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THE HYMENOPTERA IN THE COLLECTION OF ȚĂRII CRIȘURILOR MUSEUM, ORADEA

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Abstract. The paper lists the collection of determined Hymenoptera deposited in Țării Crișurilor Museum, Oradea, Romania. The list contains 66 species with 531 specimens, collected since 1952, mostly from NW Romania.

Introduction

The current status of research on the Hymenoptera of Bihor district (North-West Romania) shows a lesser degree in extensively documenting their distribution in the area. Most available data are decades old and rather scarce, and deal mainly with families Chalcididae, Encyrtidae, Torymidae, Bethyidae, Dryinidae, Sphecidae, Apidae, Halictidae, Methocidae, Mutillidae, Pompilidae, Formicidae, and Tenthredinidae (Andriescu 1988, Boțoc 1960, 1967, Knechtel 1954, 1963, Nagy 1966, 1967a, 1967b, 1973, Paraschivescu 1975, Paraschivescu & Raicev Arcașu 1977, Scobiola 1967, Scobiola-Palade 1973, 1974, Tudor 1988).

The purpose of this paper was to list, revise and publish the determined Hymenoptera specimens in the collection of Țării Crișurilor Museum, Oradea, according to present day nomenclature and classification, and to document their occurrence with collecting data.

Material and methods

The Hymenoptera in the collection of Țării Crișurilor Museum, Oradea, comprise 1017 specimens, out of which 118 (11.6 %) have no collecting data. They were collected since 1952, mainly by M. I. Paina, T. Jurcsák, and P. Perényi. The paper lists the determined 66 species, belonging to 11 families and represented by 531 specimens (52.2 %). The majority of the determinations (418 specimens, 78.7 %) were carried out by the first author, and some have been previously carried out by the eminent Romanian hymenopterologists Medeea Weinberg and Dinu Paraschivescu. We complied partly with the current most widely used classification for bees (Michener 2000) and partly with Melo's suggested higher-level system (Melo & Gonçalves 2005).

The labels were transcribed, with no synonymies mentioned, and the species and localities names were updated. All localities with no district name mentioned in brackets () are from Bihor district. When given information is lacking (e. g. collection site or date, collector's name), no conjecture data was attempted. The captures come mainly from Bihor district, especially from Oradea, Vadu Crișului and Băile 1 Mai. Few of them are from South-East Romania (Băneasa Forrest, in Dobrudja, and C. A. Rosetti, in the Danube Delta).

For each species, the number of specimens is mentioned in square brackets []. Months are in Roman numerals. The collection includes no Red List species. The most frequent families are Cynipidae (19 species, 269 specimens) and Apidae (23 species, 117 specimens). All the Cynipidae specimens, except one *Cynips quercus* (Fourcroy 1785) imago, are galls.

Abbreviations

AG = Adrian Gagiu, B. = Băile (Spa), CT = Constanța district (SE Romania), D. = hill, M. = mountain, Muz. = museum, P. = brook, păd. = forest, SJ = Sălaj district (NV Romania), TC = Tulcea district (SE Romania), V. = valley, Vf. = peak, ♀♂ (in Cynipinae) = sexual generation, ♀♀ (in Cynipinae) = asexual generation.

Collection sites, with numbers of collected specimens

Vadu Crișului [108], B. 1 Mai [85], Oradea, păd. Săldăbagiu [61], Oradea, păd. Paleu [51], Mierlău [43], Cetățile Ponorului [22], Oradea [22], Răbăgani [17], Salonta [12], Padiș (M. Bihor) [11], Betfia [8], V. Bulz [6], Șimian [5], Tinca [4], V. Drăganului (Ciripa) [4], V. Iadului [4], Biharea [3], Râtu Florilor (Padiș, M. Bihor) [3], Săldăbagiu [3], Slănic (?) [3], Băița – Ruginoasa [2], C. A. Rosetti (TC) [2], Grajduri, M. Bihor [2], Lăzăreni [2], păd. Băneasa (Canaraua Fetei, CT) [2], păd. Haieu [2], V. Leșului [2], Vf. Bihor [2], B. Felix [1], Bohodei (Padiș, M. Bihor) [1], Borz [1], Călăcea [1], Curtuișeni [1], Muz. Salonta [1], Nucet [1], Oradea, D. Măței [1], „Oradea Râpa” (?) [1], Santăul Mic [1], Stâna de Vale [1], Șimleul Silvaniei (SJ) [1], Vărășoia (M. Bihor) [1].

Catalogue

Subord. Symphyta
Superfam. Siricoidea
Fam. Siricidae
Subfam. Tremicinae

Tremex fuscicornis (Fabricius 1787) – Călăcea IX 2005, leg. R. Huza, det. AG [1];

Subord. Apocrita
Superfam. Vespoidea
Fam. Mutillidae
Subfam. Mutillinae

Mutilla europaea (Linnaeus 1758) – Vf. Bihor 13 VII 1972, leg. M. Paina [1];
M. marginata Baer 1848 – Cetățile Ponorului 2 VI 1967, leg. M. Paina [1];

Fam. Scoliidae
Subfam. Scoliinae

Megascolia (Regiscolia) maculata maculata (Drury 1773), ♂ - Muz. Salonta, det. M. Weinberg [1];
♀ - Padiș 15 VIII 1952, leg. T. Jurcsák, det. M. Weinberg [1]; Oradea, Râpa (?) 4 VII 1957, leg. P. Perényi, det. M. Weinberg [1]; Oradea, păd. Paleu 25 VII 1957, leg. T. Béczy, det. M. Weinberg [1]; B. 1 Mai 14 VIII 1958, leg. T. Jurcsák, det. M. Weinberg [1];

Fam. Formicidae
Subfam. Formicinae

Camponotus (s. str.) *herculeanus* (Linnaeus 1758), ♀ - Padiș 16 VIII 1954, leg. T. Jurcsák, det. Paraschivescu [1]; Oradea, păd. Paleu 15 V 1966, det. D. Paraschivescu [10]; Grajduri, M. Bihor 19 VII 1969, leg. M. Paina, det. D. Paraschivescu [1];
♀ immature – Oradea, păd. Paleu 4 VI 1965, det. D. Paraschivescu [10]; Nucet, D. Neagra 21 VII 1966, leg. M. Paina, det. D. Paraschivescu [1]; Padiș 28 IX 1969, leg. M. Paina, det. D. Paraschivescu [2]; V. Drăganului (Ciripa) 12 VIII 1973, leg. M. Paina, det. D. Paraschivescu [3]; Vărășoia, M. Bihor 13 X 1977, leg. M. Paina, det. D. Paraschivescu [1];
Formica (Serviformica) cinerea Mayr 1853, ♀ immature – V. Bulz (la canton) 6 VII 1973, leg. M. Paina, det. D. Paraschivescu [1]; Bohodei, M. Bihor 11 VIII 1973, leg. M. Paina, det. D. Paraschivescu [1]; B. 1 Mai 6 VIII 1975, leg. M. Paina, det. D. Paraschivescu [1];
F. (Serviformica) rufibarbis Fabricius 1793, ♀ immature – V. Bulz (la canton) 6 VII

- 1973, leg. M. Paina, det. D. Paraschivescu [1];
F. (Raptiformica) sanguinea Latreille 1798, ♀ immature – Oradea, pād. Paleu 13 V 1964, det. D. Paraschivescu [1];
F. (s. str.) pratensis Retzius 1783, ♀ immature – pād. Săldăbagiu 2 V 1966, det. D. Paraschivescu [5]; B. 1 Mai 8 V 1966, det. D. Paraschivescu [4];
Lasius (Dendrolasius) fuliginosus (Latreille 1798), ♀ immature – Răbăgani 17 IV 1976, leg. M. Paina, det. D. Paraschivescu [7];
L. (s. str.) niger Linnaeus 1758, ♂ - V. Bulz (la canton) 6 VII 1973, leg. M. Paina, det. D. Paraschivescu [1];
L. (Cautolasius) flavus (Fabricius 1782), ♀ immature – Oradea 15 IV 1966, det. D. Paraschivescu [2];
 ♀ - Râtu Florilor (M. Bihor) 13 VIII 1969, leg. Paina, det. D. Paraschivescu [1]; V. Drăganului (Ciripa) 12 VIII 1973, leg. M. Paina, det. D. Paraschivescu [1];

Subfam. Myrmicinae

- Leptothorax unifasciatus* (Latreille 1798), ♀ immature – Padiș 27 VIII 1974, leg. M. Paina, det. D. Paraschivescu [5];
Myrmica rubra (Linnaeus 1758), ♀ - Padiș 28 IX 1969, leg. M. Paina, det. D. Paraschivescu [1];

Subfam. Dolichoderinae

- Liometopum microcephalum* (Panzer 1798), ♀ immature – Tinca 11 IV 1960, det. D. Paraschivescu [1];

Fam. Vespidae

Subfam. Vespinae

- Vespa crabro* Linnaeus 1758 – Stâna de Vale 30 V 1953, leg. T. Jurcsák [1]; pād. Săldăbagiu 1 VII 1956, leg. P. Perényi, det. AG [1]; Oradea, pād. Săldăbagiu 25 VII 1957, det. AG [3]; pād. Săldăbagiu 4 IV 1965, det. AG [1]; B. 1 Mai 14 VIII 1958, leg. T. Jurcsák, det. AG [1]; B. 1 Mai 7 VI 1964, det. AG [6]; Oradea, pād. Paleu 13 V 1963, det. AG [1]; pād. Paleu 9 VI 1963, leg. P. Perényi, det. AG [3]; Oradea, pād. Paleu 16 VI 1963, leg. P. Perényi, det. AG [1]; pād. Paleu 23 VI 1963, leg. P. Perényi, det. AG [1]; Oradea, pād. Paleu 15 VI 1964, det. AG [1]; Oradea, pād. Paleu 4 VI 1965, det. AG [3]; Oradea, pād. Paleu 15 V 1966, det. AG [2]; Betfia 7 VI 1964, det. AG [1]; pād. Solyomkövár 2 V 1965, det. AG [1]; Curtuișeni 9 V 1967, leg. M. Paina, det. AG [1]; no data, det. AG [10];
Dolichovespula sylvestris (Scopoli 1763) – pād. Săldăbagiu 9 V 1965, det. AG [1];
Vespula germanica (Fabricius 1793) – Salonta 4 V 1960 [1]; Săldăbagiu 9 V 1965, det. AG [1]; Oradea, pād. Paleu 12 IV 1964, det. AG; Oradea, pād. Paleu 13

IV 1964, det. AG [1]; Oradea, p d. Paleu 16 V 1965, det. AG (2 ex.); Oradea, p d. Paleu 4 VI 1965, det. AG [1]; Oradea, p d. Paleu 24 IV 1966, det. AG; Oradea, p d. Paleu 25 IV 1966, det. AG [1];

Subfam. Polistinae

Polistes biglumis (Linnaeus 1758) – V. Iadului 7 VIII 1970, leg. M. Paina, det. AG [1]; V. Iadului 18 VIII 1971, leg. M. Paina, det. AG [1];

Superfam. Evanioidea

Fam. Gasteruptiidae

Subfam. Gasteruptiinae

Gasteruption assectator (Linnaeus 1758) – Oradea 10 VII 1957, det. AG; Grajduri (M. Bihor) 19 VII 1969, leg. M. Paina, det. AG [1];

Superfam. Ichneumonoidea

Fam. Ichneumonidae

Subfam. Ophioninae

Ophion luteus (Linnaeus 1758) – B i ta–Ruginoasa 15 IV 1972, leg. M. Paina [2];

Superfam. Cynipoidea

Fam. Cynipidae

Subfam. Cynipinae (galls)

Andricus caliciformis (Giraud 1859), ♀ - p d. B neasa (Canaraua Fetii, CT) 22 V 1967 [2];

A. kollari (Hartig 1843), ♀♀ - B. 1 Mai IV 1957, leg. P. Per nyi, det. AG [64]; Mierl u 16 VIII 1958, leg. T. Jurcs k, det. AG [2]; no data, det. AG [9];

A. lignicolus (Hartig 1840), ♀♀ - p d. Haieu 8 IX 1967, det. AG [1]; no data, det. AG [2];

A. lucidus lucidus (Hartig 1843), ♀♂ - Mierl u 16 VIII 1958, leg. T. Jurcs k, det. AG [3];

♀ - p d. Haieu 8 IX 1967, det. AG [1];

A. coronatus (Giraud 1859), ♀ - L z reni 5 XI 1955, leg. T. Jurcs k, det. AG [2];

A. hungaricus (Hartig 1843), ♀ - R b gani, V. Videi 1 V 1956, leg. T. Jurcs k, det. AG [3];

B. 1 Mai 10 VIII 1958, leg. T. Jurcs k, det. AG [2];

A. gallaetinctoriae (Olivier 1791), ♀ - Mierl u 16 VIII 1958, leg. T. Jurcs k, det. AG [2];

A. quercuscalicis (Burgsdorf 1783), ♀♀ - Oradea 2 II 1954, leg. T. Jurcs k, det. AG [3]; Oradea 20 XI 1954, leg. T. Jurcs k, det. AG [1]; B. 1 Mai 10 VIII 1958, leg. T. Jurcs k, det. AG [5];

- A. conglomeratus* (Giraud 1859), ♀ - Săldăbagiu 8 III 1954, leg. T. Jurcsák, det. AG [3]; Oradea 6 XI 1954, leg. T. Jurcsák, det. AG [3];
A. conificus conificus (Hartig 1843), ♀ - Oradea 6 II 1954, leg. T. Jurcsák, det. AG [4];
Chilaspis nitida (Giraud 1882), ♀♀ - Vadu Crișului 15 XII 1953, leg. T. Jurcsák, det. AG [106];
Neuroterus (Spathogaster) fumipennis (Hartig 1841), ♀♀ - Mierlău 16 VIII 1958, leg. T. Jurcsák, det. AG [34];
Cynips quercusfolii (Linnaeus 1758), ♀♀ - Răbăgani, V. Videi 1 V 1956, leg. T. Jurcsák, det. AG [3]; Mierlău 16 VIII 1958, leg. T. Jurcsák, det. AG [2];
C. divisa (Hartig 1840), ♀♀ - Oradea 3 II 1954, leg. T. Jurcsák, det. AG [1];
C. longiventris (Hartig 1840), ♀♀ - Oradea 3 II 1954, leg. T. Jurcsák, det. AG [1];
C. quercus (Fourcroy 1785), ♀♀ - Oradea 3 II 1954, leg. T. Jurcsák, det. AG [1]; Săldăbagiu 21 IV 1965 (+ 1 imago), det. AG [1];
Aphelonyx cerricola (Giraud 1859), ♀ - no data, det. AG [1];
Biorrhiza pallida pallida (Olivier 1791), ♀♂ - B. Felix 20 V 1956, leg. T. Jurcsák, det. AG [1];
Diastrophus rubi (Bouché 1834) - Oradea 15 II 1957, leg. P. Perényi, det. AG [1]; Salonta 23 VII 1958, leg. T. Jurcsák, det. AG [4];

Superfam. Apoidea
 Fam. Sphecidae
 Subfam. Sphecinae

- Sceliphron destillatorium* (Illiger 1807) – Salonta 10 VII 1962 [1];
S. spirifex (Linnaeus 1758) – Salonta 19 VII 1960 [1];
Ammophila sabulosa (Linnaeus 1758) – Oradea, păd. Săldăbagiu 25 VII 1957 [1];

Fam. Crabronidae
 Subfam. Bembicinae

- Bembix rostrata* (Linnaeus 1758) – B. 1 Mai 1983, leg. M. Paina, det. AG [1];

Fam. Apidae
 Subfam. Megachilinae

- Osmia melanogaster* Spinola 1808 - păd. Săldăbagiu 3 VII 1966, det. AG [1];

Subfam. Xylocopinae

- Xylocopa valga* Gerstaecker 1872 - Szilágyi S. (?) 24 VII 1956, leg. P. Perényi, det. AG;
 Răbăgani 26 V 1965, det. AG [1]; Șimian 23 V 1975, det. AG [1];

X. violacea (Linnaeus 1758) – Oradea 7 VIII 1957, det. M. Paina [1]; Salonta 5 V 1960, det. M. Paina [1]; Salonta 1 VI 1960, det. M. Paina [1];

Subfam. Apinae

Anthophora sp. – Oradea, päd. Paleu 15 V 1966 [1];

Bombus (*Confusibombus*) *confusus* Schenk 1859, ♀ - Salonta 30 VI 1960, det. AG [1];

B. (Megabombus) hortorum (Linnaeus 1761), ♂ - B. 1 Mai 2 VII 1957, leg. P. Perényi, det. AG [1];

♀ - V. Bulz (la canton) 6 VII 1973, leg. M. Paina, det. AG [1];

B. (s. str.) terrestris (Linnaeus 1758), ♂ - Cetățile Ponorului 12 VIII 1969, leg. M. Paina, det. AG [1]; C. A. Rosetti (TC) 26 IX 1980, leg. M. Paina, det. AG [1];

♀ - Slănic VIII 1953, leg. Galamb, det. AG [1]; B. 1 Mai 10 IV 1958, det. AG [1]; Salonta 5 V 1960 [1]; Oradea, päd. Paleu 12 IV 1964, det. AG [1]; Oradea, päd. Paleu 19 IV 1964, det. AG [1]; Oradea, päd. Paleu 13 V 1964, det. AG [1]; Oradea, päd. Paleu 24 IV 1966, det. AG [1]; Oradea, päd. Paleu 15 V 1966, det. AG [1]; päd. Săldăbagiu 28 III 1965, det. AG [2]; päd. Săldăbagiu 4 IV 1965, det. AG [1]; päd. Săldăbagiu 18 IV 1965, det. AG [2]; päd. Săldăbagiu 16 V 1965, det. AG [1]; päd. Săldăbagiu 2 V 1966, det. AG [10]; päd. Săldăbagiu 16 V 1965, det. AG [1]; Oradea, D. Mătzei 18 IV 1965, det. AG [1]; Șimian 28 VIII 1970, leg. M. Paina, det. AG [1]; C. A. Rosetti 26 IX 1980, leg. M. Paina, det. AG [1];

B. (Terrestrisbombus) lucorum (Linnaeus 1761), ♂ - Cetățile Ponorului 12 VIII 1969, leg. M. Paina, det. AG [10]; Râtu Florilor 13 VIII 1969, leg. M. Paina, det. AG [1];

♀ - Padiș 16 VIII 1954, leg. T. Jurcsák, det. AG [1]; Săldăbagiu 9 V 1965, det. AG [1]; V. Iadului 8 VIII 1970, leg. M. Paina, det. AG [1]; M. Bihor 20-21 VIII 1970, leg. M. Paina, det. AG [1];

B. (Thoracobombus) ruderarius (Müller 1776), ♀ - päd. Săldăbagiu 19 VI 1966, det. AG [1]; V. Iadului 7 VIII 1970, leg. M. Paina, det. AG [1]; Șimian 23 V 1975, leg. M. Paina, det. AG [1];

B. (Agrobombus) pascuorum (Scopoli 1763), ♀ - Oradea, (päd.) Săldăbagiu 3 V 1964, det. AG [2]; päd. Săldăbagiu 2 V 1966, det. AG [3]; päd. Săldăbagiu 19 VI 1966, det. AG [1]; Oradea, päd. Paleu 25 IV 1965, det. AG [1]; Oradea, päd. Paleu 24 IV 1966, det. AG [1]; B. 1 Mai 8 V 1966, det. AG [1]; Vadu Crișului 14 IV 1967, leg. M. Paina, det. AG [1]; Vadu Crișului 11 V 1968, leg. M. Paina, det. AG [1]; Cetățile Ponorului 12 VIII 1969, leg. M. Paina, det. AG [1]; Betfia, D. Șomleu 21 X 1969, leg. M. Paina, det. AG [1];

B. (Agrobombus) equestris (Fabricius 1793), ♀ - Cetățile Ponorului 12 VIII 1969, leg. M. Paina, det. AG [1];

B. (Pomobombus) pomorum (Panzer 1805), ♀ - päd. Săldăbagiu 18 IV 1965, det. AG [1];

- B. (Melanobombus) lapidarius* (Linnaeus 1758), ♂ - Șimian 28 VIII 1970, leg. M. Paina, det. AG [1];
 ♀ - Slănic VIII 1953, leg. Galamb, det. AG [2]; Oradea, păd. Paleu 12 IV 1964, det. AG [1]; Oradea, păd. Paleu 4 V 1965, det. AG [1]; B. 1 Mai 8 V 1966, det. AG [1]; B. 1 Mai 22 V 1970, leg. M. Paina, det. AG [1]; Șimian 28 VIII 1970, leg. M. Paina, det. AG [1]; Șimian 11 V 1971, leg. M. Paina, det. AG [1];
- B. (Pyrobombus) pratorum* (Linnaeus 1761), ♀ - V. Leșului 17 VIII 1971, leg. M. Paina, det. AG [1];
- B. (Subterraneobombus) distinguendus* Morawitz 1869, ♀ - Santăul Mic 26 V 1976, leg. M. Paina, det. AG [1];
- B. (Psithyrus) campestris* (Panzer 1801), ♂ - Oradea, păd. Săldăbagiu 25 VII 1957, det. AG [5];
 ♀ - Oradea, păd. Paleu 24 IV 1966, det. AG [1];
- B. (Psithyrus) bohemicus* Seidl 1838, ♂ - Râtu Florilor 11 VIII 1966, leg. M. Paina, det. AG [1];
- B. (Psithyrus) vestalis* (Geoffroy 1785), ♂ - Oradea, păd. Săldăbagiu 25 VII 1957, det. AG [3]; V. Leșului 17 VIII 1971, leg. M. Paina, det. AG [1];
- B. (Psithyrus) maxillosus* Klug 1817, ♂ - Oradea, păd. Săldăbagiu 25 VII 1957, det. AG [1];
- B. (Psithyrus) barbutellus* (Kirby 1802), ♂ - Oradea, păd. Săldăbagiu 25 VII 1957, det. AG [11]; B. 1 Mai 4 VIII 1958, det. AG [1]; V. Bulz 6 VII 1973, leg. M. Paina, det. AG [2];
 ♀ - Oradea 29 VII 1956, leg. P. Perényi, det. AG [1];
- B. (Psithyrus) norvegicus* (Sparre-Schneider 1918), ♂ - Cetățile Ponorului 12 VIII 1969, leg. M. Paina, det. AG [3];
- Tetralonia hungarica* (Friese 1895), ♂ - păd. Săldăbagiu 9 V 1965, det. AG [1];
 ♀ - Cetățile Ponorului 12 VIII 1969, leg. M. Paina, det. AG [4]; Borz 5 V 1971, leg. M. Paina, det. AG [1]; Biharea 5 VII 1975, leg. M. Paina, det. AG [3];

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