

COLLECTION CATALOGUE

Catalogue of type specimens of braconid wasps (Hymenoptera: Braconidae) deposited in the National Museum, Prague, Czech Republic¹⁾

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Abstract. Type specimens from the collection of Hymenoptera deposited in the Department of Entomology, National Museum, Prague are currently being catalogued. In this part of the catalogue dealing with the family Braconidae, we present precise information about 27 taxa belonging to the subfamilies Brachistinae (1 species), Cheloninae (1 species), Doryctinae (1 species), Euphorinae (2 species), Gnamptodontinae (1 species), Lysiterminae (1 species), Microgastrinae (2 species), Opiinae (15 species) and Orgilinae (3 species), including holotypes of 20 species. Current status, distribution, and photos are given for each taxon. Additionally, one missing type and one historically important specimen are mentioned in the catalogue with detailed information about them.

Key words. Catalogue, type specimens, National Museum, Hymenoptera, Braconidae

Zoobank: <http://zoobank.org/urn:lsid:zoobank.org:pub:FA9F151F-C5FE-4048-9A82-8B21726D8D3E>
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Introduction

The entomological collection of the National Museum in Prague, Czech Republic (herein after NMP; NMPC when referring to collection) currently contains over 8 million specimens, including primary types of several tens of thousands of taxa. The majority of specimens and types belong to the order Coleoptera (beetles), but nearly all other insect orders are also represented by more or less numerous material, including types.

The collection of the Hymenoptera belongs among the smaller parts of the collection being estimated to be around 550,000 specimens. Despite that, it contains numerous primary types which are aimed to be catalogued as to the following contributions. The history of entomological collections was shortly surveyed in the previous articles by BEZDĚK & HÁJEK (2009), KMENT & KOLÍNOVÁ (2013), and MACHÁČKOVÁ & FIKÁČEK (2014) with reference to Coleoptera, Heteroptera, and Polyneoptera, respectively.

Historically, the Hymenoptera collection in NMP was based mainly on the material from Central and South-Eastern Europe obtained by purchase or donations from various collectors before the World War II, then extended by acquisitions of material from the East Mediterranean and the Middle East collected by NMP expeditions to

Turkey (1947) and Iran (1970, 1973, 1977) as well as other material from individual collecting trips of the curators mainly to Central Asia, Southeast Asia, Australia and South America. However, the taxonomic groups are unevenly represented based on the specialization of curators who have been working there.

An important part of the history of the NMP's Hymenoptera collection relates to the name of its first curator-specialist, Zdeněk Bouček (1924–2011), who worked there in the years 1956–1969. His collection of the chalcids belongs to the most important in the world and contains the largest amount of type material (more than 2,000 types). Undoubtedly his greatest credit is that as a curator he organized the entire collection, previously scattered in sub-collections acquired by purchases, donations, bequests or collecting activities of previous curators; these were all incorporated into a basic systematic collection. Thanks to his creative activity, the Hymenoptera collection experienced a significant progress resulting in substantial growth of the collection fund. He also maintained contacts with many of his contemporaries who participated in identification and descriptions of new taxa from the NMPC or exchanged specimens and paratypes with them. Unfortunately, in 1968 he emigrated abroad for political reasons and became an

¹⁾Catalogue of type specimens in NMPC, Part 18



employee of the British Museum of Natural History (currently The Natural History Museum) in London, where he successfully continued his scientific work. However, Z. Bouček never forgot the NMP and with permission, he separated small parts of the processed material into a voucher collection, which he donated, together with his private library to the NMP upon his retirement. After retiring and returning home (1994), he continued to work there as a scientific associate as long as his health allowed. For a detailed biography of Z. Bouček see NOYES (2005) and NIEVES-ALDREY & MOYA (2011).

Although the role of Z. Bouček is indisputable, there are other important persons, whose contributions became a prerequisite for the future expansion of the Hymenoptera collection in NMP. Among the most prominent workers were Oldřich Šustera (1879–1971) and Vilém Zavadil (1876–1953), who already determined and organized the collections before the World War II, and later they willed their large collections of Hymenoptera, containing mainly materials from the former Czechoslovakia, to NMP. Zavadil's collection, with its precise preparation technique, still attracts attention of experts. Other important collection is that of František Gregor (1896–1942) with approximately 70,000 specimens of mainly ichneumonid wasps, including types and historical specimens. Together with the collection of Josef Šedivý (1925–2008), they represent the most important specialized collections of Ichneumonidae in NMP.

Even after Z. Bouček left for emigration, his followers continued in his footsteps and increased the collection fund of NMP with other acquisitions obtained through purchases or bequests. Among the most important ones are Vladimír Balthasar's (1897–1978) collection of Palaearctic Chrysidae, Sphecidae and Crabronidae (counting approx. 7,500 specimens including type material), and the collection of Augustin Hoffer (1910–1981) of Palaearctic species of the Encyrtidae containing approx. 16,000 specimens with more than a hundred of types included. The last significant acquisition was the collection of Vladimír Kalina (1941–2022), a specialist on Eurytomidae, obtained in 2022 and containing thousands of specimens, also with types included.

At present, the collection continues to be purposefully enriched and developed by the collecting activity of the present curator, Ján Macek (since 1978). The greatest progress in the period of the last twenty years has been in the Diapriidae family, which, from the starting point of a small regional collection, has reached a worldwide extent, and now represents one of the largest in Europe. Besides the common material, it also includes type series of newly described species from all over the world, but most of the material is from Europe.

Finally, some further notable collections containing type material are listed here: Karel Beneš (Symphyta); Miroslav Čapek (Braconidae, in part); Lubomír Masner (Diapriidae, Scelionidae); Petr Masner (Figitidae); Josef Sadil (Formicidae); Jaromír Strejček (Dryinidae, Bethylidae); Jan Šnoflák (Braconidae, part) and Boleslav Tomšík (Proctotrupidae, Diapriidae).

So far, only the Formicidae types deposited in NMPC have been properly catalogued (BEZDĚČKOVÁ et al. 2017). In this contribution, following the International Code of Zoological Nomenclature (ICZN 1999), we continue the cataloguing effort by providing the list of the Braconidae types.

Material and methods

The system used to arrange the taxa mostly follows YU et al. (2016). Within each subfamily/tribe, the genera and species are arranged alphabetically. Each entry includes:

- the name of the taxon in original combination;
- the name of the taxon in original combination and spelling, with the author and year of description. Pagination, figures and plates are also given;
- the name-bearing type, number of specimens (including their sex if known) and exact label data. Our remarks are found in square brackets: [p] – preceding data are printed, [hw] – preceding data are handwritten. Separate labels are indicated by a double slash ‘//’ and lines within each label are separated by a slash ‘/’. Unless otherwise indicated, it means black ink and white label;
- the type condition is mentioned for considerably damaged specimens (given in parentheses following the particular specimen);
- the current taxonomic status;
- known distribution data are mentioned using data from YU et al. (2016), DOLATI et al. (2021) and GADALLAH et al. (2022).

In addition, several figures have been added that capture the characteristic labels for the author's descriptions of the species (Figs 33–35). Full reference to each publication can be found in the References section.

Catalogue

Family Braconidae Nees, 1811

Subfamily Brachistinae Förster, 1863

Tribe Brachistini Förster, 1863

Triaspis algiricus Šnoflák, 1953

Triaspis algiricus Šnoflák, 1953: 390, Fig. 44 (original description).

The holotype and one paratype are deposited in NMPC (general collection):

HOLOTYPE (♀): ‘Djebel Aurés / Alg. vii.32 / Dr. Heyrovský [p] // algirus / ♀ (indifferent characters [hw, pencil] // *Triaspis* ♀ / (T.) *algirus* n. / Šnoflák [hw] / TYPE [p, red label] // Mus. Nat. Prague / Inv. [p] 3201 [hw, orange label]’ (Fig. 1). (Left hind wing and right hind leg are detached, but they are mounted on a piece of card under the pinned specimen.)

PARATYPE (♀): ‘Djebel Aurés / Alg. vii.32 / Dr. Heyrovský [p] // algirus / ♀ // *Triaspis* ♀ / *algirus* n. / Šnoflák [hw] / PARA[hw]TYPE [p, red label] // Mus. Nat. Prague / Inv. [p] 3537 [hw, orange label] // Specimen / figured / CvA [p] . [hw] 199[p]8[hw]’. (Specimen is missing right hind leg.)

Current status. Valid species (see FISCHER 1971a, PAPP 1999 and YU et al. 2016).

Distribution. Algeria (see YU et al. 2016).

Subfamily Cheloninae Förster, 1863

Tribe Phanerotomini Baker, 1926

Phanerotoma bicolor Šnoflák, 1958

Phanerotoma bicolor Šnoflák, 1958: 381 (original description).

The holotype and four paratypes are deposited in NMPC (ex. coll. J. Obenberger):

HOLOTYPE (♀): ‘Agay – var / Gallia, v.27 / Coll. Obenberger [p] // typus [hw] // TYPUS [p, red label in black frame] / ex. Šnoflákem původ. / označ. j. typ. (♀!), ne / ♂, jak změn. Kratochvíl! [hw, reverse of the same red label] // Phanerotoma / bicolor / ♀ Šnoflák [hw] / J. Šnoflák determ. // Mus. Nat. Pragae / Inv. [p] 3536 [hw, orange label]’ (Fig. 2). (Missing middle left leg and hind left tarsi.)

ALLOTYPE (♂): ‘Agay – var / Gallia, v.28 / Coll. Obenberger [p] // allotypus [hw] / Allotypus [hw, red label] / Phanerotoma / bicolor / ♂ Šnoflák [hw] / J. Šnoflák determ. // Mus. Nat. Pragae / Inv. [p] 3539 [hw, orange label]’ (Fig. 3).

PARATYPE (♂): ‘Agay – var / Gallia, v. 27 / Coll. Obenberger [p] // Paratypus [hw, red label] / Phanerotoma / bicolor / ♂ Šnoflák [hw] / J. Šnoflák determ. // Mus. Nat. Pragae / Inv. [p] 3540 [hw, orange label]’. (Left antenna partly missing.)

PARATYPE (♀): ‘Agay – var / Gallia, v.27 / Coll. Obenberger [p] // [label with part of antenna] // Paratypus [hw, red label] / Phanerotoma / bicolor / ♀ Šnoflák [hw] / J. Šnoflák determ. // Mus. Nat. Pragae / Inv. [p] 3538 [hw, orange label]’. (Antennae partly missing.)

PARATYPE (♀): ‘Le Lavandou / Var. Gallia m. / EXP. Obenber. // [piece of card with probably lost glued missing leg] // Paratypus [hw, red label] / Phanerotoma / bicolor / ♀ Šnoflák [hw] / J. Šnoflák determ. // Mus. Nat. Pragae / Inv. [p] 3541 [hw, orange label]’. (Missing part of front left leg and whole left hind leg. On the right side missing whole middle leg and antenna.)

Current status. Junior synonym of *Phanerotoma planifrons* (Nees, 1816) (see BELOKOBILSKY et al. 2003).

Distribution. Afghanistan, Algeria, Azerbaijan, Belgium, Bulgaria, China, Czech Republic, France, Georgia, Germany, Hungary, Iran, Italy, Japan, Kazakhstan, Korean peninsula, Moldova, Mongolia, Morocco, Portugal, Russia, Serbia, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey, USA (introduced species), Ukraine, United Kingdom, Uzbekistan (see YU et al. 2016, GADALLAH et al. 2022).

Subfamily Doryctinae Förster, 1863

Tribe Doryctini Förster, 1863

Subtribe Caenophanina Belokobylskij, 1992

Dendrosotinus similis Bouček, 1955

Dendrosotinus similis Bouček, 1955: 84, Fig. 1 (original description).

The holotype and three paratypes are deposited in NMPC (general collection):

HOLOTYPE (♀): ‘Polonia: Pieniny, e larv. P. polonicus / 1948. Karpinski [hw] // Dendrosotinus ♀ / similis Běk. [hw] / Det. Z. Bouček [p] 1954 [hw] // Holotypus [hw, red label] // Mus. Nat. Pragae / Inv. [p] 3051 [hw, orange label]’ (Fig. 4).

ALLOTYPE (♂): ‘Polonia: Pieniny / e larv. Pityophth. / polonici Karp. [hw] // Karpinski / 1948 [hw] // Dendrosotinus ♂ / similis Běk [hw] / Det. Z. Bouček [p] 1954 [hw] // Allotypus [hw, red label] // Mus. Nat. Pragae / Inv. [p] 3052 [hw, orange label]’ (Fig. 5).

PARATYPE (♀): ‘Polonia: Pieniny / e larv. Pityophth. / polonici Karp. [hw] // Karpinski / 1948 [hw] // terebra deest [hw] // Dendrosotinus ♀ / similis Běk [hw] / Det. Z. Bouček [p] 1953 [hw] // Paratypus [hw, red label] // Mus. Nat. Pragae / Inv. [p] 25.778 [hw, blue ink, orange label]’.

PARATYPE (♂): ‘Polonia: Pieniny / e larv. Pityophth. / polonici Karp. [hw] // Karpinski / 1948 [hw] // Dendrosotinus ♂ / similis Běk [hw] / Det. Z. Bouček [p] 1954 [hw] // D. similis Běk. / PARATYPUS [hw, blue ink] // Mus. Nat. Pragae / Inv. [p] 25.779 [hw, blue ink, orange label]’.

Current status. Valid species, currently as *Dendrosotinus (Glidoria) similis* (Bouček, 1955) (see VAN ACHTERBERG 2003).

Distribution. Germany, Israel, Poland, Switzerland, United Kingdom (see YU et al. 2016).

Subfamily Euphorinae Förster, 1863

Tribe Cosmophorini Muesebeck & Walkley, 1951

Cosmophorus roubali Čapek, 1958

Cosmophorus roubali Čapek, 1958: 166, Figs 17–22 (original description).

The holotype and seven paratypes are deposited in NMPC, one paratype is missing (general collection):

HOLOTYPE (♀): ‘Boh. c. Luka p. Med. / Roubal ed. 6 [hw] // Pityophthorus / Lichtensteini [hw] // [red circular label] // Cosmophorus / roubali ♀ / holotypus [hw, blue ink] // det. M. Čapek 57 [hw, blue ink] // Mus. Nat. Pragae / Inv. [p] 3211 [hw, orange label]’ (Fig. 6).

ALLOTYPE (♂): ‘Boh. c. Luka p. Med. / Roubal ed. 6 [hw] // Pityophthorus / Lichtensteini [hw] // [red circular label] // Cosmophorus / roubali ♂ / allotypus [hw, blue ink] // det. M. Čapek 57 [hw, blue ink] // Allotypus [p, red label] // Mus. Nat. Pragae / Inv. [p] 3212 [hw, orange label]’ (Fig. 7).

PARATYPE (♀): ‘Boh. c. Luka pod / Medníkem, Pityo- / phth. Lichtensteini / Roubal ad. [hw] // Cosmophorus / roubali ♀ / paratypus [hw, blue ink] // det. M. Čapek 57 [hw, blue ink] // PARA [hw, blue ink] TYPE [p, red label in black frame] // Mus. Nat. Pragae / Inv. [p] 25.376 [hw, blue ink, orange label]’.

PARATYPE (♀): ‘Boh. c., Luka p. / Med. / Roubal [hw] // Pityophthorus / Lichtensteini [hw] // Cosmophorus ♀ / sp. [hw] / Det. Z. Bouček [p] 1954 [hw] // Cosmophorus / roubali ♀ / paratypus [hw, blue ink] // det. M. Čapek 57 [hw, blue ink] // PARA [hw, blue ink] TYPE [p, red label in black frame] // Mus. Nat. Pragae / Inv. [p] 25.377 [hw, blue ink, orange label]’.

PARATYPE (♀): ‘Boh. c., Luka p. / Med., Roubal [hw] // Pityophthorus / Lichtensteini [hw] // Cosmophorus ♀ / sp. [hw] / Det. Z. Bouček [p] 1954 [hw] // Cosmophorus / roubali ♀ / paratypus [hw, blue ink] // det. M. Čapek 57 [hw, blue ink] // PARA [hw, blue ink] TYPE [p, red label in black frame] // Mus. Nat. Pragae / Inv. [p] 25.378 [hw, blue ink, orange label]’.

PARATYPE (♂): ‘JINCE, Boh. / Dr. Obenberger [p] // Cosmophorus / roubali ♂ / paratypus [hw, blue, ink] // det. M. Čapek 57 [hw, blue ink] // PARA [hw, blue ink] TYPE [p, red label in black frame] // Mus. Nat. Pragae / Inv. [p] 25.381 [hw, blue ink, orange label]’.

PARATYPE (♂): ‘Boh. c., Luka p. / Med. / lichtensteini / Roubal ed. [hw] // Cosmophorus / roubali ♂ / paratypus [hw, blue, ink] // det. M. Čapek 57 [hw, blue ink] // PARA [hw, blue ink] TYPE [p, red label in black frame] // Mus. Nat. Pragae / Inv. [p] 25.382 [hw, blue ink, orange label]’.

Current status. Valid species (see YU et al. 2016).

Distribution. Czech Republic (see YU et al. 2016).

Remark. One paratype is missing, probably due to a loan to another museum and subsequent non-return. Unfortunately, records of that loan are missing.

***Ropalophorus wisconsinensis* Shenefelt, 1960**

Ropalophorus wisconsinensis Shenefelt, 1960: 543, Fig. B (original description).

Two paratypes are deposited in NMPC (general collection):

PARATYPE (♀): ‘Wood co., Wis. / Nekoosa [p] / vii-10 [hw] 19 [p] 48 [hw] / W.W. Barrett [p] // light trap [p] // PARATYPE [p] / Ropalophorus / wisconsinensis / Shenefelt 1960 [hw, red label] // Mus. Nat. Pragae / Inv. [p] 25.610 [hw, blue ink, orange label]’ (Fig. 8).

PARATYPE (♀): ‘Wood co., Wis. / Nekoosa [p] / vii-II [hw] 19 [p] 46 [hw] / W.W. Barrett [p] // light trap [p] // PARATYPE [p] / Ropalophorus / wisconsinensis / Shenefelt 1960 [hw, red label] // Mus. Nat. Pragae / Inv. [p] 25.611 [hw, blue ink, orange label]’.

Current status. Junior synonym of *Ropalophorus clavicornis* (Wemael, 1835) (see YU et al. 2016).

Distribution. USA (see YU et al. 2016).

Subfamily Gnamptodontinae Fischer, 1970

Tribe Gnamptodontini Fischer, 1970

***Gnamptodon breviradialis* Fischer, 1959**

Gnamptodon breviradialis Fischer, 1959: 259, Fig. 5 (original description).

The holotype is deposited in NMPC (general collection):

HOLOTYPE (♀): ‘Hung.: Nyíregy- / háza / 18.x.54. Bouček [p] // Gnamptodon / breviradialis [hw] / det. Fischer [p] n.sp. [hw] // Holotype [p, red label] // ♀ Gnamptodon / breviradialis Fischer [hw] / C. van Achterberg 19[p]82[hw] / TYPE SERIES checked [p] // Mus. Nat. Pragae / Inv. [p] 3231 [hw, orange label]’ (Fig. 9).

Current status. Valid species (YU et al. 2016).

Distribution. France, Greece, Hungary, Iran, Italy, Moldova, Russia, Slovakia (see YU et al. 2016, GADALLAH et al. 2022).

Subfamily Lysiterminae Tobias, 1968

Tribe Lysitermini Tobias, 1968

***Rogadinaspis tritoma* Bouček, 1956**

Rogadinaspis tritoma Bouček, 1956: 443–446, Fig. 1 (original description).

The holotype and one paratype are deposited in NMPC (general collection):

HOLOTYPE (♀): ‘Bohemia or. / Velký Vřešťov [p] / viii [hw].53 Bouček [p] / Rogadinaspis ♀ / tritoma n.g.n.sp. [hw] / Det. Z. Bouček [p] 1954. [hw] // Holotypus [p, red label] // Mus. Nat. Pragae / Inv. [p] 3090 [hw, orange label] // Lysitermus / pallidus Fö. ♀ [hw] / det. Papp J. [p], [hw] 1[p] 984. [hw]’ (Fig. 10).

PARATYPE (♀): ‘Boh. [p], [hw] Praha-okolí [p] / Chuchle [hw] / Bouček [p] 24.vi. 55 [hw] // Rogadinaspis ♀ / tritoma Běck. [hw] / Det. Z. Bouček [p] 1955 [hw] // PARATYPUS [p] / inv. č. / 26 220 [hw, red label] // ♀ Rogadinaspis / tritoma Bouček 1956 [hw] / C. van Achterberg 19 [p] 81 [hw] / TYPE checked [p] // Lysitermus / pallidus Fö. ♀ [hw] / det. Papp J. [p], [hw] 1[p] 984. [hw]’.

Current status. Valid species, currently as *Lysitermus tritoma* (Bouček, 1956) (see VAN ACHTERBERG 1991 and YU et al. 2016).

Distribution. Czech Republic (see YU et al. 2016).

Subfamily Microgastrinae Förster, 1863

Tribe Microgastrini Förster, 1863

Subtribe Apantelina Viereck, 1918

***Apanteles murinanae* Čapek & Zwölfer, 1957**

Apanteles murinanae Čapek & Zwölfer, 1957: 119, Figs 1–5 (original description).

The holotype and three paratypes are deposited in NMPC (general collection):

HOLOTYPE (♀): ‘Hodruša / vi.1956 / lgt. Ing. Čapek [hw, blue ink] // TYPUS [p, red label in black frame] // Apanteles murinanae / Čapek & Zwölfer / holotypus [hw, blue ink] // Mus. Nat. Pragae / Inv. [p] 3582 [hw, blue ink, orange label]’ (Fig. 11).

PARATYPE (♀): ‘Apanteles murinanae / Čapek & Zwölfer / paratypus ♀ [hw, blue ink] // ex / Choristoneura / murinana [hw, blue ink] // Mus. Nat. Pragae / Inv. [p] 3555 [hw, blue ink, orange label]’.

PARATYPE (♂): ‘Apanteles murinanae / Čapek & Zwölfer / paratypus ♂ [hw, blue ink] // ex / Choristoneura / murinana [hw, blue ink] // Mus. Nat. Pragae / Inv. [p] 3583 [hw, blue ink, orange label]’.

PARATYPE (♂): ‘Apanteles murinanae / Čapek & Zwölfer / paratypus ♂ [hw, blue ink] // ex / Choristoneura / murinana [hw, blue ink] // Mus. Nat. Pragae / Inv. [p] 3556 [hw, blue ink, orange label]’.

Current status. Valid species, currently as *Dolichognidea murinanae* (Čapek & Zwölfer, 1957) (see ČAPEK & LUKÁŠ 1989).

Distribution. Austria, Czech Republic, Finland, France, Germany, Italy, Lithuania, Mongolia, Morocco, Poland, Romania, Russia, Slovakia, Switzerland, Turkey, United Kingdom (see FERNANDEZ-TRIANA et al. 2020).

***Apanteles dion* Nixon, 1965**

Apanteles dion Nixon, 1965: 183, Fig. 206 (original description).

The holotype is deposited in NMPC (general collection):

HOLOTYPE (♀): ‘Type [p, label in red circle] // MORAVIA mer. / Mohelno / Bouček lgt. [p] // Microgastrinae / gen.nov. [hw] / det. P. Starý 19[p]58[hw] // Apanteles / dion Nix. / Type ♀ [hw] // Mus. Nat. Pragae / Inv. [p] 26.190 [hw, blue ink, orange label] // Apanteles [p] ♀ / suevus Reinh. [hw, blue ink] // det. Papp, 19[p]72.[hw, blue ink]’. (Abdomen is broken off and glued on a label.) (Fig. 12).

Current status. Junior synonym of *Illidops suevus* Reinhard, 1880 (see FERNANDEZ-TRIANA et al. 2020).

Distribution. Armenia, Austria, Bulgaria, Croatia, Czech Republic, France, Germany, Greece, Hungary, Iran, Kazakhstan, Korea, Malta, Moldova, Mongolia, Montenegro, North Macedonia, Poland, Romania, Russia, Serbia, Slovakia, Switzerland, United Kingdom (see YU et al. 2016).

Subfamily Opiinae Blanchard, 1845

Tribe Opiini Blanchard, 1845

***Opius bouceki* Fischer, 1958**

Opius bouceki Fischer, 1958a: 305–306, Fig. 3 (original description).

Holotype is missing, one paratype is deposited in NMPC (general collection):

PARATYPE (♂): ‘Pod. Biskúpice / Slov. m. vi.1952 / P. Starý [hw] // Opius / bouceki / n.sp. [hw] / det. Fischer // Paratype [p, red label] // Mus. Nat. Pragae / Inv. [p] 3353 [hw, orange label]’ (Fig. 14).

Current status. Valid species: *Opius (Hypocynodus) bouceki* Fischer, 1958 (see FISCHER 1958a, BEYARSLAN & FISCHER 2013, GADALLAH et al. 2022).

Distribution. Czech Republic, Hungary, Iran, Slovakia, Turkey (See YU et al. 2016, GADALLAH et al. 2022).

Remark. The holotype is missing, probably due to a loan to another museum and subsequent non-return. Unfortunately, records of the loan for this specimen are missing.

Opius capeki Fischer, 1963

Opius capeki Fischer, 1963: 286, Figs 4–7 (original description).

The holotype and allotype are deposited in NMPC (ex. coll. M. Čapek):

HOLOTYPE (♀): ‘Muráň / 25.vi.1957 / Lgt. M. Čapek [hw] // Opius [p] / Capeki ♀ / n.sp. [hw, blue ink] / det. Fischer // Holotype [p, red label] // Präparat! [hw, pencil] // Mus. Nat. Prague / Inv. [p] 25.786 [hw, blue ink, orange label]’ (Fig. 15). (Fore wing and all legs are missing on the non-glued side of specimen.)

ALLOTYPE (♂): ‘Muráň / 25.vi.1957 / Lgt. M. Čapek [hw] // Opius [p] / Capeki ♂ / n.sp. [hw, blue ink] / det. Fischer // Allotype [p, red label] // Mus. Nat. Prague / Inv. [p] 25.787 [hw, blue ink, orange label]’ (Fig. 16).

Current status. Valid species, currently as *Phaedrotoma capeki* (Fischer, 1963) (see VAN ACHTERBERG 2009 and YU et al. 2016).

Distribution. Estonia, Slovakia (see YU et al. 2016).

Remark. The slide preparation that is listed on the label under the female holotype is missing.

Opius caudifer Fischer, 1958

Opius caudifer Fischer, 1958a: 295 (original description).

The holotype is deposited in NMPC (general collection):

HOLOTYPE (♀): ‘Bohemia or. / Velký Vřešťov / 25.vi.53 Bouček [p] // Typus [p, red label] // Opius / caudifer / sp.n. [hw, blue ink] / det. Fischer // Mus. Nat. Prague / Inv. [p] 3227 [hw, orange label]’ (Fig. 17).

Current status. Junior synonym of *Opius longicornis* Thomson, 1895 (see FISCHER 1995, YU et al. 2016).

Distribution. Austria, Czech Republic, Finland, France, Germany, Hungary, Italy, Lithuania, Romania, Russia, Slovenia, Spain, Sweden, United Kingdom (see YU et al. 2016).

Opius curtipectus Fischer, 1958

Opius curtipectus Fischer, 1958b: 286, Fig. 22 (original description).

The holotype is deposited in NMPC (general collection):

HOLOTYPE (♂): ‘Karlštejn / Boh. centr. 1954 / lgt. P. Starý [p] // Opius / curtipectus / sp.n. [hw, blue ink] / det. Fischer // Holotype [p, red label] // Mus. Nat. Prague / Inv. [p] 2976 [hw, orange label]’ (Fig. 18).

Current status. Valid species, currently as *Utetes curtipectus* (Fischer, 1958) (see FISCHER 1972, DOLATI et al. 2021, GADALLAH et al. 2022).

Distribution. Austria, Czech Republic, Finland, Iran, Lithuania, Spain, Turkey (see YU et al. 2016, DOLATI et al. 2021, GADALLAH et al. 2022).

Opius laetatorius Fischer, 1958

Opius laetatorius Fischer, 1958a: 312, Figs 8–9 (original description).

The holotype is deposited in NMPC (general collection):

HOLOTYPE (♀): ‘Bukovany – Mor. [p] / 19.viii. [hw] 1942 / Šuster [p] // Opius / laetatorius / Holotype n.sp. [hw] / det. Fischer // TYPUS [p, red label] // Mus. Nat. Prague / Inv. [p] 3224 [hw, orange label]’ (Fig. 19).

Current status. Valid species: *Opius (Merotrachys) laetatorius* Fischer, 1958 (see YU et al. 2016).

Distribution. Czech Republic, France, Germany, Hungary, Moldova, Russia, Spain, Turkey (YU et al. 2016).

Opius latipes Fischer, 1958

Opius latipes Fischer, 1958a: 308, Figs 5–6 (original description).

The holotype and one paratype are deposited in NMPC (general collection):

HOLOTYPE (♂): ‘Karlštejn / Boh. centr. 1954 / lgt. P. Starý [p] // Opius / latipes / n.sp. [hw, blue ink] / det. Fischer // HOLOTYPUS [p, red label] // Mus. Nat. Prague / Inv. [p] 3226 [hw, orange label]’ (Fig. 20).

PARATYPE (♂): ‘Karlštejn / Boh. centr. 1954 / lgt. P. Starý [p] // Opius / latipes / n.sp. [hw] / det. Fischer [p] // PARATYPUS / O. latipes [hw, red label] // Mus. Nat. Prague / Inv. [p] 26.072 [hw, orange label]’.

Current status. Junior synonym of *Opius pendulus* Haldy, 1837 (see BELOKOBILSKIJ et al. 2003).

Distribution. Austria, Belgium, Bulgaria, Canada, Czech Republic, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Italy, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Poland, Russia, Serbia, Spain, Sweden, Switzerland, Turkey, United Kingdom, USA (YU et al. 2016, GADALLAH et al. 2022).

Opius magnicauda Fischer, 1958

Opius magnicauda Fischer, 1958a: 298, Fig. 1 (original description).

The holotype, allotype and one paratype are deposited in NMPC (general collection):

HOLOTYPE (♀): ‘▲ [hw] Deblík v Stře- / dohoří [p] 26.vii.56 [hw] / BOHEMIA, Bouček [p] // Opius / magnicauda / n.sp. [hw] / det. Fischer // TYPUS [p, red label] // Mus. Nat. Prague / Inv. [p] 3229 [hw, orange label]’ (Fig. 21). (Missing front leg on non-glued side and one fore wing, second fore wing is glued on the label.)

ALLOTYPE (♂): ‘▲ [hw] Deblík, Stře- / dohoří, BOHEMIA / Bouček 1957 [p, strikethrough-hw] / 26.vii.1956 [hw, reverse side of the same label] // Opius [p] / magnicauda / n.sp. [hw] / det. Fischer // Allotype [p, red label] // Mus. Nat. Prague / Inv. [p] 3238 [hw, orange label]’ (Fig. 22).

PARATYPE (♀): ‘Karlštejn / Boh. centr. 1954 / lgt. P. Starý [p, light blue shiny label] // Opius / magnicauda / n.sp. [hw] / det. Fischer [p] // Paratypus [hw, blue ink, red label] // Mus. Nat. Prague / Inv. [p] 26.076 [hw, blue ink, orange label]’.

Current status. Valid species: *Opius (Opiothorax) magnicauda* Fischer, 1958 (see YU et al. 2016).

Distribution. Austria, Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Iran, Italy, Kazakhstan, Poland, Russia, Sweden, Switzerland, Turkey (see YU et al. 2016).

Opius minor Fischer, 1957

Opius minor Fischer, 1957: 219, Fig. 15 (original description).

The holotype and one paratype are deposited in NMPC (general collection):

HOLOTYPE (♀): ‘D. Věstonice / Mor. m. vi.1956 / P. Starý [hw, blue ink] // opius / minor / n.sp. [hw, blue ink] / det. Fischer [p] // O. minor Fi. ♀ [hw] / HOLOTYPUS [p, red label] // Mus. Nat. Prague / Inv. [p] 3221 [hw, orange label]’ (Fig. 23). (Hind leg on a non-glued side is missing, both antennae are missing, but one is glued on a label.)

PARATYPE (♀): ‘Strážiště u V. / Žernosek [p] 3.vi. [hw, pencil] / Bohemia [p] 1956 [hw, pencil] // Opius / minor / n.sp. [hw, blue ink] / det. Fischer [p] // Paratypus [hw, blue ink, red label] // Mus. Nat. Prague / Inv. [p] 26.073 [hw, blue ink, orange label]’ (One antenna is missing.)

Current status. Junior synonym of *Opius gracilis* Fischer, 1957 (see BELOKOBYLSKIJ et al. 2003).

Distribution. Austria, Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Italy, Mongolia, Poland, Russia, Spain, Sweden, Switzerland, Tunisia, United Kingdom, Uzbekistan (see YU et al. 2016).

Opius moravicus Fischer, 1960

Opius moravicus Fischer, 1960: 64 (original description).

The holotype is deposited in NMPC (general collection):

HOLOTYPE (♂): ‘Hostýn-okolí / Mor. or. vii.1954 / lgt. P. Starý [p] // Opius / moravicus / n.sp. [hw, blue ink] / det. Fischer // Holotype [p, red ink] // Mus. Nat. Pragae / Inv. [p] 2977 [hw, blue ink, orange label]’ (Fig. 24).

Current status. Valid species: *Opius (Ilicopius) moravicus* Fischer, 1960 (see YU et al. 2016).

Distribution. Czech Republic, Hungary, Iran, Turkey (see YU et al. 2016).

Opius nigricinctus Fischer, 1957

Opius nigricinctus Fischer, 1957: 353, Fig. 3 (original description).

The holotype is deposited in NMPC:

HOLOTYPE (♀): ‘Hostýn-okolí / Mor. or. viii.1954 / lgt. P. Starý [p] // Opius / nigricinctus / m. [hw] / det. Fischer [p] // O. nigricinctus Fi. [hw] / HOLOTYPE [p] ♀ [hw, red label] // Opius [p] ♀ / crassicrus Th. [hw] / det. Papp, 19 [p] 77 [hw] // Mus. Nat. Pragae / Inv. [p] 3223 [hw, orange label]’ (Fig. 25).

Current status. Junior synonym of *Opius (Kainopaeoipius) crassicrus* Thomson, 1895 (see FISCHER 1977, FISCHER & KOPONEN 1999, BELOKOBYLSKIJ et al. 2003, YU et al. 2016).

Distribution. Austria, Bulgaria, Czech Republic, Finland, Germany, Hungary, Italy, Poland, Russia, Sweden (see YU et al. 2016).

Opius propodealis Fischer, 1958

Opius propodealis Fischer, 1958a: 299 (original description).

The holotype is deposited in NMPC (general collection):

HOLOTYPE (♀): ‘B. Štiavnica / viii.1956. [hw, blue ink] // Opius / propodealis / Holotype n.sp. [hw] / det. Fischer // TYPUS [p, red label in black frame] // Mus. Nat. Pragae / Inv. [p] 3225 [hw, orange label]’ (Fig. 26).

Current status. Valid species, currently as *Opiognathus propodealis* (Fischer, 1958) (see YU et al. 2016).

Distribution. Austria, Czech Republic, Estonia, Finland, France, Germany, Hungary, India, Iran, Italy, South Korea, Lithuania, Netherlands, Poland, Russia, Serbia, Slovakia, Spain, Switzerland, Turkey, United Kingdom (see YU et al. 2016).

Opius pulchriventris Fischer, 1958

Opius pulchriventris Fischer, 1958a: 301 (original description).

The holotype and two paratypes are deposited in NMPC (general collection):

HOLOTYPE (♀): ‘Karlštejn [hw] / Boh. [p, blue ink, pink underline] c [hw] / P. Starý [p, blue ink] / 14.vi. [hw, vertically written] / 195 [p, blue ink] 3 [hw, vertically written] // Opius / pulchriventris / n.sp. [hw] / det. Fischer // HOLOTYPE [p, red label] // Mus. Nat. Pragae / Inv. [p] 3222 [hw, orange label]’ (Fig. 27).

PARATYPE (♀): ‘Karlštejn [hw] / Boh. [p, blue ink, pink underline] c [hw] / P. Starý [p, blue ink] / 20.vi. [hw, vertically written] / 195 [p, blue ink]

3 [hw, vertically written] // Opius / pulchriventris / n.sp. [hw] / det. Fischer [p] // Paratype [hw, red label] // Mus. Nat. Pragae / Inv. [p] 26.074 [hw, blue ink, orange label]’. (Missing tarsi of left middle leg.)
PARATYPE (♂): ‘Karlštejn [hw] / Boh. [p, blue ink, pink underline] c [hw] / P. Starý [p, blue ink] / 12.vi. [hw, vertically written] / 195 [p, blue ink] 4 [hw, vertically written] // Opius / pulchriventris / n.sp. [hw] / det. Fischer [p] // Paratype [hw, red label] // Mus. Nat. Pragae / Inv. [p] 26.075 [hw, blue ink, orange label]’. (Left antenna is missing.)

Current status. Junior synonym of *Phaedrotoma pulchriceps* (Szépligeti, 1898) (see VAN ACHTERBERG 2014).

Distribution. Austria, Czech Republic, Finland, France, Germany, Iran, Italy, Kazakhstan, Korean peninsula, Moldova, Poland, Russia, Slovakia, Spain, Switzerland, Turkey, United Kingdom (see YU et al. 2016, GADALLAH et al. 2022).

Opius staryi Fischer, 1958

Opius staryi Fischer, 1958a: 303 (original description).

The holotype is deposited in NMPC (general collection):

HOLOTYPE (♀): ‘Hostýn-okolí / Mor. or. viii.1954 / lgt. P. Starý [p] // Opius / staryi / n.sp. [hw, blue ink] / det. Fischer // TYPUS [p, red label in black frame] // Mus. Nat. Pragae / Inv. [p] 3228 [hw, orange label]’ (Fig. 28).

Current status. Valid species: *Opius (Phaedrotoma) staryi* Fischer, 1958 (YU et al. 2016, GADALLAH et al. 2022).

Distribution. Austria, Bosnia and Herzegovina, Czech Republic, Estonia, Finland, France, Germany, Hungary, Iran, Italy, Montenegro, Netherlands, Romania, Russia, Serbia, Slovakia, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom, Uzbekistan (see YU et al. 2016, GADALLAH et al. 2022).

Subfamily Orgilinae Ashmead, 1900

Tribe Orgilini Ashmead, 1900

Orgilus achterbergi Taeger, 1989

Orgilus achterbergi Taeger, 1989: 51, Figs 114, 117, 129, 146, 148, 151 (original description).

One paratype is deposited in NMPC (general collection):

PARATYPE (♀): ‘ČSR. Slovakia [p] on / Piliš u Sl. IV. M. [hw-blue ink] / viii. [hw] / 1 [hw-blue ink] 8 [partly hw-blue ink and p] 50 [hw-blue ink] A. Hoffer [p] // Paratype [p] / *Orgilus* ♀ / achterbergi / sp.n. [hw] / det. A. Taeger [p] 88 [hw]’ (Fig. 29). (Missing tarsi on fore and middle legs at the non-glued side.)

Current status. Valid species: *Orgilus (Orgilus) achterbergi* Taeger, 1989 (see TAEGER 1989, RIEDEL & HANSEN 2014).

Distribution. Austria, Belgium, Bulgaria, France, Germany, Hungary, Italy, Norway, Romania, Slovakia, Slovenia, Switzerland, United Kingdom (see YU et al. 2016).

Orgilus oehlkei Tager, 1989

Orgilus oehlkei Tager, 1989: 144, Fig. 27 (original description).

One paratype is deposited in NMPC (general collection):

PARATYPE (♂): ‘Karlštejn / Bohe. / lgt. P. Starý [hw] / 25.vii. / 1953 [hw, written vertically] // Paratype [p] / *Orgilus* / oehlkei sp.n. [hw] / det. A. Taeger [p] 88 [hw, red label]’ (Fig. 30).

Current status. Valid species: *Orgilus (Orgilus) oehlkei* Taeger, 1989 (see TAEGER 1989, PAPP 2005).

Distribution. Czech Republic, Hungary, Romania (see YU et al. 2016).

Orgilus tobiasi Taeger, 1989

Orgilus tobiasi Taeger, 1989: 200, Fig. 34 (original description).

Ten paratypes are deposited in NMPC (general collection):

PARATYPES (♂): ‘Karlštejn [p] / Boh. centr. 1954 [p] / lgt. P. Starý [p, light blue shiny label] // Paratype [p] / *Orgilus* ♂ [hw] / *tobiasi* sp.n. [hw] / det. A. Taeger [p] 88 [hw, red label]’.

PARATYPE (♀): ‘Karlštejn [hw, blue ink] / Boh [p, blue ink] c [hw, blue ink] / P. Stary [p, blue ink] / 3.vii. [hw, blue ink, written vertically] / 195 [p, blue ink] 3 [hw, blue ink] // Paratype [p] / *Orgilus* ♀ / *tobiasi* sp.n. [hw] / det. A Taeger [p] 88 [hw, red label]’.

PARATYPE (♂): ‘Karlštejn [hw, blue ink] / Boh [p, blue ink] c [hw, blue ink] / P. Stary [p, blue ink] / 3.vii. [hw, blue ink, written vertically] / 195 [p, blue ink] 3 [hw, blue ink] // Paratype [p] / *Orgilus* ♂ / *tobiasi* sp.n. [hw] / det. A Taeger [p] 88 [hw, red label]’.

PARATYPE (♀): ‘Karlštejn [hw, blue ink] / Boh. [p, blue ink] c [hw, blue ink] . [p, blue ink] . [hw, blue ink] / P. Stary [p, blue ink] / 23.v. [hw, blue ink, written vertically] / 195 [p, blue ink] 3 [hw, blue ink] // Paratype [p] / *Orgilus* ♀ / *tobiasi* sp.n. [hw] / det. A Taeger [p] 88 [hw, red label]’ (Fig. 31).

PARATYPE (♂): ‘Karlštejn [hw, blue ink] / Boh. [p, blue ink] c [hw, blue ink] . [p, blue ink] . [hw, blue ink] / P. Stary [p, blue ink] / 20.vi. [hw, blue ink, written vertically] / 195 [p, blue ink] 3 [hw, blue ink] // Paratype [p] / *Orgilus* ♂ / *tobiasi* sp.n. [hw] / det. A Taeger [p] 88 [hw, red label]’ (Fig. 32).

PARATYPE (♀): ‘ČSR. Slovakia [p] or. / Baba u Somotoru / 1 [hw, blue ink] 9 [p] 53 [hw, blue ink] A. Hoffer [p] vii [hw, blue ink] // Paratype [p] / *Orgilus* ♀ / *tobiasi* sp.n. [hw] / det. A Taeger [p, red label] 88 [hw]’.

Current status. Valid species: *Orgilus* (*Orgilus*) *tobiasi* Taeger, 1989 (see TAEGER 1989, BELOKOBILSKIJ et al. 2003).

Distribution. Albania, Armenia, Czech Republic, Germany, Greece, Hungary, Iran, Ireland, Italy, Romania, Serbia, Spain, Switzerland, Turkey, United Kingdom (see YU et al. 2016).

Missing types

Subfamily Opiinae Blanchard, 1845

Tribe Opiini Blanchard, 1845

Opius dilatatus Fischer, 1960

Opius dilatatus Fischer, 1960: 56–57 (original description).

The type specimen which should be deposited in NMPC is currently missing in the collection, probably due to a loan to another museum and subsequent non-return. Unfortunately, records of the loan for this type are missing.

Current status. Junior synonym of *Opius* (*Opius*) *pygmaetor* (Nees, 1811) (see YU et al. 2016).

Distribution. Denmark, France, Lithuania, Slovakia, Switzerland (see YU et al. 2016).

Historically significant specimens in the collection of Braconidae

Subfamily Opiinae Blanchard, 1845

Tribe Opiini Blanchard, 1845

Opius annulicornis (Thomson, 1895)

Xynobius (*Xynobius*) *annulicornis* Thomson, 1895: 2188 (original combination).

The ‘allotype’ is deposited in NMPC:

ALLOTYPE (♂): ‘Velký Vřesťov / Bohemia or. / Bouček [p] 13.viii.56. [hw] // *Opius* [p] / *annulicornis* / ♂ Thoms. [hw] / det. Fischer // Allotype [p, red label] // Mus. Nat. Pragae / Inv. [p] 3232 [hw, orange label]’ (Fig. 13).

Current status. Junior synonym of *Xynobius* (*Xynobius*) *thomsoni* (Fischer, 1971) (see FISCHER 1971b, 1972; GADALLAH et al. 2022).

Distribution. Austria, Czech Republic, France, Hungary, Italy, Switzerland, Turkey, United Kingdom (see YU et al. 2016, GADALLAH et al. 2022).

Remark. The ‘allotype’ refers to the first description of a male of the species but is not a type specimen in the sense of ICZN (1999).

Acknowledgements

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References

- ACHTERBERG C. VAN 1991: Revision of the genera of the Afrotropical and west Palaearctic Rogadinae Foerster (Hymenoptera: Braconidae). *Zoologische Verhandelingen* **273**: 4–102.
- ACHTERBERG C. VAN 2003: The West Palaearctic species of the genera *Gildoria* Hedqvist and *Platyspathius* Viereck, with keys to the species (Hymenoptera: Braconidae: Doryctinae). *Zoologische Mededelingen* (Leiden) **77**: 267–290.
- ACHTERBERG C. VAN 2009: *Phaedrotoma capeki* (Fischer, 1963). Accessed through: Fauna Europaea at http://www.faunaeur.org/full_results.php?id=338656.
- ACHTERBERG C. VAN 2014: Notes on the checklist of Braconidae (Hymenoptera) from Switzerland. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* **87**: 191–213.
- BELOKOBILSKIJ S. A., TAEGER A., VAN ACHTERBERG C., HAESELBARTH E. & RIEDEL M. 2003: Checklist of the Braconidae (Hymenoptera) of Germany. *Beiträge zur Entomologie* **53**: 341–435.
- BEYARSLAN A. & FISCHER M. 2013: Checklist of Turkish Opiinae (Hymenoptera, Braconidae). *Zootaxa* **3721**: 401–454.
- BEZDĚČKOVÁ K., BEZDĚČKA P., MACEK J. & MALENOVSKÝ I. 2017: Catalogue of type specimens of ants (Hymenoptera: Formicidae) deposited in Czech Museums. *Acta Entomologica Musei Nationalis Pragae* **57**(1): 295–308.
- BEZDĚK A. & HÁJEK J. 2009: Catalogue of type specimens of beetles (Coleoptera) deposited in the National Museum, Prague, Czech Republic. *Acta Entomologica Musei Nationalis Pragae* **49**: 349–378.
- BOUČEK Z. 1955: Hymenopterous parasites of *Pityophthorus polonicus* Karp. *Roczniki Nauk Licheny* (Warszawa) **11**: 83–92.
- BOUČEK Z. 1956: On a new genus of Braconidae (Hymenoptera), with remarks on the wing nomenclature. *Acta Entomologica Musei Nationalis Pragae* **30**: 441–446.
- ČAPEK M. 1958: Revision der Europäischen Arten der Gattung *Cosmophorus* Ratz. (Hymenoptera, Braconidae). *Acta Entomologica Musei Nationalis Pragae* **32**: 151–169.
- ČAPEK M. & LUKÁŠ J. 1989: Apocrita, Parasitica, Ichneumonoidea, Braconidae. Pp. 27–44. In: ŠEDIVÝ J. (ed.): *Enumeratio insectorum Bohemoslovakiae, Checklist of Czechoslovak Insects III. (Hymenoptera)*. *Acta Faunistica Entomologica Musei Nationalis Pragae* **19**: 3–194.
- ČAPEK M. & ZWÖLFER H. 1957: *Apanteles murinanae* nov. spec. (Braconidae, Hym.), ein neuer Parasit des Tannentreibwicklers. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* **30**: 119–126.
- DOLATI S., TALEBI A. A., PERIS-FELIPO F. J., FARAHANI S. & KHAYRANDISH M. 2021: New data on the subfamily Opiinae (Hymenoptera: Braconidae) from Iran. *Zootaxa* **4903**: 331–352.
- FERNANDEZ-TRIANA J., SHAW M. R., BOUDREAU C., BEAUDIN M. & BROAD G. R. 2020: Annotated and illustrated world checklist of Microgastrinae parasitoid wasps (Hymenoptera, Braconidae). *ZooKeys* **920**: 1–1090.
- FISCHER M. 1957: Neue *Opius*-Arten aus Schweden (Hym. Braconidae). *Opuscula Entomologica* (Lund) **22**: 211–225.
- FISCHER M. 1958a: Die europäischen Arten der Gattung *Opius* Wesm. Teil IVb (Hymenoptera, Braconidae). *Acta Entomologica Musei Nationalis Pragae* **32**: 295–316.

- FISCHER M. 1958b: Die europäischen Arten der Gattung *Opius* Wesm. Teil 1b (Hymenoptera, Braconidae). *Annali del Museo Civico di Storia Naturale di Genova* **70**: 245–304.
- FISCHER M. 1959: Die europäischen Opiinae (Hymenoptera, Braconidae). *Acta Entomologica Musei Nationalis Pragae* **33**: 241–263.
- FISCHER M. 1963: Über paläarktische Opiinae (Hym., Braconidae). *Annalen des Naturhistorischen Museums in Wien* **66**: 283–305.
- FISCHER M. 1971a: Redeskription von *Triaspis algiricus* Snoflak (Hymenoptera, Braconidae). *Entomologisches Nachrichtenblatt Österreichischer und Schweizer Entomologen* **23**: 102–103.
- FISCHER M. 1971b: *Index to entomophagous insects Hymenoptera Braconidae*. World Francois, Paris, 189 pp.
- FISCHER M. 1972: *Hymenoptera Braconidae (Opiinae I) – Paläarktische Region. Das Tierreich*. Walter de Gruyter, Berlin & New York, 620 pp.
- FISCHER M. 1977: Opiinae aus Kärnten, gesammelt im Jahre 1973 in der Umgebung von Hüttenberg (Hymenoptera, Braconidae). *Carinthia II* **167 / 87**: 351–366.
- FISCHER M. 1995: Korrekturen und Ergänzung zur Taxonomie altweltlicher Opiinae und Neufassung eines Bestimmungsschlüssels für die paläarktischen Arten des Subgenus *Opiothorax* Fischer, 1972 des Genus *Opius* Wesmael, 1835 (Hymenoptera, Braconidae). *Entomofauna* **16**: 217–242.
- FISCHER M. & KOPONEN M. 1999: A survey of Opiinae (Hymenoptera, Braconidae) of Finland, part 2. *Entomologica Fennica* **10**: 129–160.
- GADALLAH N. S., GHAHARI H. & SHAW S. R. 2022: *Braconidae of the Middle East (Hymenoptera): Taxonomy, Distribution, Biology, and Biocontrol Benefits of Parasitoid Wasps*. Academic Press, London, 596 pp.
- ICZN 1999: *International Code of Zoological Nomenclature. Fourth edition*. The International Trust for Zoological Nomenclature, London, 306 pp.
- KMENT P. & KOLÍNOVA Z. 2013: Catalogue of type specimens of true bugs (Hemiptera: Heteroptera) deposited in the National Museum, Prague, Czech Republic. *Acta Entomologica Musei Nationalis Pragae* **53**: 821–890.
- MACHÁČKOVÁ L. & FIKÁČEK M. 2014: Catalogue of the type specimens deposited in the Department of Entomology, National Museum, Prague, Czech Republic. Polyneoptera. *Acta Entomologica Musei Nationalis Pragae* **54**: 399–450.
- NIEVES-ALDREY J. L. & MOYA I. I. 2011: In memoriam Zdenek Bouček (1924–2011). *Graellsia* **67**: 245–250.
- NIXON G.E.J. 1965: A reclassification of the tribe Microgasterini (Hymenoptera: Braconidae). *Bulletin of the British Museum (Natural History), Entomology Series, Supplement* **2**: 1–284.
- NOYES J. S. 2005: In celebration of the 80th birthday of Zdeněk Bouček: father of modern Chalcidoidea systematics. *Acta Societatis Zoologicae Bohemoslovenicae* **69**: 1–10.
- PAPP J. 1999: *Triaspis warnckeii* sp.nov. from Algeria (Hymenoptera, Braconidae: Calyptinae). *Entomofauna* **20**: 121–128.
- PAPP J. 2005: A checklist of the Braconidae of Hungary (Hymenoptera). *Folia Entomologica Hungarica* **66**: 137–194.
- RIEDEL M. & HANSEN L. O. 2014: Braconidae (Hymenoptera) of Norway, Part II. *Norwegian Journal of Entomology* **61**: 147–159.
- SHENEFELT R.D. 1960: *Ropalophorus* Haliday - a genus new to North America (Hymenoptera: Braconidae: Euphorinae). *Annals of the Entomological Society of America* **53**: 542–546.
- ŠNOFLÁK J. 1953: La monographie de *Triaspis* Hal. (Hym. Bracon) de la Tchécoslovaquie. *Acta Entomologica Musei Nationalis Pragae* **28**: 285–396.
- ŠNOFLÁK J. 1958: Nový druh lumžíka rodu *Phanerotoma*. (Une nouvelle espèce du genre *Phanerotoma* (Hym. Braconidae)). *Zoologické Listy* **7**: 381–383 (in French with Czech introduction).
- TAEGER A. 1989: *Die Orgilus-Arten der Paläarktis (Hymenoptera, Braconidae)*. Arbeit aus dem Institut für Pflanzenschutzforschung Kleinmachnow, Bereich Eberswalde, Berlin, 260 pp.
- THOMSON C.G. 1895: LII. Bidrag till Braconidernas Kändedom. *Opuscula Entomologica* **20**: 2141–2339.
- YU D. S., ACHTERBERG C. VAN & HORSTMANN K. 2016: Taxapad 2016–World Ichneumonoidea 2015. *Taxonomy, Biology, Morphology and Distribution Ontario: Nepean, Canada: On USB Flash Drive*.

Appendix: Figures 1–35

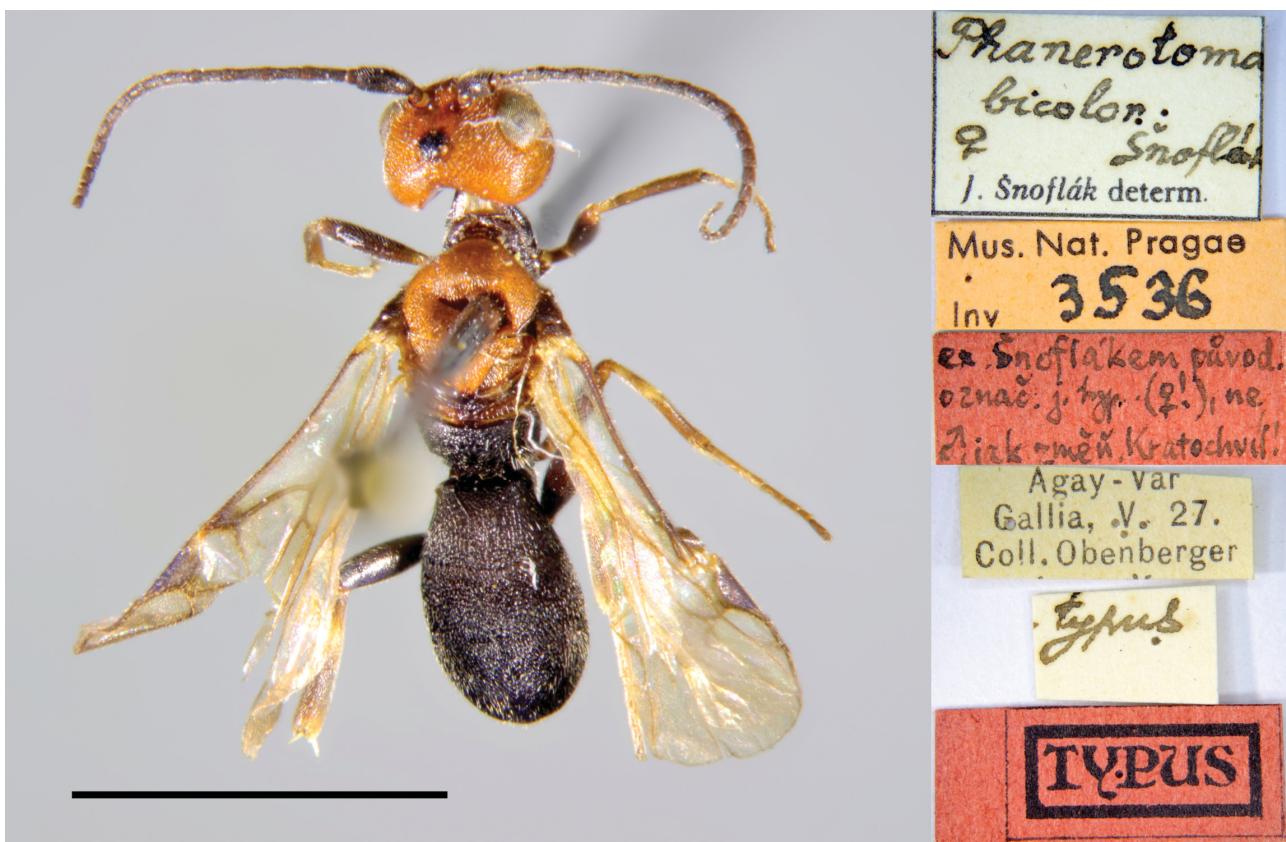
Fig. 1. Holotype of *Triaspis algirus* Šnoflák, 1958 with its labels (scale bar = 2.5 mm).Fig. 2. Holotype of *Phanerotoma bicolor* Šnoflák, 1958 with its labels (scale bar = 2.5 mm).



Fig. 3. Allotype of *Phanerotoma bicolor* Šnoflák, 1958 with its labels (scale bar = 2.5 mm).

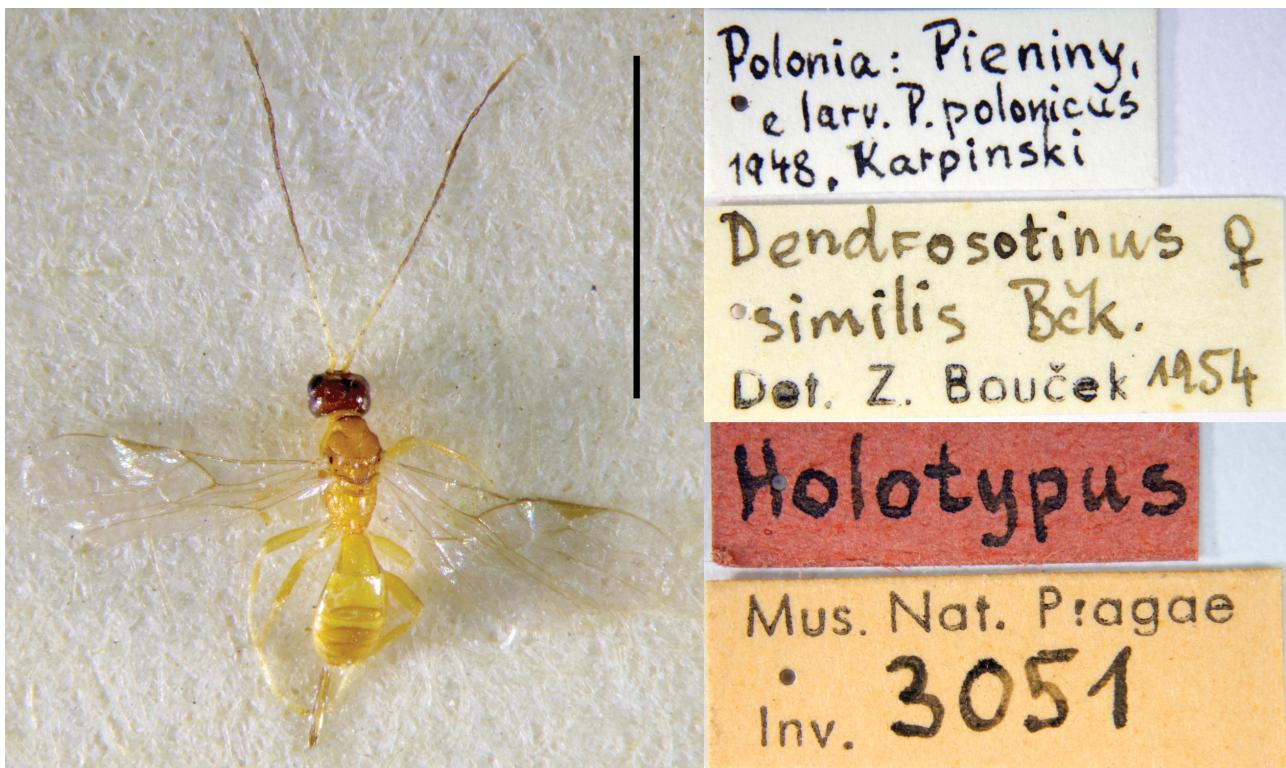


Fig. 4. Holotype of *Dendrosotinus similis* Bouček, 1955 with its labels (scale bar = 2.5 mm).

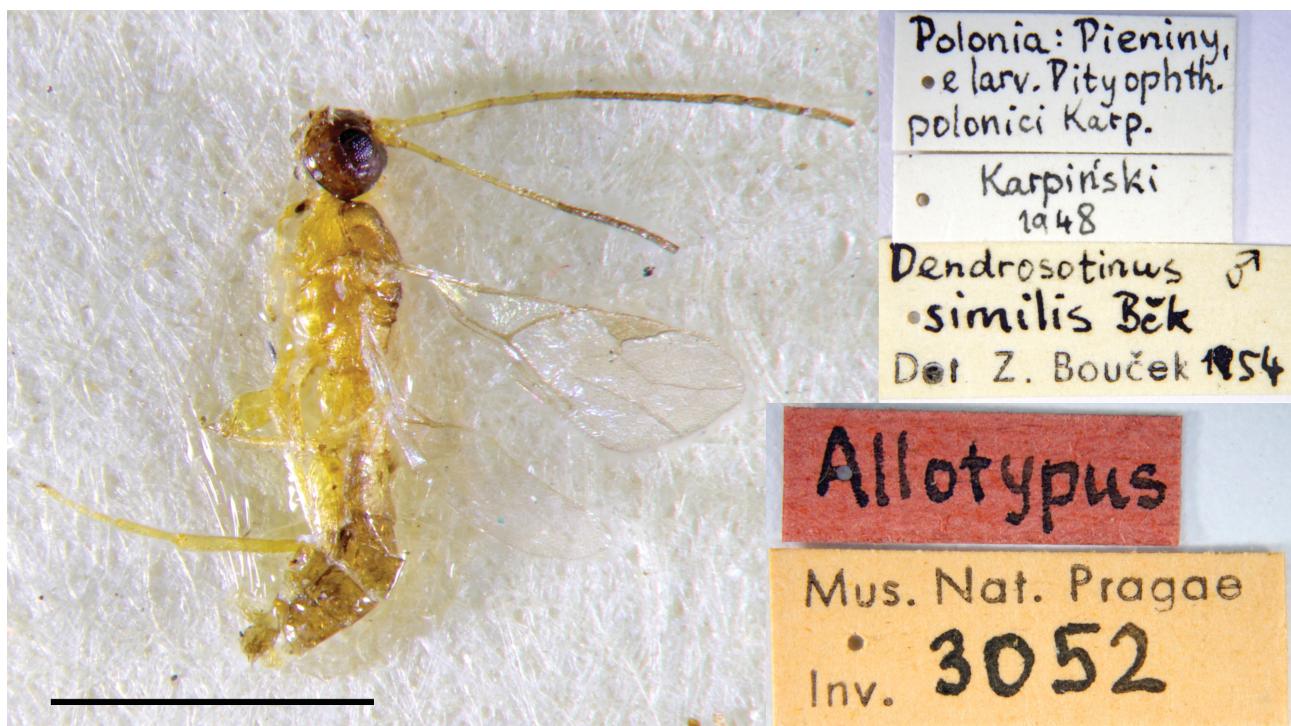


Fig. 5. Allotype of *Dendrosotinus similis* Bouček, 1955 with its labels (scale bar = 2.5 mm).



Fig. 6. Holotype of *Cosmophorus roubali* Čapek, 1958 with its labels (scale bar = 2.5 mm).

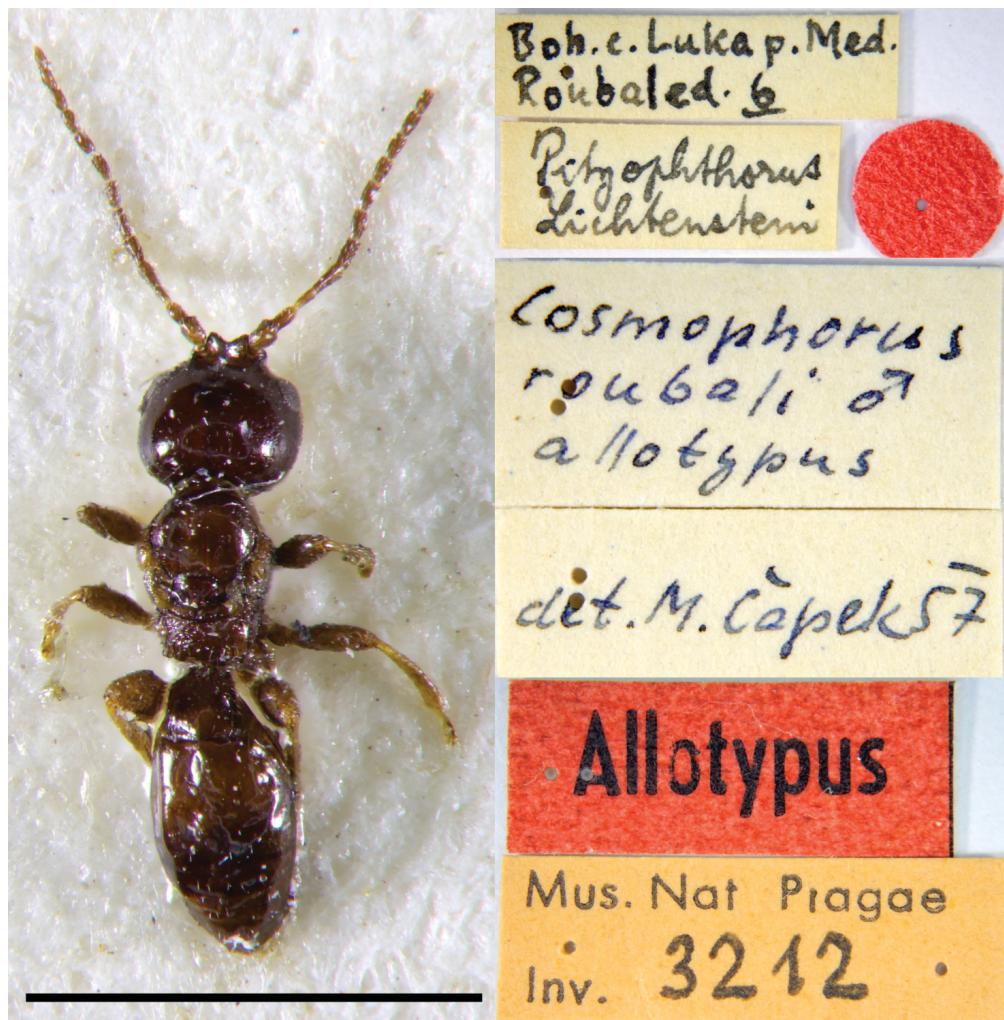
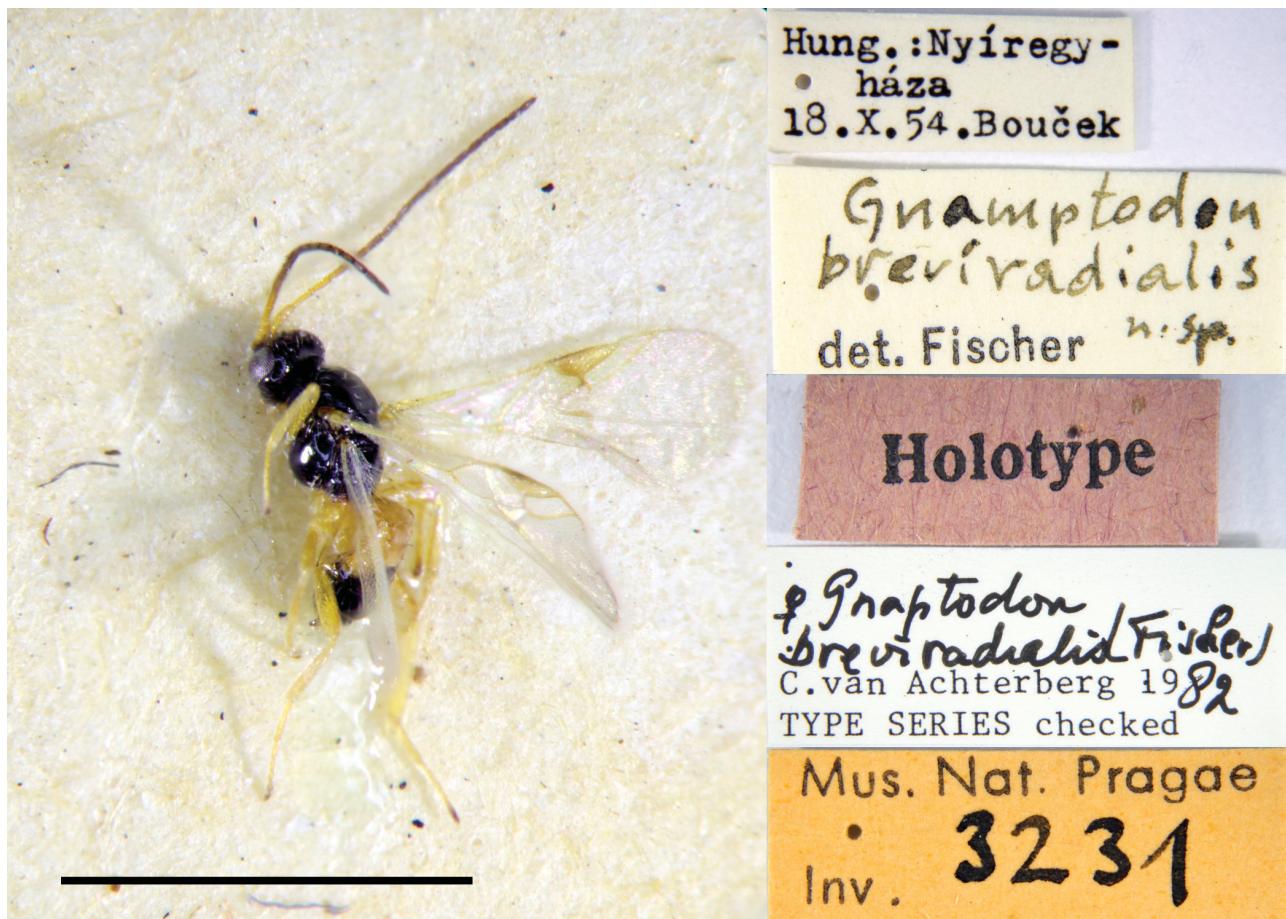
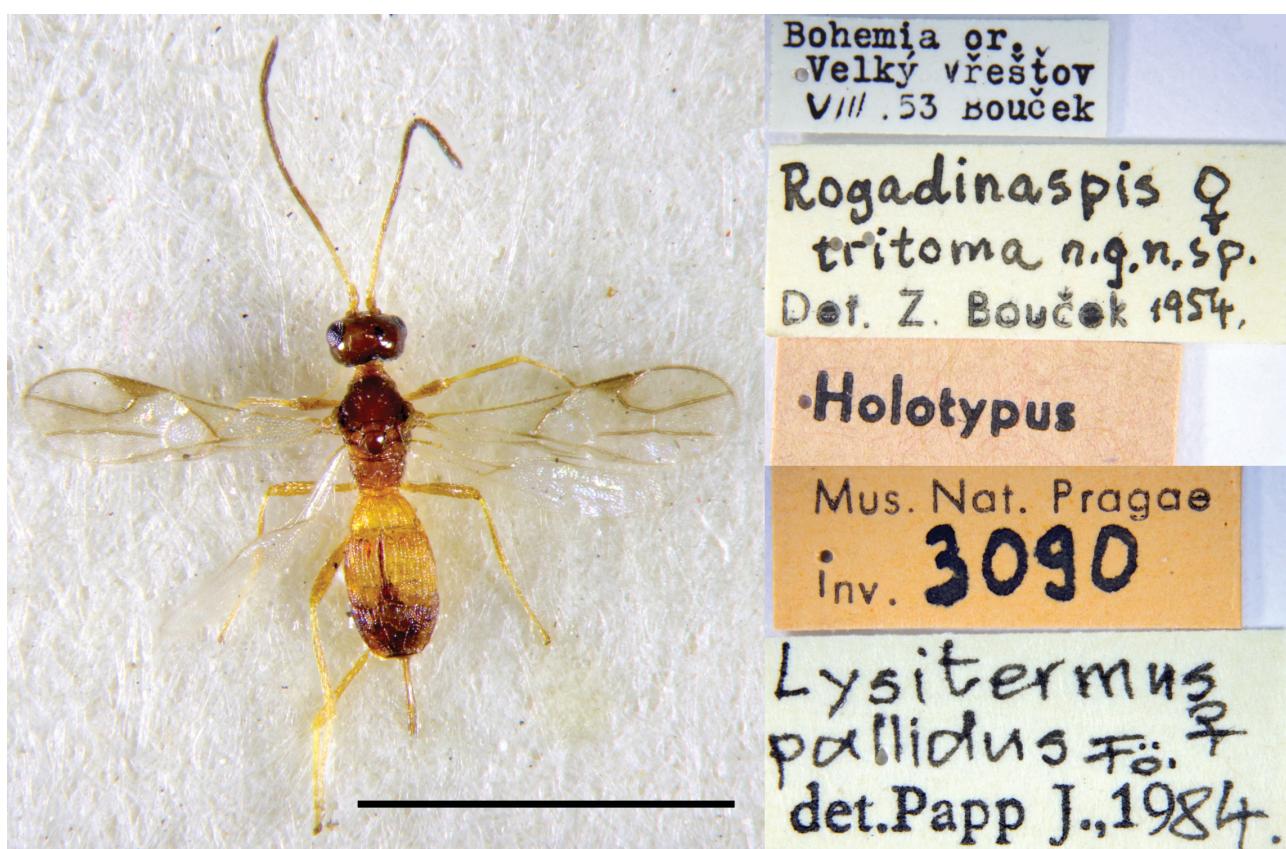


Fig. 7. Allotype of *Cosmophorus roubali* Čapek, 1958 with its labels (scale bar = 2.5 mm).



Fig. 8. Paratype of *Ropalophorus wisconsinensis* Shenefelt, 1960 with its labels (scale bar = 2.5 mm).

Fig. 9. Holotype of *Gnampydon breviradialis* Fischer, 1959 with its labels (scale bar = 2.5 mm).Fig. 10. Holotype of *Rogadiaspis tritoma* Bouček, 1956 with its labels (scale bar = 2.5 mm).

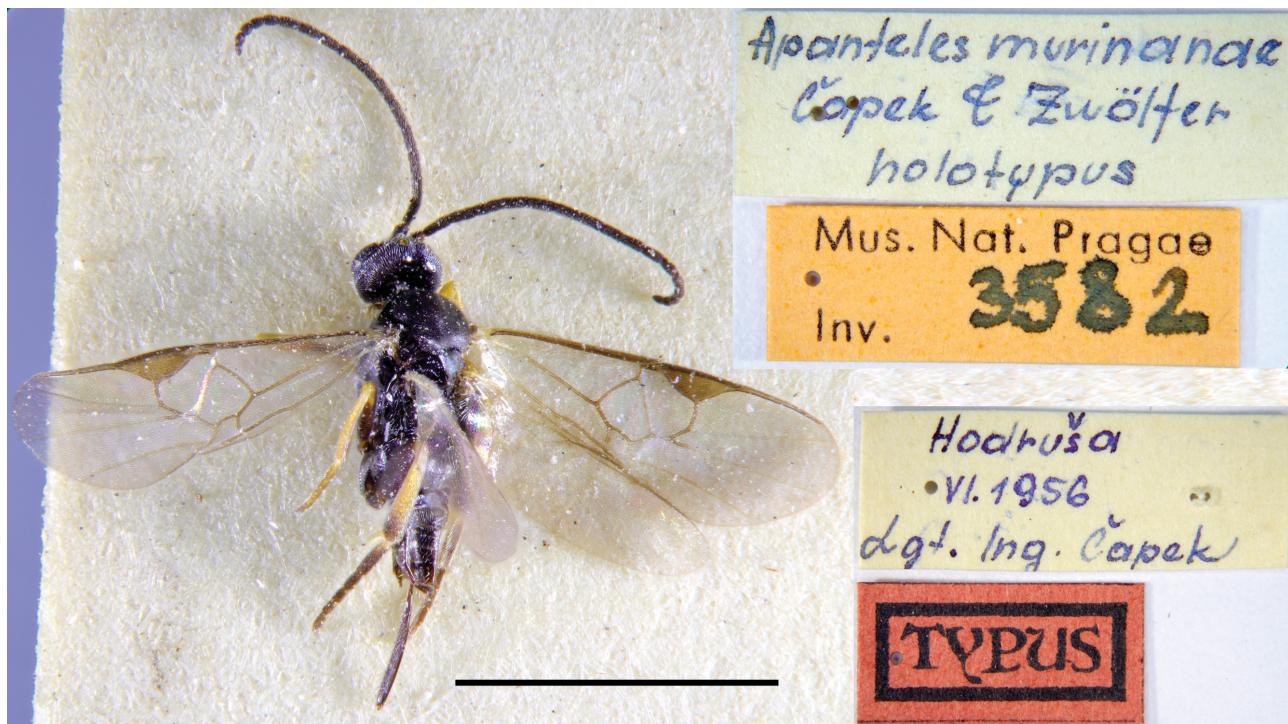


Fig. 11. Holotype of *Apanteles murinanae* Čapek & Zwölfer, 1957 with its labels (scale bar = 2.5 mm).



Fig. 12. Holotype of *Apanteles dion* Nixon, 1965 with its labels (scale bar = 2.5 mm).

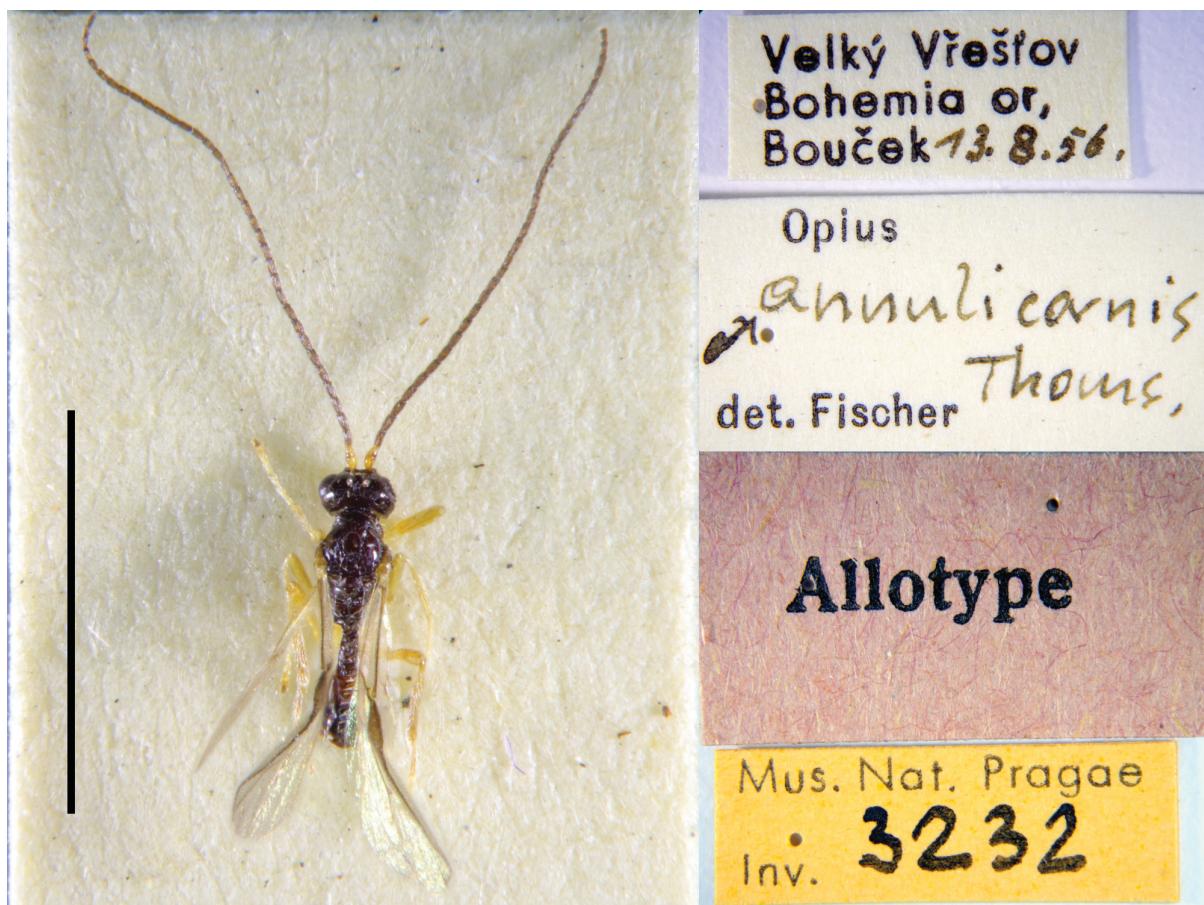


Fig. 13. Allotype of *Opius annulicornis* (Thomson, 1895) with its labels (scale bar = 2.5 mm).

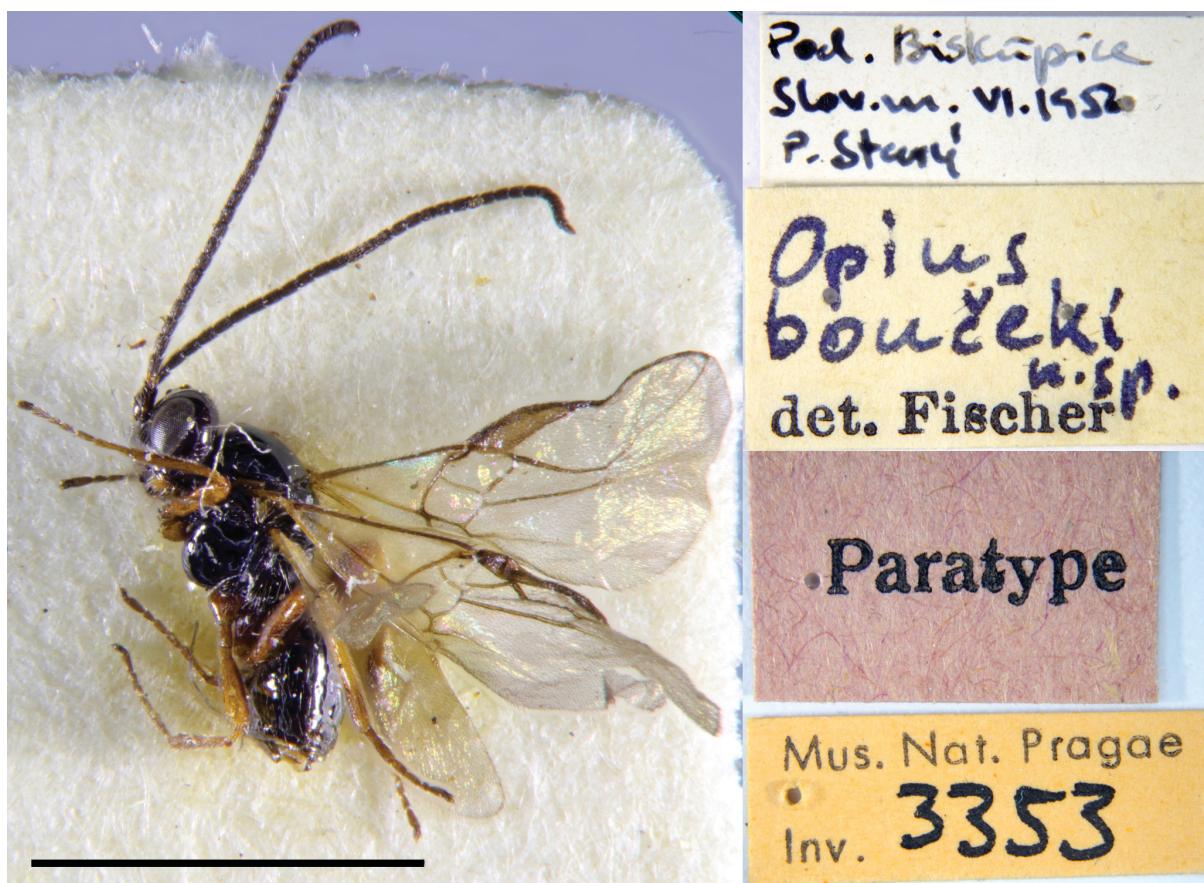


Fig. 14. Paratype of *Opius boučekí* (Fischer, 1958) with its labels (scale bar = 2.5 mm).

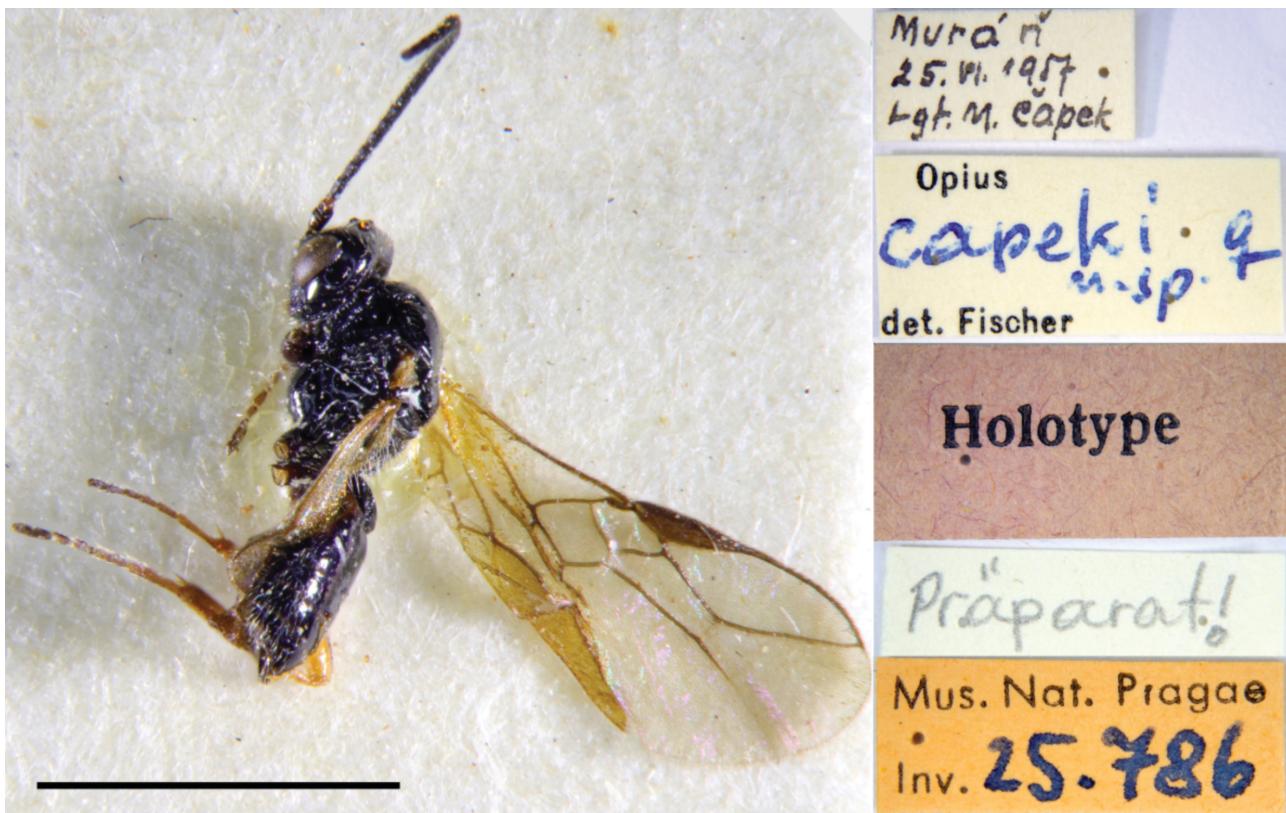


Fig. 15. Holotype of *Opius capeki* Fischer, 1963 with its labels (scale bar = 2.5 mm).

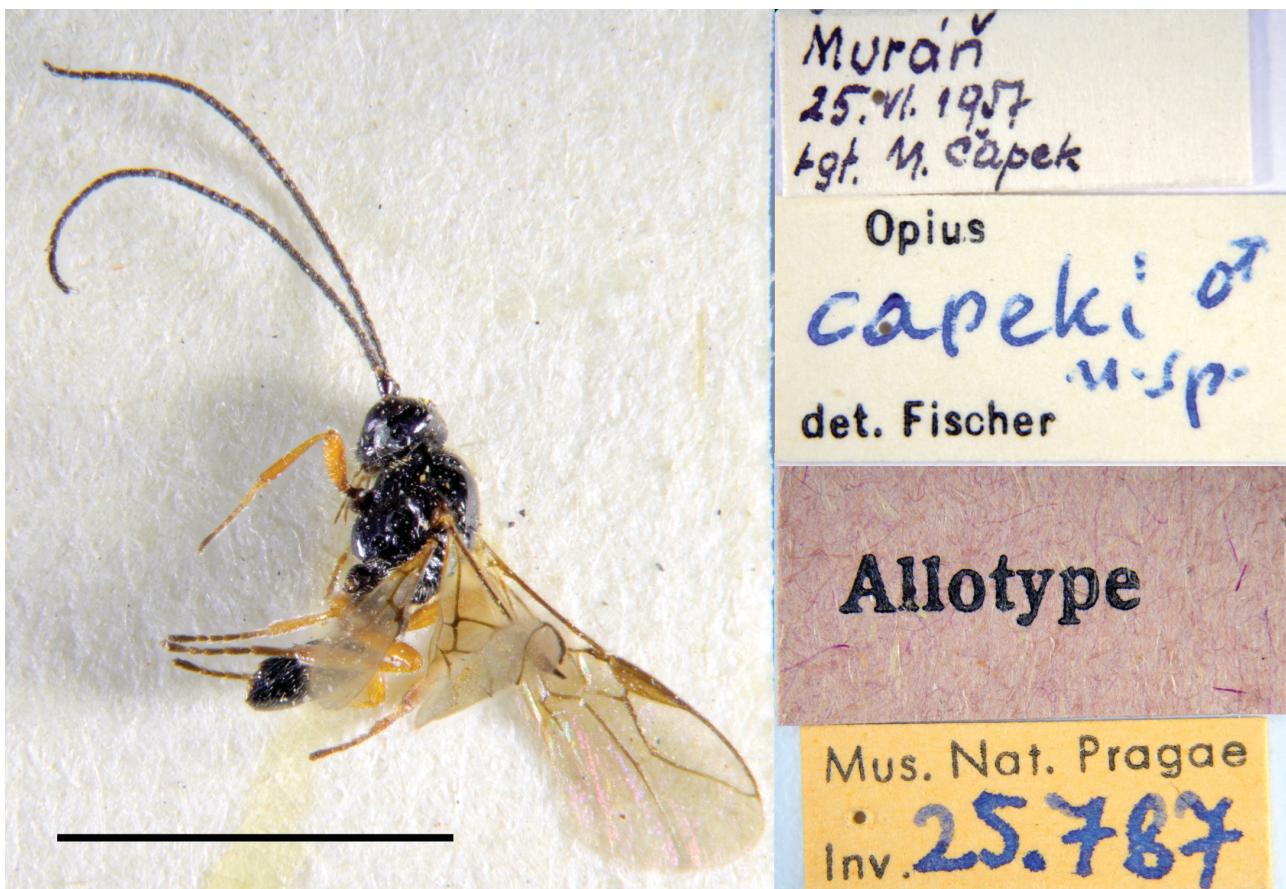


Fig. 16. Allotype of *Opius capeki* Fischer, 1963 with its labels (scale bar = 2.5 mm).



Fig. 17. Holotype of *Opius caudifer* Fischer, 1958 with its labels (scale bar = 2.5 mm).



Fig. 18. Holotype of *Opius curtipectus* Fischer, 1958 with its labels (scale bar = 2.5 mm).



Fig. 19. Holotype of *Opius laetatorius* Fischer, 1958 with its labels (scale bar = 2.5 mm).

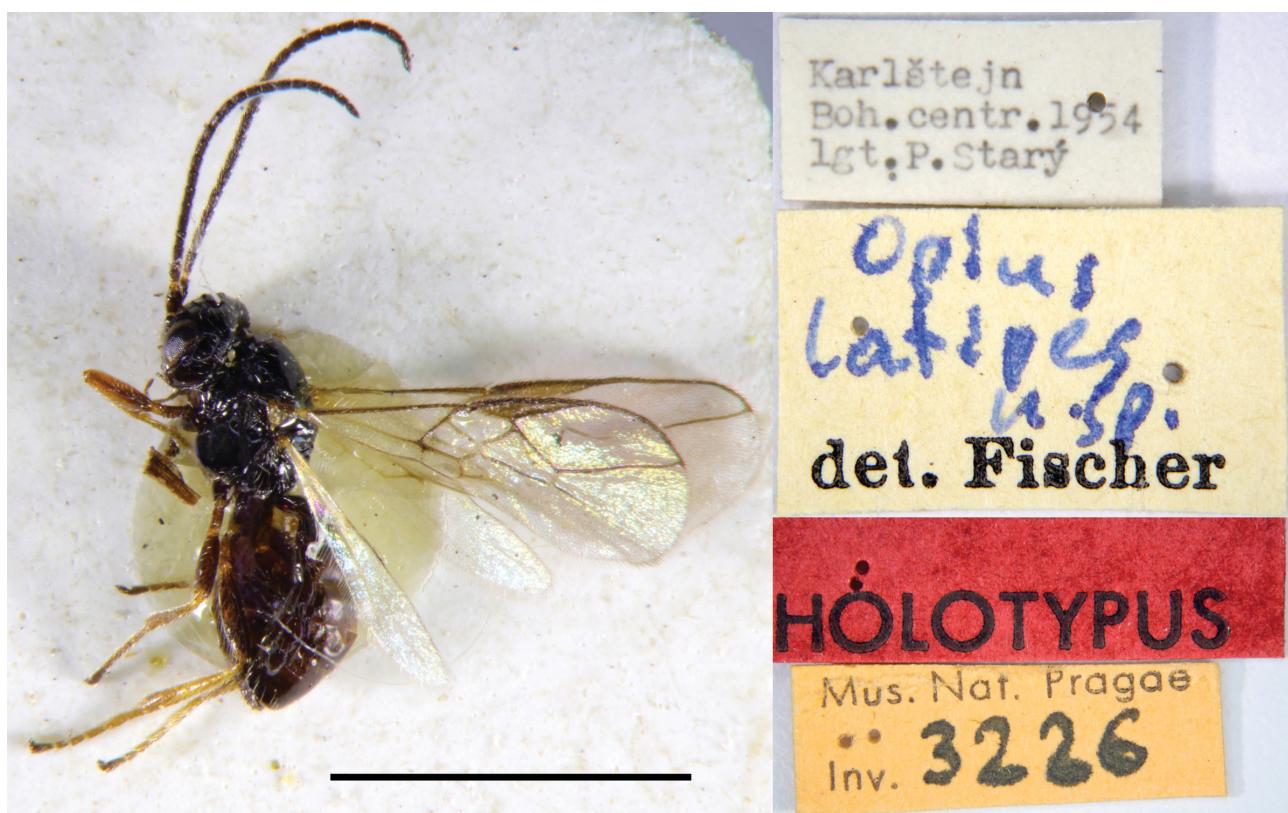


Fig. 20. Holotype of *Opius latipes* Fischer, 1958 with its labels (scale bar = 2.5 mm).



Fig. 21. Holotype of *Opius magnicauda* Fischer, 1958 with its labels (scale bar = 2.5 mm).

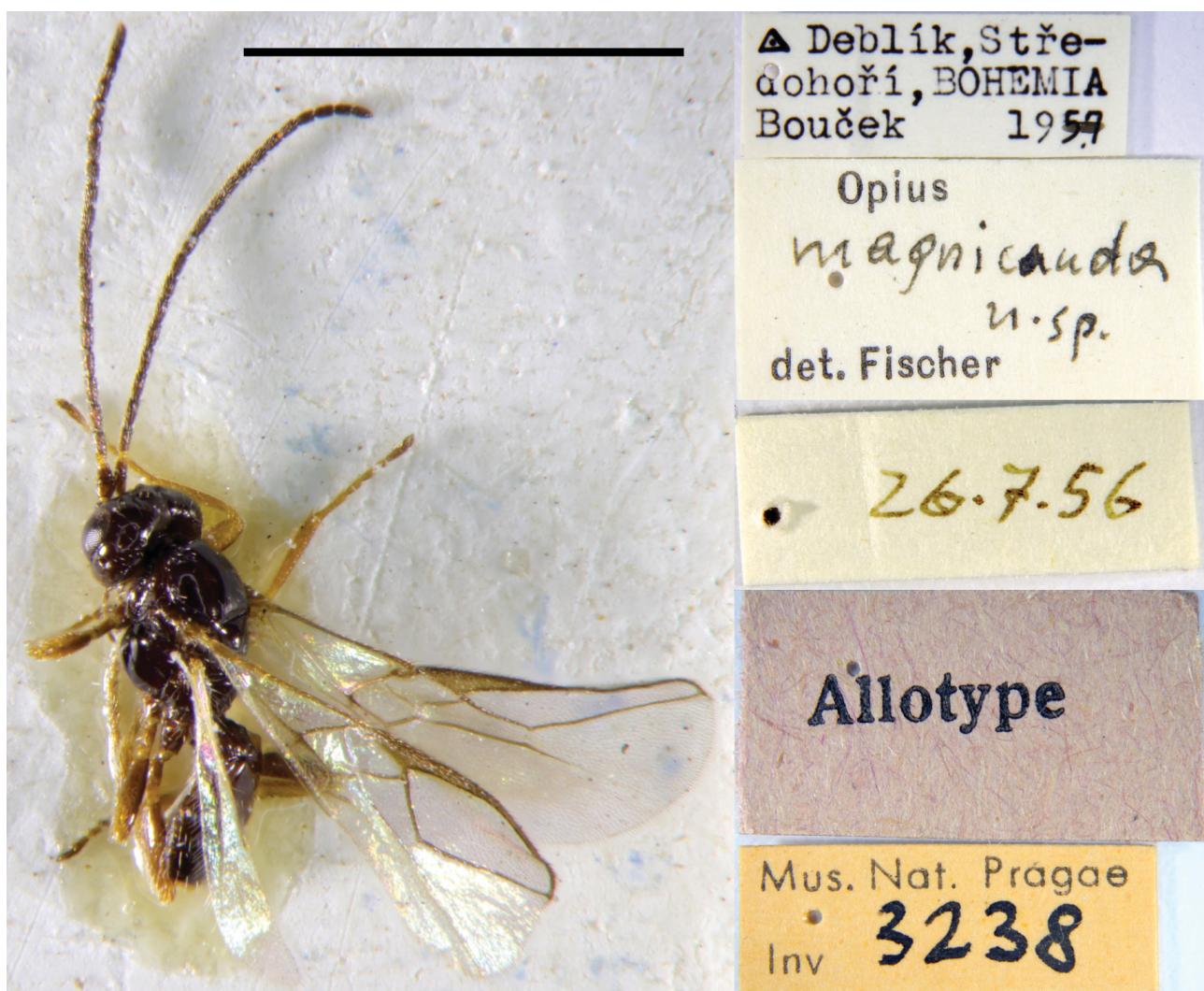


Fig. 22. Allotype of *Opius magnicauda* Fischer, 1958 with its labels (scale bar = 2.5 mm).



Fig. 23. Holotype of *Opies minor* Fischer, 1957 with its labels (scale bar = 2.5 mm).



Fig. 24. Holotype of *Opies moravicus* Fischer, 1960 with its labels (scale bar = 2.5 mm).



Fig. 25. Holotype of *Opius nigricinctus* Fischer, 1957 with its labels (scale bar = 2.5 mm).

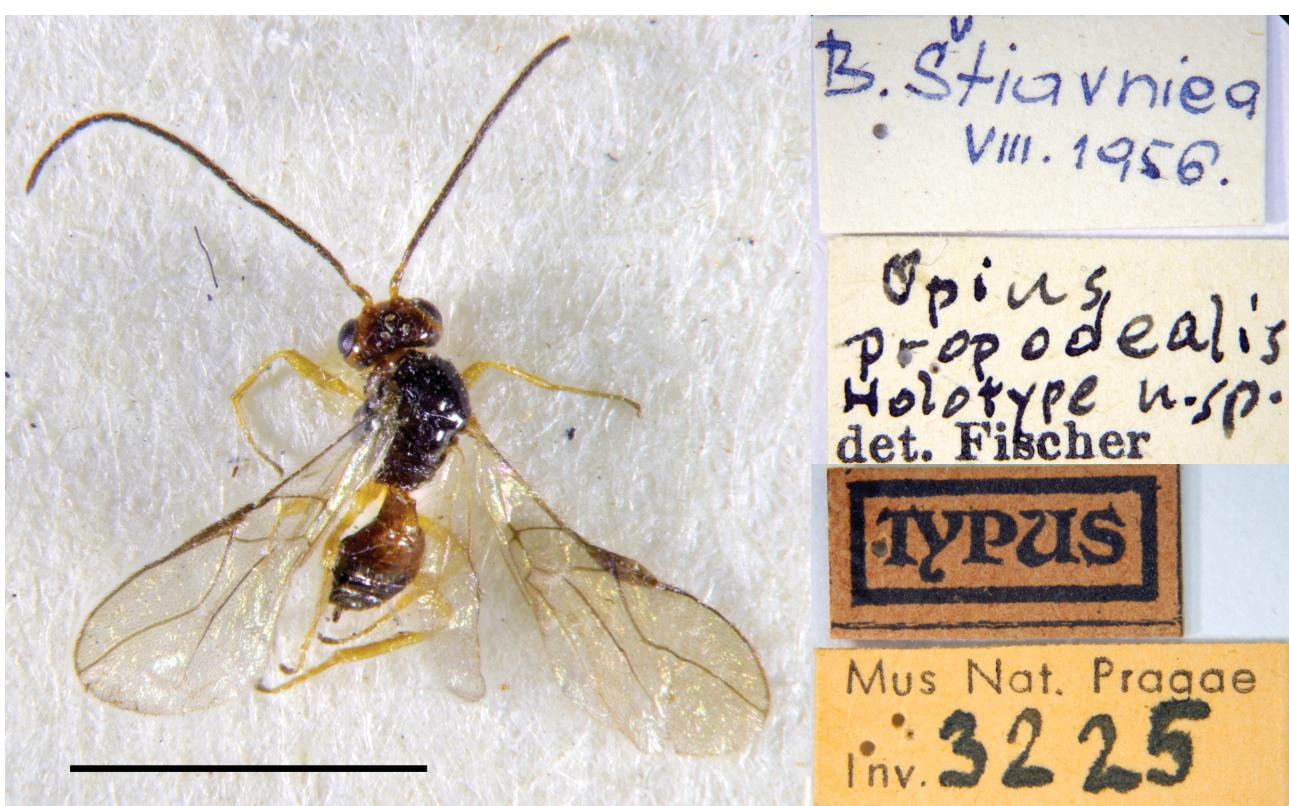


Fig. 26. Holotype of *Opius propodealis* Fischer, 1958 with its labels (scale bar = 2.5 mm).



Fig. 27. Holotype of *Opius pulchriventris* Fischer, 1958 with its labels (scale bar = 2.5 mm).



Fig. 28. Holotype of *Opius staryi* Fischer, 1958 with its labels (scale bar = 2.5 mm).



Fig. 29. Paratype of *Orgilus achterbergi* Taeger, 1989 (scale bar = 2.5 mm).

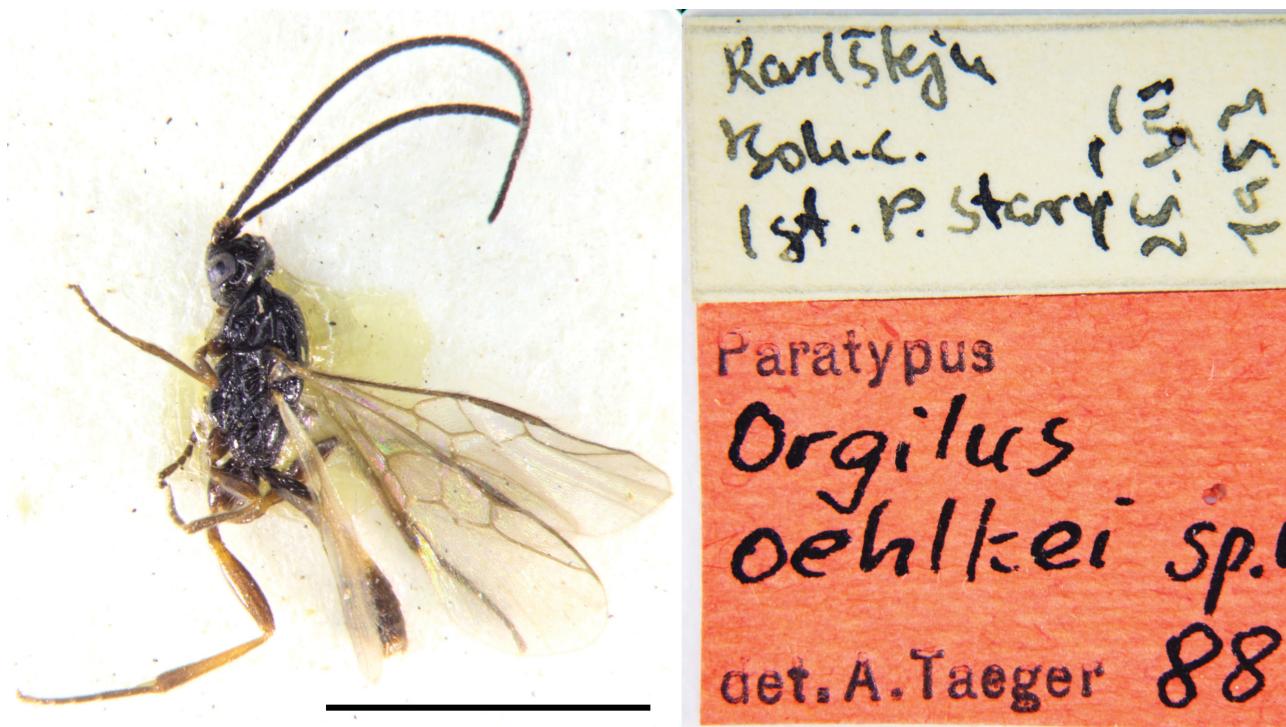


Fig. 30. Paratype of *Orgilus oehlkei* Taeger, 1989 (scale bar = 2.5 mm).

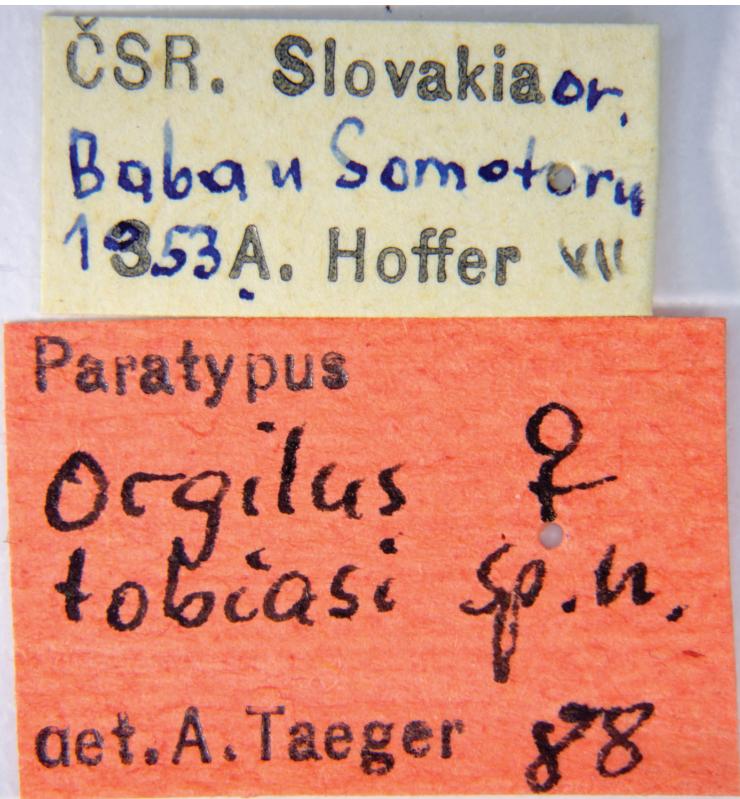


Fig. 31. Paratype of *Orgilus tobiasi* Taeger, 1989 (female) (scale bar = 2.5 mm).

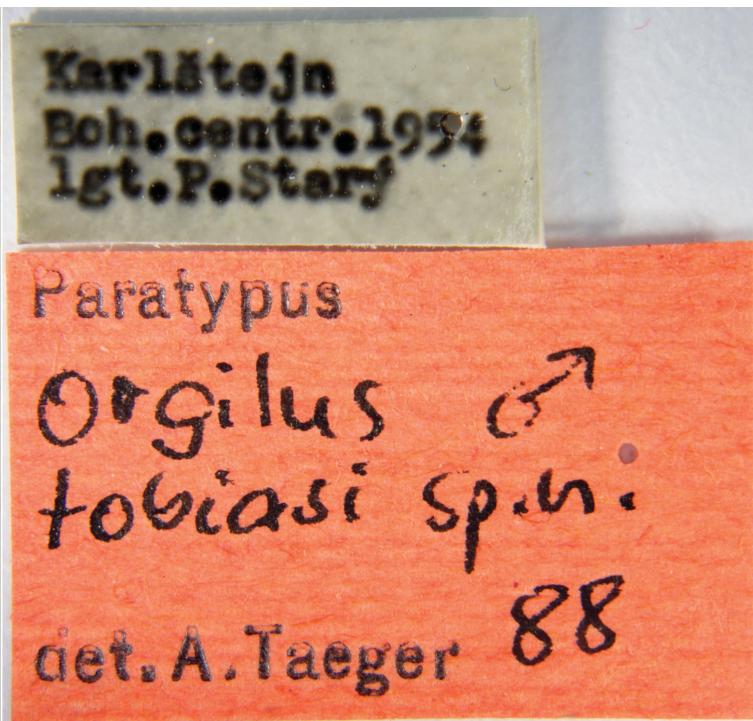


Fig. 32. Paratype of *Orgilus tobiasi* Taeger, 1989 (male) (scale bar = 2.5 mm).

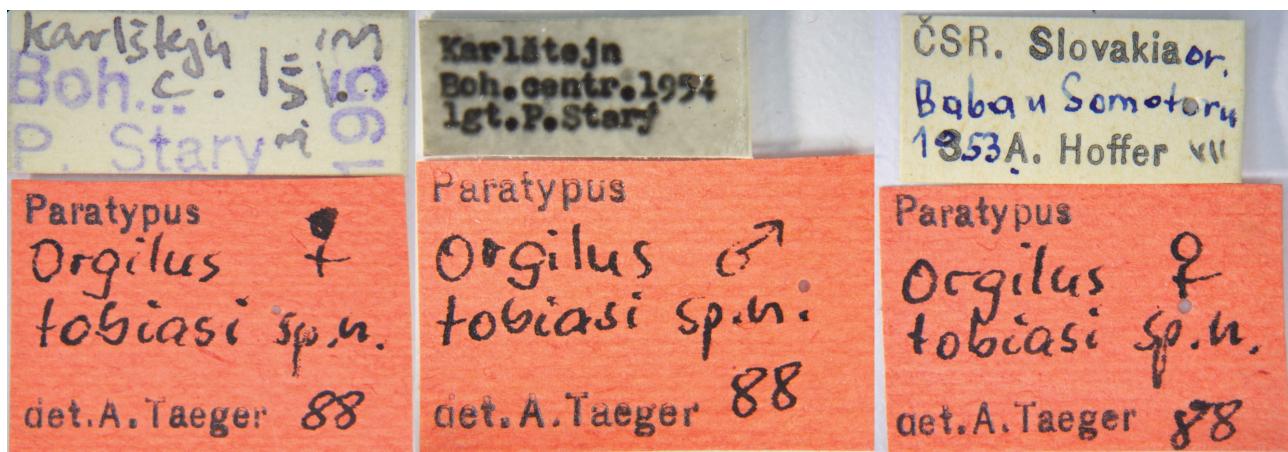


Fig. 33. Different types of locality labels used by P. Starý in 1950s and locality label used by A. Hoffer with paratype labels by A. Taeger.

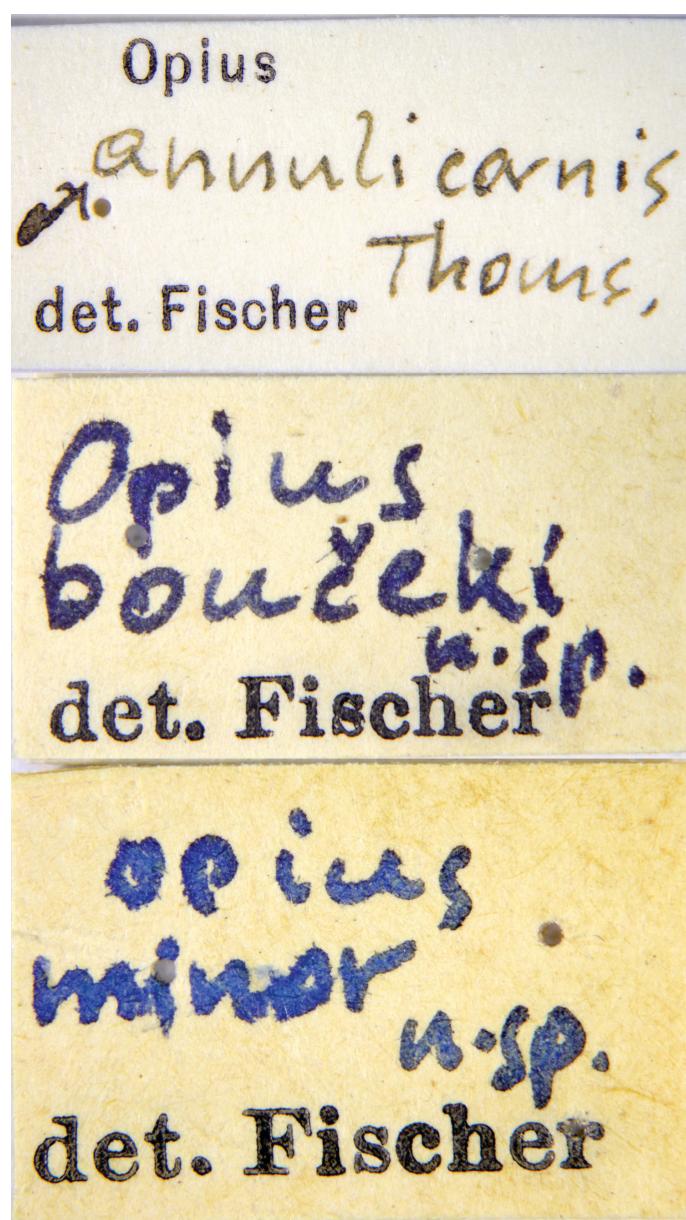


Fig. 34. Characteristic determination labels used by Maximilian Fischer which are under the type material deposited in NMPC.



Fig. 35. Different type labels used by Maximilian Fischer for material stored in NMPC.