: 1 ♂, Vadul Izei, 9.VII.1995, I.M., 2 ♂♂, 1 ♀, Săpâța: Brustani Clearing, 6.VII.1996, 13.VII.1996, C.P., I.M., 1 ♂, Poienile de sub Munte: Coșnea Chalet, 19.VII.2004, C.B.

*Ecology*. Oligolectics: Fabaceae, prefer *Lotus corniculatus*. Flying season: June-August. Nest in burrows on the ground; the cell partitions are made of leaf fragments.

*Distribution*. South Europe (part), North, Eastern and Central Europe, Siberia, Northern Asia, Transcaucasia.

## Tribe Megachilini

*Chelostoma* Latreille, 1809\* *Chelostoma campanularum* (Kirby, 1802)

*Material*: 1 ♂, Strâmtura: Slătioara River: Berșota Stream, 9.VII.1995, C.P., 1 ♂, Pietrosul Rodnei: Laboratory House, 10.VII.1995, A.S., 1 ♂, Moisei: Izvorul lui Dragoș, Forest Range, 13.VII.1995, C.P., 4 ♂ ♂, Călinești: Văleni: "Săcătura" Forest Range, 7.VII.1995, I.M., C.P., 2 ♂ ♂, Săpâța: Colibi, 9.VII.1996, I.M., 1 ♂, Crasna Vișeu: 12 km upstream the confluence Hututeanca - Pop Ivan, 19.VII.2004, G.C., 1 ♂, Vaser Valley: Făina, 21.VII.2004, C.B., 1 ♂, Poienile de sub Munte: Coșnea Chalet, 25.VII.2004, G.C., 1 ♂, Dragomirești, 22.VI.2003, M.S.

*Ecology*. Oligolectics: *Campanula*. Flying season: June-August. Nest in pre-existing cavities in thatched roofs, dry hollow stems and wooden walls. Their nest form small aggregations.

*Distribution*. Europe, North-East USA, North Africa, the Caucasus.

\* *Chelostoma distinctum* (Stoeckert, 1929)

*Material*: 1 ♂, Strâmtura: "Podul Slătioarei" Forest Range, 6.VII.1995, C.P., 1 ♂, Crasna Vișeuului: Hututeanca streamlet, 17.VI.2003, C.P., 1 ♂, Săliștea: Idișor Stream, 23.VI.2003, C.P.

*Ecology*. Oligolectics: Campanulaceae. Flying season: June-August. Nest in hollow dry stem.

*Distribution*. South, Eastern and Central Europe, the Caucasus.

\* *Chelostoma florissomne* (Linnaeus, 1758)

*Material*: 2 ♂ ♂, Săpâța: Săpânciora Valley, 20.V.1996, Mi.S., 2 ♂ ♂, Repedea: Smereceni Clearing, 22.VI.1997, R.S., Repedea: Elmo Clearing, 24.VI.1997, I.M.

*Ecology*. Oligolectics: *Ranunculus*. Flying season: May-July. Nest in dry hollow stem. Cleptoparasite: *Sapyga clavicornis* (Sapygidae).

*Distribution*. Europe, the Caucasus, North Africa.

\* *Chelostoma rapunculi* (Lepelletier, 1841)

*Material*: 1 ♂, Bârsana, 5.VII.1995, I.M., 2 ♂ ♂, Moisei: Izvorul lui Dragoș, Forest Range, 750 m altitude, 13.VII.1995, C.P., C.H., 1 ♂, Săpâța: Brustani Clearing, 13.VII.1996, A.S.

*Ecology*. Oligolectics: *Campanula*. Flying season: May-August. Nest in pre-existing cavities in hollow stem and wooden buildings. Cleptoparasite: *Stelis breviscula* (Megachilidae).

*Distribution*. Europe, the Caucasus, Asia Minor, Turkmenistan, Siberia, Kazakhstan, Russian Far East, North-Eastern USA.

*Megachile* Latreille, 1802\* *Megachile lagopoda* (Linnaeus, 1761)

*Material*: 1 ♂, Săpâța: Brustani Clearing, 10.VII.1996, A.S.

*Ecology.* Polylectics: prefer Asteraceae. Flying season: June – August. Nest in pre-existing cavities in the soil. Cleptoparasite: *Coelioxys conoidea* (Megachilidae).

*Distribution.* Europe, the Caucasus, Siberia, Central Asia, part of the former USSR, Russian Far East, Japan, North Africa.

\* *Megachile lapponica* Thomson, 1872

*Material:* 1 ♀, Poienile de sub Munte: Coșnea Chalet, 19.VII.2004, C.B.

*Ecology.* Polylectics: Fabaceae and Laminaceae. Flying season: June – August. Nest in pre-existing cavities in dead wood. Cleptoparasite: *Coelioxys inermis* (Megachilidae).

*Distribution.* North Europe, Eastern and Central Europe (part), Siberia, Russian Far East, Korea, Japan.

\* *Megachile ligniseca* (Kirby, 1802)

*Material:* 1 ♂, Poienile de sub Munte: Rica River Valley, 2 km upstream Coșnea Chalet, 25.VII.2004, R.S.

*Ecology.* Polylectics: prefer Asteraceae. Flying season: June – August. Nest in pre-existing cavities in dead wood.

*Distribution.* North, Central and Eastern Europe, Siberia, Russian Far East, North-Eastern China, Japan.

\* *Megachile versicolor* Smith, 1844

*Material:* 1 ♀, Crasna Vișeuului, 23.VIII.1997, C.P.

*Ecology.* Polylectics: prefer Asteraceae and Fabaceae. Flying season: May – September. Nest in pre-existing cavities in dead wood or in hollow stem.

*Distribution.* Europe, West and North Kazakhstan, Siberia, Russian Far East.

\* *Megachile willughbiella* (Kirby, 1802)

*Material:* 1 ♂, Ieud, 4.VII.1995, C.P., 1 ♂, Vaser Valley: Făina, 21.VII.2004, C.B.

*Ecology.* Polylectics: prefer Asteraceae and Fabaceae. Flying season: June – August. Nest in pre-existing cavities in dead wood or in hollow stem.

*Distribution.* North, Eastern and Central Europe, South Europe (part), the Caucasus, Siberia, Russian Far East.

*Coelioxys* Latreille, 1809

\* *Coelioxys aurolimbata* Förster, 1853

*Material:* 1 ♂, Bârsana, 5.VII.1995, I.M.

*Ecology.* Cleptoparasitic species. Host: *Megachile ericetorum*. Flying season: June – August.

*Distribution.* Europe, Central Asian part of the former USSR, the Caucasus, Asia Minor, North Africa.

\* *Coelioxys rufescens* Lepeletier & Serville, 1825

*Material:* 1 ♂, Crasna Vișeuului, 23.VIII.1997, C.P.

*Ecology.* Cleptoparasitic of *Megachile*, *Anthophora quadrimaculata*, *A. bimaculata*, *Clisodon furcatus*.

*Distribution.* Europe, Central Asian part of the former USSR, the Caucasus, Asia Minor, Kazakhstan, Central Siberia, Yakut, Pamirs, China, Algeria.

Family Anthophoridae

Subfamily Nomadinae

Tribe Nomadini

*Nomada* Scopoli, 1770

*Nomada ochrostoma* Kirby, 1802

Reported by Szilády (op. cit.) from Rodna Mountains (1,400 m).

*Ecology.* Cleptoparasitic species.

Subfamily Anthophorinae

Tribe Eucerini

*Eucera* Scopoli, 1770

\* *Eucera dalmatica* Lepeletier, 1841

*Material:* 1 ♂, Dragomirești: Baicu Forest Range, 21.VI.2003, M.S.

*Ecology.* Stenoic eremophilous. Flying season: June – August. Stenofagous species; females collect on *Echium vulgare*, *E. altissimum*.

*Distribution.* Minor Asia, USSR steppes, Hungary, Yugoslavia, Romania.

\* *Eucera longicornis* (Linnaeus, 1758)

*Material:* 4 ♂ ♂, Repedea: Elmo Clearing, 24.VI.1997, C.P., I.M., Repedea: Forest Range, 2.VII.1997, I.M., 1 ♀, Repedea: Smereceni Clearing, 22.VI.1997, I.M., 1 ♀, Poienile de sub Munte: Coșnea Forest Range, 16.VI.2003, R.S.

*Ecology.* Eurioic. Flying season: April – September. Polyphagous species. It makes its nests on the sunny hills, covered with rare herbs. *Nomada sexfaciata* parasite in its nest.

*Distribution.* Europe.

*Tetralonia* Spinola, 1838

\* *Tetralonia salicariae* (Lepeletier, 1841)

*Material:* 1 ♀, Oncești, 10.VII.1995, I.M.

*Ecology.* Eurioic eremophilous. Flying season: June – August. Polyphagous species.

*Distribution.* North Africa, East, South and Central Europe.

Tribe Anthophorini

*Clisodon* Patton

\* *Clisodon furcatus* (Panzer, 1798)

*Material:* 1 ♂, Crasna Vișeuului: Pop Ivan Stream Valley, 17.VI. 2003, R.S.

*Ecology.* Eurioic. Flying season: June – August. Nest made in dead wood.

*Distribution.* North, East, West and South Europe, Palaearctic Asia.

Family Apidae

Subfamily Bombinae

*Bombus* Latreille, 1802

*Bombus hortorum* (Linnaeus, 1761)

Reported by Szilády (op. cit.) and Pascu (op. cit.) from Rodna Mountains (1,300 m).

*Material:* 1 ♀, Bârsana, 5.VII.1995, I.M., 1 ♀, Izvorul Izei, 6.VII.1995, I.M., 1 ♀, Călinești: Văleni: “Săcătura” Forest Range, 7.VII.1995, I.M., 2 ♀ ♀, Repedea: Forest Range, 26.VI.1997, I.M., 1 ♀, Crasna Vișeului: Hututeanca River Valley, 17.VI.2003, R.S., 1 ♀, Dragomirești: Lunca lui Cosiță, 22.VI.2003, R.S., 1 ♀, Vaser Valley: Bardău transect – Cozia, 22.VII.2004, G.C.

*Ecology.* Polylectic social species. Nest in the ground.

*Distribution.* Palaearctic.

In Romania, it is spread all around the country.

\* *Bombus hypnorum* (Linnaeus, 1758)

*Material:* 1 ♂, Mara: Tătarul dam, 16.VII.1998, I.M. (Fig. 4).

*Ecology.* Polylectic social species. Nest above the ground, in cavities or rock crevices.

*Distribution.* Palaearctic.

In Romania, it is a rarer species, being occurred within the conifer area.

\* *Bombus lapidarius* (Linnaeus, 1758)

*Material:* 1 ♀, Bârsana, 5.VII.1995, I.M., 3 ♀ ♀, Ieud, 8.IX.1995, C.P., 4 ♀ ♀, Săpânța: Brustani Clearing, 6.VII.1996, C.P., A.S., 1 ♀, Vișeul de Jos, 22.VIII.1997, E.R., 2 ♀ ♀, Mara, 2 km upstream, 17.VII.1998, C.P., A.V., 1 ♀, Bistra, 21.VII.1998,

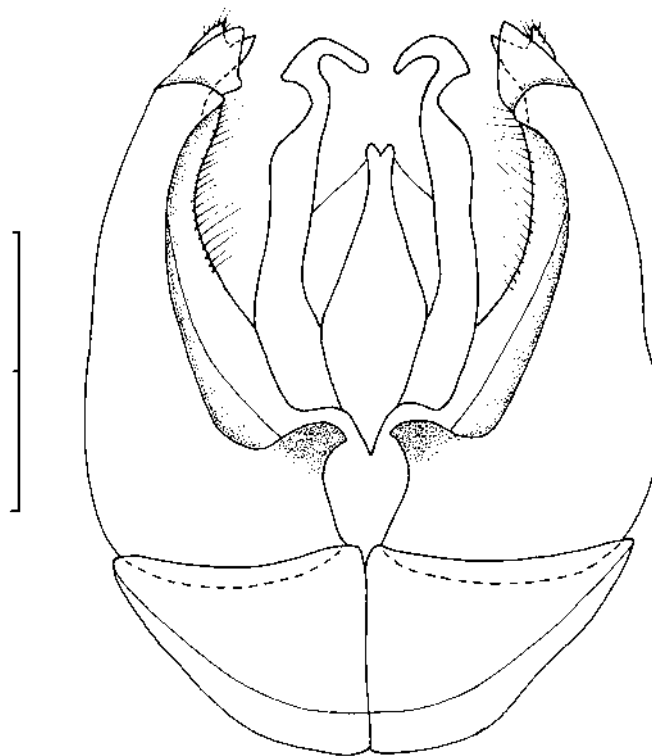


Fig. 4 – *Bombus hypnorum* (Linnaeus, 1758), dorsal view of male genitalia. Scale: 1 mm.

C.P., 6 ♀♀, Poienile de sub Munte: Coșnea Chalet, 19.VII.2004, C.B., G.C., 25.VII.2004, C.B.

*Ecology.* Polylectic social species. Nest in the ground.

*Distribution.* Western Palaearctic.

In Romania, it is spread all around the country, from the steppe areas with forest to the alpine areas.

*Bombus mastrucatus* Gerstäcker, 1869

Reported by Pascu (op. cit.) from the Rodna Mountains.

*Ecology.* Polylectic social species. Nest in the ground.

*Distribution.* Palaearctic.

In Romania, it is frequent in the conifer area and in the alpine one.

\* *Bombus pascuorum* (Scopoli, 1763)

*Material:* 1 ♀, Izvorul Izei, 6.VII.1995, I.M., 2 ♂♂, Strâmtura: Slătioara River: Berșotă Stream, 7.IX.1995, C.P., 2 ♀♀, Săpânța: Colibi, 12.VII.1996, I.M., 1 ♀, Repedea: Forest Range, 26.VI.1997, I.M., 5 ♀♀, Mara, 18.VII.1998, C.P., 21.VII.1998, I.M., 3 ♀♀, Rona de Sus: Forest Range, 20.VII.1998, I.M., 2 ♀♀, Poienile de sub Munte: Coșnea Chalet, 15.VII.2004, C.B., G.C., 6 ♀♀, Vaser Valley: Făina, 21.VII.2004, C.B., R.S., 8 ♀♀, Vaser Valley: Bardău-Cozia transect, 22.VII.2004, C.B., G.C., 1 ♂, 2 ♀♀, Vișeu Valley, 4 km upstream, 24.VII.2004, C.B., 1 ♀, Poienile de sub Munte: Rica River Valley, 2 km upstream Coșnea Chalet, 25.VII.2004, R.S.

*Ecology.* Polylectic social species. Nest above the ground.

*Distribution.* Europe, Siberia.

In Romania it is one of the most common species of this genus, becoming frequent in the upper forest areas.

\* *Bombus pratorum* (Linnaeus, 1761)

*Material:* 4 ♂♂, Săpânța: Colibi, 12.VII.1996, I.M., C.P., 3 ♂♂, Mara: Tătarul dam, 16.VII.1998, I.M., A.V., 3 ♂♂, Mara, 2 km upstream, straight bank, 18.VII.1998, I.M.

*Ecology.* Polylectic social species. Nest usually above the ground, sometimes in the ground.

*Distribution.* Palaearctic.

In Romania, it is distributed in the areas with woody vegetation, most frequently in the conifer ones.

*Bombus pyrenaicus* Pérez, 1879

Reported by Kiss (op. cit.) in the Țibleș Mountains.

*Ecology.* Polylectic social species. Nest in the ground.

*Distribution.* Europe.

In Romania, it occurs in the alpine area.

\* *Bombus ruderarius* (Müller, 1776)

*Material:* 2 ♀♀, Oncești, 10.VII.1995, I.M., 2 ♀♀, Săpânța: Brustani Clearing, 10.VII.1996, A.S., Nireș, 11.VII.1996, I.M., 1 ♀, Repedea: Forest Range, 21.VI.1996, I.M., 1 ♀, Crasna Vișeuului, 29.VIII.1997, C.P., 9 ♀♀, Mara, 2 km upstream, left bank, 17.VII.1998, C.P., right bank, 18.VII.1998, A.V., 1 ♀, Izvoarele Resort, 23.VII.1998, I.M., 1 ♀, Poienile de sub Munte: Coșnea Chalet, 19.VII.2004, G.C.

*Ecology.* Polylectic social species. Nest above the ground.

*Distribution.* Palaearctic.

In Romania, it is distributed in the areas with woody vegetation.

\* *Bombus ruderatus* Fabricius, 1775

*Material:* 1 ♂, Crasna Vişeuului, 12 km upstream Pop Ivan Stream Valley, 18.VII.2004, R.S.

*Ecology.* Polylectic social species. Nest in the ground.

*Distribution.* Palaearctic.

*Bombus soroensis* Fabricius, 1776

Reported by Pascu (op. cit.) in the Rodna Mountains.

*Ecology.* Polylectic social species. Nest in the ground.

*Distribution.* Palaearctic.

\* *Bombus sylvarum* (Linnaeus, 1761)

*Material:* 1 ♀, Izvorul Izei, 6.VII.1995, I.M., 2 ♀ ♀, Vişeu Valley: confluence Vişeu-Tisa, 24.VII.2004, C.B., G.C.

*Ecology.* Polylectic social species. Nest above the ground or in mouse burrows.

*Distribution.* Palaearctic.

In Romania, it is a common species and lives in the forest areas.

*Bombus subterraneus* (Linnaeus, 1758)

Reported by Kiss (op. cit.) in Țibleş Mountains as: *Bombus subterraneus* L. var. *borealis* Schmied.

*Bombus terrestris* (Linnaeus, 1758)

Reported by Szilády (op. cit.) from Rodna Mountains. The same author reported the species under the name *Bombus terrestris* L. var. *autumnalis* F. from Rodna Mountains (2,200 m).

*Material:* 2 ♀ ♀, Izvorul Izei, 6.VII.1995, I.M., C.P., 1 ♀, Pietrosul Rodnei, altitude 2050 m, 12.VII.1995, R.S., 1 ♂, Ieud, 8.IX.1995, C.P., 1 ♀, Săpânta: Colibi, 880 m altitude, 19.V.1996, Mi.S., 3 ♂ ♂, 38 ♀ ♀, Săpânta: Colibi, 5.VII.1996, I.M., C.P., C.H., 6.VII.1996, I.M., C.P., 8.VII.1996, I.M., A.S., C.P., 9-12.VII.1996, I.M., 13-15.VII.1996, I.M., 3 ♂ ♂, 23 ♀ ♀, Săpânta: Brustani Clearing, 6-12.VII.1996, I.M., A.S., C.P., 13.VII.1996, I.M., 9 ♀ ♀, Săpânta: Nireş, 10.VII.1996, 11.VII.1996, I.M., C.H., 5 ♀ ♀, Săpânta: Săpânta Valley, 12.VII.1996, A.S., C.H., 7 ♀ ♀, Repedea: Smereceni Clearing, 22-27.VI.1997, I.M., R.S., 2 ♀ ♀, Repedea: Elmo Clearing, 24.VI.1997, I.M., 29.VI.1997, A.S., 5 ♀ ♀, Repedea: Forest Range, 26.VI.1997, I.M., 1 ♀, Borşa-resort, 2 km downstream, 20.VIII.1997, C.P., 1 ♀, Prislop Strait: Vişeuţ, 20.VIII.1997, C.P., 2 ♀ ♀, Mara: Tătarul dam, 16.VII.1998, I.M., 19.VII.1998, C.P., 15 ♀ ♀, Mara, 2 km upstream, left bank, 17.VII.1998, I.M., C.P., right bank, 18.VII.1998, I.M., A.V., 3 ♂ ♂, 2 ♀ ♀, Mara, 1 km upstream, 21.VII.1998, I.M., A.V., 22.VII.1998, I.M., 2 ♀ ♀, Pleşca Chalet: Pârâul Roşu, 22.VII.1998, I.M., 1 ♀, Bistra, 21.VII.1998, C.P., 1 ♀, Rona de Sus: Forest Range, 21.VII.1998, I.M., 1 ♀, Izvoarele Resort, 1 km downstream, 23.VII.1998, I.M., 1 ♀, Poienile de sub Munte: Forest Range Coşnea, 16.VI.2003, R.S., 1 ♀, Crasna Vişeuului: Pop Ivan Stream, 17.VI.2003, C.P., 10 ♀ ♀, Poienile de sub Munte: Forest Range Coşnea, 15.VII.2004, G.C., 19.VII.2004, C.B., G.C., 25.VII.2004, C.B., 1 ♂, Coşnea River Valley, 20.VII.2004, R.S., 6 ♀ ♀, Crasna Vişeuului: confluence Hututeanca-Pop Ivan, 18.VII.2004, C.B., R.S., 11 ♀ ♀, Vaser Valley: Făina, 21.VII.2004, C.B., 1 ♀, Vaser Valley: Făina-Bardău transect, 22.VII.2004, C.B., G.C., 1 ♂, 16 ♀ ♀, Bardău-Cozia transect, 22.VII.2004, C.B., G.C., 1 ♂, Poienile de sub Munte, 2 km upstream Coşnea Chalet, 25.VII.2004, R.S.

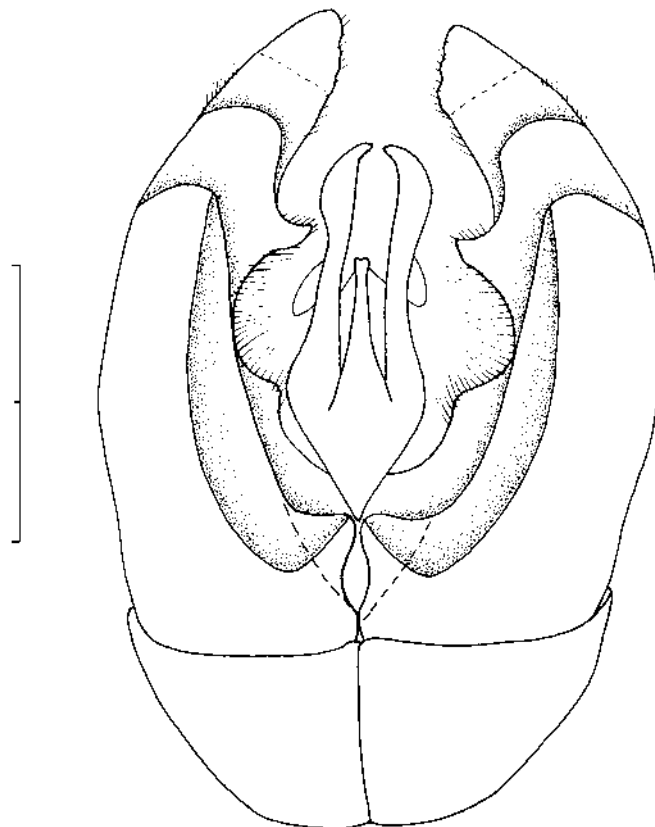


Fig. 5 – *Psithyrus barbutellus* (Kirby, 1802), dorsal view of male genitalia. Scale: 1 mm.

*Ecology.* Polylectic social species. Nest usually in the ground, sometimes above the ground.

*Distribution.* Palaearctic.

In Romania, it is a common species.

*Psithyrus* Lepeletier, 1832

*Psithyrus barbutellus* (Kirby, 1802)

Reported by Szilády (op. cit.) from Rodna Mountains (Fig. 5).

*Material.* 1 ♂, Borșa-resort, 2 km downstream, 20.VIII.1997, C.P.

*Ecology.* Cleptoparasitic species. Host: *Bombus hortorum*, *B. humilis*, *B. pascuorum*, *B. ruderarius*.

*Distribution.* Europe, Northern Asia.

In Romania, it is a rarer species.

\* *Psithyrus bohemicus* Seidl, 1838

*Material:* 4 ♂ ♂, Săpânța: Brustani Clearing, 6.VII.1996, I.M., A.S., C.P., 2 ♀ ♀, Repedea: Forest Rangē, 26.VII.1997, I.M., Repedea: Elmo Clearing, 29.VI.1997, A.S., 1 ♂, Rona de Sus: Forest Range, 20.VII.1998, I.M., 2 ♂ ♂, Mara: Pleșca Chalet: Pârâul Roșu, 22.VII.1998, I.M., 2 ♂ ♂, Poienile de sub Munte: Rica River Valley, 2 km upstream Coșnea Chalet, 15.VII.2004, G.C., 25.VII.2004, R.S., 1 ♂, Vișeu Valley: confluence Vișeu-Tisa, 24.VII.2004, G.C.

*Ecology.* Cleptoparasitic species. Host: *Bombus lucorum*.

*Distribution.* Europe, Northern Asia.

In Romania, it occurs frequently in the upper areas of the woody vegetation.

*Psithyrus vestalis* Fourcr.

Reported by Frivaldszky (op. cit.) from Făina.

*Ecology.* Cleptoparasitic species. Host: *Bombus terrestris*.

*Distribution.* Europe.

*Apis* Linnaeus, 1758

\* *Apis mellifera* Linnaeus, 1758

*Material:* 4 ♀ ♀, Ieud, 4.VII.1995, I.M., 4 ♀ ♀, Vadu Izei, 9.VII.1995, I.M., 4 ♀ ♀, Pietrosul Rodnei: Laboratory House, 10.VII.1995, A.S., 8 ♀ ♀, Săpânța: Brustani Clearing, 6.VII.1996, I.M., A.S., 1 ♀, Repedea: Cârligătura Valley, 27.VI.1997, C.P., 14 ♀ ♀, Smereceni Clearing, 29.VI.1997, I.M., 5 ♀ ♀, Elmo Clearing, 29.VI.1997, A.S., 3 ♀ ♀, Borșa-resort, 2 km downstream, 20.VIII.1997, C.P., 2 ♀ ♀, Leordina, 22.VIII.1997, C.P., 7 ♀ ♀, Crasna Vișeuului, 23.VIII.1997, C.P., 31 ♀ ♀, Mara, 2 km upstream, left bank, 17.VII.1998, I.M., right bank, 18.VII.1998, I.M., A.V., 2 ♀ ♀, Mara: Tătar Gorges, 19.VII.1998, I.M., 7 ♀ ♀, Cornești: Coșeu River, right bank, 19.VII.1998, I.M., C.P., 3 ♀ ♀, Rona de Sus: Forest Range, 20.VII.1998, I.M., 22 ♀ ♀, Bistra, 3 km upstream, 21.VII.1998, C.P., 24.VII.2004, G.C., 5 ♀ ♀, Izvoarele Resort, 23.VII.1998, I.M., C.P., 3 ♀ ♀, Berbești, left bank, 24.VII.1998, C.P., 5 ♀ ♀, Dragomirești: Baicu Forest Range, 21.VI.2003, C.P., 5 ♀ ♀, Poenile de sub Munte: Coșnea River Valley, 15.VII.2004, G.C., R.S., 2 ♀ ♀, Rica River Valley, 2 km upstream Coșnea Chalet, 25.VII.2004, R.S., 31 ♀ ♀, Poenile de sub Munte: Coșnea Chalet, 19.VII.2004, C.B., G.C., 22.VII.2004, C.B., 3 ♀ ♀, Vaser Valley: Bardău-Cozia transect, 22.VII.2004, C.B., 9 ♀ ♀, Vișeu Valley, 4 km upstream, 24.VII.2004, C.B., 23 ♀ ♀, Vișeu Valley: confluence Vișeu-Tisa, 24.VII.2004, C.B.

*Ecology.* Polylectic social species.

*Distribution.* Cosmopolitan.

#### DISCUSSIONS

The species *Nomada ochrostoma* Kirby (Family Anthophoridae), *Bombus mastrucatus* Gerstäcker, *B. pyrenaicus* Pérez, *B. soroeensis* Fabricius, *B. subterraneus* (Linnaeus), *Psithyrus vestalis* Fourcr. (Family Apidae) were reported from Maramureș in older papers, but they were not found again during the field trips made during 1995-1998 and 2003-2004. They might be considered endangered or extinct from the area, but their searching has to be continued.

The species *Bombus hortorum* Linnaeus, *B. terrestris* Linnaeus and *Psithyrus barbutellus* Kirby were reported by Szilády (1914) and by Pascu (1979) from the Rodna Mountains and they are present in my studied material.

By my contribution I add 12 species of the Family Megachilidae, 4 species of the Family Anthophoridae and 9 species of the Family Apidae, reported from this area for the first time.

The knowledge on the Apidae of Maramureș is lacunose for the time being, so it can be considered at its very beginning although, the first reports are dated 1871.

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CONTRIBUȚII LA CUNOAȘTEREA HIMENOPTERELOR APOIDE  
(HYMENOPTERA: MEGACHILIDAE, ANTHOPHORIDAE, APIDAE)  
DIN MARAMUREȘ (ROMÂNIA). PARTEA I

## REZUMAT

Se prezintă o primă listă a himenopterelor apoide colectate din Maramureș în perioadele 1995-1998 și 2003-2004 de către specialiștii Muzeului Național de Istorie Naturală "Grigore Antipa" din București. Au fost prelevate probe din 41 situri de colectare situate în bazinele hidrografice ale Izei, Săpânței, Vișeului, Mării, Rezervația Pietrosul Rodnei, Munții Gutâi, Valea Vaserului. Din totalul de 6680 exemplare de himenoptere colectate, au fost identificate 532 exemplare de apoide. Lista cu materialul determinat cuprinde 34 specii de apoide, încadrate în 3 familii: Megachilidae (12 specii), Anthophoridae (5 specii) și Apidae (17 specii). 25 specii din 9 genuri sunt semnalate pentru prima dată în zona studiată; 9 specii sunt citate și în literatura veche. Lista mai cuprinde date ecologice, fenologice și distribuționale.

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