

**Braconidae (Hymenoptera) from Tunisia, 4. Fourteen subfamilies\***

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**Abstract** – One hundred and twenty-seven braconid species belonging to 14 subfamilies are reported from Tunisia. Two species are described as new: *Bracon (Glabrobracon) flavobasis* sp. n. (Braconinae) and *Pholetesor moczari* sp. n. (Microgastrinae), their descriptions and nearest allies are presented. Ninety-eight species are new to the fauna of Tunisia, one species, *Frekius barbieri* (Fischer, 1962) (Opiinae) is new to Spain. With 31 figures.

**Key words** – Braconidae, Tunisia, North Africa, faunistic records, new species

INTRODUCTION

This contribution is the final (or concluding) part of my series (PAPP 1979, 1981a, 1990) on the Tunisian braconid wasps. The 127 braconid species listed here-under belong to the following 14 subfamilies (with numbers of species): Agathidinae 9, Alysini 14 (Alysiini 7, Dacnusiini 7), Blacinae 1, Brachistinae 9, Braconinae 26 (one new), Cheloninae 10, Euphorinae 4, Helconinae 3, Homolobinae 1, Hormiinae 2, Microgastrinae 36 (one new), Opiinae 9, and Rogadinae 3. The number of the braconid species new to the fauna of Tunisia is 98, i.e. 78.4% of the total species number of the whole family (127). The bulk of the investigated braconid material is deposited in the Hungarian Natural History Museum, Budapest (HNHM); further studied Tunisian braconids are housed in the Zoological Museum, Lund University (ZMLU), in the Natural History Museum, London (NHML), in the Zoologisches Museum, Humboldt Universität, Berlin (ZMB), in the Naturhistorisches Museum, Wien (NMW), and in the private collection of C. Schmid-Egger (Berlin) (CSE).

The Tunisian braconid material of the HNHM was collected by zoologists of the museum in 1977 (March to April and September). In their two reports on the collecting trips (GOZMÁNY & MAHUNKA 1977, MAHUNKA & MAHUNKA-

\* The paper is dedicated to Dr László Móczár, doyen of the Hungarian hymenopterists, celebrating his 100th birthday.

PAPP 1978) a list of the collecting sites was presented, complemented with dates and methods. The numbered collecting localities are referred in the subsequent faunistic list of the species.

#### LIST OF THE BRACONID SPECIES FROM TUNISIA

The collectors' names are given in an abbreviated form: AP = Attila Podluszányi, GJK = G. J. Kerrich, KMG = K. M. Guichard, LB = Lajos Bíró, LG = László Gozmány, LM = Lujza Mahunka, M = Madl, MO = M. Olsson, R = Ruschka, RD = Roy Danielsson, SCHE = C. Schmied-Egger, SM = Sándor Mahunka, Z = P. Zobrys.

An asterisk (\*) indicates that the species is new to the fauna of Tunisia.

Where not indicated the depository is the Hungarian Natural History Museum, Budapest.

Where not indicated the distributional data of the species are presented after YU *et al.* (2012).

The taxon names (subfamilies, genera, species) are listed according to their alphabetic orders.

#### Agathidinae

\**Agathis fulmeki* Fischer, 1957 – 1 ♂: Karthago, 13.IV.1913, unknown collector. – Widely distributed in the western Palaearctic Region, closest to Tunisia known from Morocco, Spain, Greece and Turkey.

\**Agathis malvacearum* Latreille, 1805 – 1 ♂ (ZMLU): N of Sfax, 2 km East of Djebeniana, 11.IV.1994, RD. – Frequent in the western Palaearctic Region, in the Mediterranean Subregion a common species, closest to Tunisia known from several South European countries.

\**Agathis nigra* Nees, 1812 – 1 ♀ + 1 ♂ (ZMLU): N of Sfax, 2 km E from Djebeniana, 11.IV.1994, RD. – Its distribution is similar to that of *A. malvacearum*.

\**Agathis rufipalpis* Nees, 1812 – 1 ♂ (ZMLU): N of Sfax, 2 km East of Djebeniana, 11.IV.1994, RD. – Widely distributed in the western Palaearctic Region, closest to Tunisia known from Sardinia (Italy) and Spain.

*Agathis umbellatarum* Nees, 1812 – 1 ♀ (ZMB): “Tunis”, 3–5.1912, Z. – First reported from Tunisia by SMITS VAN BURGST (1913), known also from Algeria. In South Europe a common species.

\**Agathis varipes* Thomson, 1895 – 1 ♀: “Tunis”, 3–5.1912, Z. – Deviating feature: metasoma entirely reddish yellow. – Sporadic to frequent in Europe, eastwards distributed to Kazakhstan and Mongolia; closest to Tunisia known from Italy and Greece (Crete).

\**Bassus tumidulus* (Nees, 1812) – 1 ♂: 1 km E of Tabarka, 9.IV.1994, RD. – Common in Europe, closest to Tunisia known from Morocco, Italy (Sardinia, Sicily) and Greece (Crete).

\**Disophrys caesa* (Klug, 1835) – 2 ♀: “Tunis” 1898, leg. Schmiedeknecht. 1 ♂ (ZMB): Mukavis. – Widely distributed in South Europe, eastwards reported from Turkey and Iran. Closest to Tunisia known from Algeria, Morocco.

\**Earinus elator* (Fabricius, 1804) – 1 ♂: 8 km NE of Nafza, 10.IV.1994, RD. – The male specimen represents the albinic form (“var. *thoracicus*”) of the species: mesoscutum + scutellum black (nominative form) or reddish yellow (albinic form). Frequent in South Europe, closest to Tunisia known from Italy and France (Corse).

#### Alysiinae: Alysiini

\**Dinotrema imparidens* (Fischer, 1974) – 1 ♀ (*Aspilota delicata* Fischer, det. T. Munk 2001): Nebeur, about 30 km N from El Kef, 30.III.1977, SM (loc. no. 35). – Deviating features: antenna with 18 antennomeres, 17th antennomere 1.8 times as long as broad. Hind femur 3.8 as long as broad. First tergite 1.9 times as long as broad posteriorly. Described from Austria, known also from Hungary.

\**Dinotrema paucicrenis* (Fischer, 1973) – 1 ♂: El Kef, in the town and along its southern border (along railway track), taken from weedy vegetation along track and ditch borders, 2.IV.1977, LG & SM (loc. no. 46). – Described from Ötztaler Tirol (Austria), known from Hungary, Greece, Spain and Korea.

*Dinotrema significarum* (Fischer, 1973) – 1 ♀: Boughara, garden of agricultural college, singled from ground surface, 3.IV.1977, SM (loc. no. 58). – Described from Austria, known from Hungary, Greece, Spain, Iran and Korea. First recorded from Tunisia by PERIS-FELIPO (2013: 420).

\**Phaenocarpa conspurcator* (Haliday, 1838) – 1 ♀ (ZMLU): 10 km SW of Bizerta, 7.IV.1994, RD. – Frequent to common in Europe, closest to Tunisia known from Italy.

*Synaldis distracta* (Nees, 1834) – 1 ♂: “Tunis” leg. Hoegen. 1 ♂: Gafsa, III.1903, LB. – Frequent to common in Europe, reported from Tunisia.

*Synaldis fraudulentula* Papp, 1981 – 1 ♀: 2 km W of La Hencha, taken from *Ferula* flowers, 9.IV.1977, SM (loc. no. 93). – Described from Tunisia, reported also from Hungary.

\**Synaldis perfida* Fischer, 1970 – 1 ♀ (ZMLU): 12 km E from Mateur, 12.IV.1994, RD. – Described from Austria, known also from Hungary.

#### Alysiinae: Dacnusiini

\**Chorebus anitus* (Nixon, 1943) – 1 ♂: Tozeur, taken from undergrowth of palm plantation, 16.IV.1977, SM (loc. no. 119). – Its known distribution is sporadic: Great Britain, Sweden, Hungary, former Yugoslavia, Ukraine, Kazakhstan.

\**Chorebus baeticus* Griffiths, 1967 – 1 ♂: Gafsa, III.1903, LB. – In South Europe known in a few countries, closest to Tunisia in Spain.

\**Chorebus mucronatus* (Telenga, 1934) – 1 ♂: Hamam-el-Lif, 10.IV.1913. – Known from several countries of the Palaearctic Region as far as Mongolia, closest to Tunisia known from Crete (Greece) and Macedonia.

\**Chorebus myles* (Nixon, 1943) – 7 ♀: 2 km W from La Hencha, taken from *Ferula* flowers, 9.IV.1977, SM (loc. no. 93). – NIXON (1943: 163, 1946: 292) described from “Germany: Probably neighbourhood of Berlin” on the basis of two female specimens. TOBIAS (1986a: 181) reported it from Ukraine and Azerbaijan; known also from Serbia (YU *et al.* 2012). In the HNHM there are specimens from Hungary (1 ♀) and Turkmenistan (1 ♂).

\**Chorebus orbiculatae* Griffiths, 1967 – 1 ♀: “Tunis”. – Currently known from Ireland, Great Britain, Spain, Ukraine and Asiatic Russia (Primorsky Krai).

\**Chorebus thusa* (Nixon, 1937) – 1 ♀: Mahares, near Sfax, III.1903, LB. – The female specimen represents an albinic form: nominate form black coloured, the single Tunesian female’s ground corporal colour is rusty brown. Known from Ireland, Great Britain, Sweden, Denmark, Czechia, Hungary, European Russia (Sankt-Petersburg) and Mongolia.

\**Protodacnusa tristis* (Nees, 1834) – 2 ♀: El Kef, in the town and along its southern border (along railway track), taken from weedy vegetation along track and ditch borders, 2.IV.1977, SM. – A fairly frequent species in the Palaearctic Region as far eastwards as Kazakhstan and Tajikistan. Closest to Tunisia known from Spain and Turkey.

#### Blacinae

\**Blacus rufescens* Ruthe, 1861 – 1 ♂ (ZMLU): N of Soussa, 3 km S of Hergla, 12.IV.1994, RD. 5 ♂ (4 ♂ ZMLU): 25 km S of Kairouan, 11.IV.1994, RD. – Frequent in Central Europe, Sweden and European Turkey.

#### Brachistinae (= Calyptinae)

\**Eubazus (Brachistes) gallicus* (Reinhard, 1867) – 1 ♂: Zagchouan, Si Naoul, 27.V.1995, AP. – Frequent in Europe, eastwards distributed as far as Kazakhstan; closest to Tunisia known from Italy and Greece.

\**Eubazus (Brachistes) gigas* (Fahringer, 1925) – 1 ♀ (ZMLU): 25 km SW from Bizerta, 10.IV.1994, RD. – Described from Montenegro, reported also from Serbia, Hungary, Slovakia, Romania (Transylvania).

\**Eubazus (Brachistes) parvulus* (Reinhard, 1867) – 2 ♀ (ZMLU): 25 km S of Kairouan, 11.IV.1994, RD. – In the western Palaearctic Region known from

several countries of Europe eastwards as far as Kazakhstan; closest to Tunisia reported from Greece (PAPP 1999).

\**Schizoprymnus bidentulus* (Szépligeti, 1901) – 1 ♀ + 1 ♂: Béja, Testour, 28.V.1995, AP. – Described from Hungary, reported also from six countries of Europe, closest to Tunisia known from Bulgaria and Serbia.

*Schizoprymnus obscurus* (Nees, 1816) – 1 ♂: N of Sousse, 3 km S of Hergia, 12.IV.1994, RD. 1 ♂ (ZMLU): 3 km S of El Fahs, 11.IV.1994, RD. – Frequent to common in the Palaearctic Region, reported from Tunisia (PAPP 1981a: 157), known also from Morocco.

\**Schizoprymnus parvus* (Thomson, 1891) – 1 ♀: Sfax, leg. LB. 1 ♀: 2 km W of La Hencha, taken from *Ferula* flowers, 9.IV.1977, SM (loc. no. 93). 1 ♀ (ZMLU): 12 km NE from Matour, 7.IV.1994, RD. – Widely distributed in the Palaearctic Region (eastwards to Mongolia), closest to Tunisia known from Greece.

\**Schizoprymnus pullatus* (Dahlbom, 1833) (= *Sigalphus rufipes* Herrich-Schäffer, 1838; = *Sigalphus globosus* Szépligeti, 1898) – 1 ♀: 2 km W from La Hencha, taken from *Ferula* flowers, 9.IV.1977, SM (loc. no. 93). – In Europe known from six countries, eastwards as far as Kazakhstan and Iran; closest to Tunisia known from Croatia.

\**Triaspis obscurellus* (Nees, 1816) – 1 ♀: 3 km S Hergia, 12.IV.1994, leg. RD. 1 ♀ + 1 ♂: N of Sfax, 2 km E of Djebeniana, 11.IV.1994, leg. RD. 2 ♀ + 8 ♂: Zaghuan Si Naoul, 27.V.1995, AP. 1 ♂: Kairouan, El Aorussa, 28.V.1995, AP. – Widely distributed in the western Palaearctic Region, closest to Tunisia known from Spain, Italy and Greece.

\**Triaspis pallipes* (Nees, 1816) – 2 ♀ + 1 ♂ (1 ♀ + 1 ♂ ZMLU), 25 km S of Kairouan, 11.IV.1994, RD. – The most frequent *Triaspis* species in the Palaearctic Region, closest to Tunisia known from Italy.

#### Braconinae

\**Bracon (Glabrobracon) abbreviator* Nees, 1834 – 1 ♀ (ZMLU): N of Sousse, 3 km S of Hergla, 12.IV.1994, RD. – Frequent to common in Europe, closest to Tunisia known from Algeria and Morocco.

*Bracon (Palpibracon) atrator* Nees, 1834 – 1 ♂ (ZMLU): 25 km S of Kairouan, 11.IV.1994, RD. 4 ♀ + 1 ♂ (3 ♀ ZMLU): N of Sousse, 3 km S of Hergla, 12.IV.1994, RD. 1 ♀ (ZMLU): 17 km SE of Zaghuan, 12.IV.1994, RD. – Widely distributed and frequent to common in the Palaearctic Region.

\**Bracon (Palpibracon) delibator* Haliday, 1833) (= *Bracon anthracinus* Nees, 1834) – 2 ♀ + 2 ♂ (ZMLU): 1 km E of Tabarka, 8–9.IV.1994, RD. 1 ♀ (ZMLU): Khadaira, 9 km S of Tabarka, 8.IV.1994, RD. 1 ♀ (ZMLU): 25 km S of Kairouan, 11.IV.1994, RD. 1 ♂: Kairouan, El Aorussa, 28.V.1995, AP. – Frequent to common

in the western Palaearctic Region, closest to Tunisia known from Spain, Italy, Greece (Crete) and Turkey.

*Bracon (Glabrobracon) dichromus* Wesmael, 1838 (melanic form: “var. *maculiger*” by WESMAEL 1838: 50 as species, as variety by PAPP 2012: 14): 2 ♀ (1 ♀ ZMLU): N of Sousse, 3 km S from Hergla, 12.IV.1994, RD. 1 ♀: 12 km E from Mateur, 12.IV.1994, RD. – In southern half of Europe frequent to common.

\**Bracon (Lucobracon) erraticus* Wesmael, 1838 (melanic form: “var. *supercilius*” by WESMAEL 1838: 35 as species, as variety by PAPP 2012: 26): 1 ♂ (ZMLU): 3 km S of El Fahs, 11.IV.1994, RD. 1 ♂ (ZMLU): N of Sousse, 3 km S of Hergla, 12.IV.1994, RD. – A common *Bracon* species in the Palaearctic Region, first reported in northern Africa .

*Bracon (Lucobracon) femoralis* Brullé, 1832 (= *Bracon hedwigae* Schmiedeknecht, 1896) – 1 ♀ (ZMLU): 17 km SE from Zaghuan, 7.IV.1994, RD. 1 ♀: N of Sfax, 2 km E from Djebeniana, 11.IV.1994, RD. – Deviating feature: hind femur lemon yellow. A fairly frequent species in the Mediterranean Subregion, reported from Tunisia (PAPP 1990: 91 under the name *B. hedwigae*).

\****Bracon (Glabrobracon) flavobasis*** sp. n. – See in the section “Descriptions of two new species”.

*Bracon (Bracon) fulvipes* Nees, 1834 – 1 ♀ (ZMLU): 1 km S Tabarka, 8.IV.1994, RD. – One of the most common *Bracon* species in the Palaearctic Region. First reported from Tunisia by PAPP (1990: 91).

\**Bracon (Bracon) leptus* Marshall, 1897 – 3 ♀ (2 ♀ ZMLU): 12 km E of Tabarka, 9.IV.1994, RD. 1 ♀ + 2 ♂ (1 ♀ + 1 ♂ ZMB): “Tunis” 3.V.1912, Z. – Widely distributed in the Palaearctic Region, in southern half of Europe frequent to common, closest to Tunisia known from Sicily (Italy) and Crete (Greece).

*Bracon (Bracon) luteator* Nees, 1834 (melanic form: “var. *nigripedator*” by NEES 1834: 116 as species, as variety by PAPP 1990: 91): 1 ♀: Hammamet, 6.IV.1964, GJK. 1 ♂ (ZMLU): N of Sousse, 3 km S Hergla, 12.V.V.1994, RD. – Widely distributed and frequent to common in the western Palaearctic Region.

*Bracon (Glabrobracon) minutator* (Fabricius, 1798) (= *Bracon thalassinus* Schmiedeknecht, 1896) – 1 ♀ (ZMLU): 17 km SE of Zaghuan, 7.IV.1994, RD. 1 ♀: N of Sousse, 3 km S Hergla, 12.IV.1994, RD. 1 ♀ + 5 ♂ (1 ♀ + 3 ♂ ZMLU): 12 km E of Mateur, 12.IV.1994, RD. – Widely distributed and frequent to common in the western Palaearctic Region.

*Bracon (Glabrobracon) obscurator* Nees, 1812 – 1 ♀ (ZMLU): N of Sousse, 3 km S Hergla, 12.IV.1994, RD. – Widely distributed and frequent to common in the western Palaearctic Region.

\**Bracon (Bracon) obscuricornis* Szépligeti, 1896 – 2 ♀ (ZMB): “Tunis”, 3.V.1912, Z. – Widely distributed in the Mediterranean Subregion, closest to Tunisia known from Italy and Israel.

\**Bracon (Osculobracon) osculator* Nees, 1812 – 1 ♂ (NMW): “Tunis”, V–VI.1918, R. 1 ♂ (ZMLU): 12 km E of Mateur, 12.IV.1994, RD. – One of the most common *Bracon* species in the Palaearctic Region, first reported in northern Africa: closest to Tunisia known from Italy and Greece.

\**Bracon (Glabrobracon) otiosus* Marshall, 1885 – 1 ♀ (ZMLU): Khadaira, 9 km S of Tabarka, 8.IV.1994, RD. – In Europe frequent, closest to Tunisia known from Greece.

\**Bracon (Glabrobracon) pachyceri* Quintaret, 1912 – 1 ♀: 2 km W from La Héncha, 9.IV.1977, SM. – Described from France (Marseille), reported from Sweden, Hungary, Czechia, Bulgaria and Turkey.

*Bracon (Bracon) pectoralis* Wesmael, 1838 – 1 ♀ (ZMB): “Tunis”, 3.V.1912, Z. 1 ♂ (NHML): Tabarka, 5 VIII 1978, KMG. 1 ♀ (ZMLU): 1 km S of Tabarka, 9.IV.1994, RD. 1 ♀ (ZMLU): N of Sfax, 2 km E from Djebeniana, 11.IV.1994, RD. 2 ♀ (1 ♀ ZMLU), N of Sousse, 3 km S from Hergla, 12.IV.1994, RD. – Widely distributed and frequent to common in the western Palaearctic Region.

*Bracon (Glabrobracon) sanctaerucis* Schmiedeknecht, 1897 – 1 ♂ (ZMLU): N of Sousse, 3 km S from Hergla, 12.IV.1994, RD. – It seems to be a true Mediterranean species: described from Algeria, reported from Tunisia, Spain, Greece and former Yugoslavia.

\**Bracon (Bracon) subrugosus* Szépligeti, 1901 – 1 ♂ (ZMLU): 12 km E of Tabarka, 9.IV.1994, RD. 1 ♂ (ZMLU): 4 km E of Ain Sebaa, 23 km E from Tabarka, 9.IV.1994, RD. – Distributed rather sporadically in Europe. For taxonomic position see in PAPP (2008: 1779).

\**Bracon (Glabrobracon) tekkensis* Telenga, 1936 – 1 ♀: Bou Hedma, 10.IV.1976, MO. 2 ♀ (ZMLU): 12 km E of Mateur, 12.IV.1994, RD. – Described from Turkmenistan, reported from Greece, Hungary, Macedonia and Turkey.

*Bracon (Cyanopterobracon) urinator* (Fabricius, 1798) – 3 ♀ + 4 ♂ (ZMB): “Tunis” 3.V.1912, Z. 1 ♂ (ZMLU): 25 km S of Kairouan, 11.IV.1994, RD. 2 ♂ (ZMLU): 3 km S El Fahs, 11.IV.1994, RD. 3 ♀ + 7 ♀ (3♀ + 6 ♂ ZMLU): N of Sousse, 3 km S of Hergla, 12.IV.1994, RD. 3 ♀ (in Coll. Schnee): 5 km from El Kef, Tu-kef, taken from *Eryngium* flower, 22 VI 1994, SCHE. 1 ♀ (in Coll. Schnee): 40 km W from Jeadouba, Ain Soltane, Feidja, 25 VI 1994, SCHE. – Widely distributed and frequent to common in the forest steppe zone of the Palaearctic Region.

*Bracon (Glabrobracon) variator* Nees, 1812 – 2 ♂ (ZMLU): 25 km S Kairouan, 11.IV.1994, RD. 1 ♀ (ZMLU): 12 km E from Mateur, 12.IV.1994, RD. 1 ♀ (1 ♀ ZMLU): N of Sousse, 3 km S from Hergla, 12.IV.1994, RD. – Widely distributed and frequent to common in the Palaearctic Region.

*Bracon (Bracon) variegator* Spinola, 1808 – 1 ♀ (ZMLU): 8 km NE from Nafza, 10.IV.1994, RD. 1 ♂ (ZMLU): 12 km E from Mateur, 12.IV.1994, RD. – Frequent to common in Europe.

*Glyptomorpha pectoralis* (Brullé, 1846) – 1 ♂ (ZMLU): 4 km E of Ain Sebaa, 23 km E from Tabarka, 9.IV.1994, RD. 2 ♀ + 1 ♂ (CSCH): 10 km of Gabés, Oasengarten, 18 VI 1994, SCHE. 2 ♀ (CSCH): Gafsa, Oasengarten, 21 VI 1994, SCHE. 1 ♀ (CSCH): 15 km S from Monastir, 27 VI 1994, SCHE. 1 ♀ (CSCH): 25 km S of Bizerte, Lac Ichkeul, Nordufer, 26 VI 1994, SCHE. 3 ♀ + 3 ♂ (CSCH): 10 km SE Foum, Tataouine, 10°30'E / 32°51'N, 25 III 2001, SCHE. – Frequent to common in the semidesert / forest steppe zone of the Palaearctic Region.

*Habrobracon concolorans* (Marshall, 1900) (= *H. nigricans* Szépligeti, 1901) – 1 ♂: Kairouan, El Aorussa, 28.V.1995, AP. – Frequent to common in the Palaearctic Region, reported from Tunisia under then name *H. nigricans* (PAPP 1990: 92).

\**Iphiaulax impostor* (Scopoli, 1763) (albinic form “var. *rufosignatus*” by KOKUJEV 1898: 404 as *Vipio (Iphiaulax) impostor rufosignatus*, as variety by TELENGA 1936: 114): 1 ♀ (CSCH): 15 km Gabés, Quod el Akarit, Tu-gaq Wadi, 18 VI 1994, SCHE. 1 ♀ (CSCH): Chott el Djerid, 5 km N of El Faouar, 33°26'N / 08°41'E, 10 VI 2000, SCHE. – In northern Africa known from Algeria and Morocco, widely distributed in the Palaearctic Region; the albinic form frequent in the Mediterranean Subregion.

#### Cheloninae

\**Ascogaster klugii* (Nees, 1816) – 1 ♀ (ZMLU): 8 km NE from Nafza, 10.IV.1994, RD. – In West Europe widely distributed, closest to Tunisia known from Italy.

\**Chelonus ocellatus* Alexeev, 1971 – 1 ♀: Bou Hedma, 11.IV.1994, MO. – Described from Turkmenistan, known from Crimea (Ukraine), Hungary and Slovakia.

\**Chelonus productus* Herrich-Schäffer, 1838 – 1 ♀: Gafsa, 22.III.1903, LB. 1 ♀ (ZMLU): 12 NE from Mateur, 7.IV.1994, RD. – In the western Palaearctic region known from six countries, closest to Tunisia in Crete (Greece) and Cyprus.

\**Chelonus subannulatus* Abdinbekova, 1971 – 2 ♂ (1 ♂ ZMLU): N of Sousse, 3 km S from Hergla, 7–12.IV.1994, RD. – Described from Azerbaijan, known from Hungary and Slovakia. TOBIAS (2011: 434) placed the name *Ch. subannulatus* in junior synonymy with *Ch. submuticus*.

\**Chelonus submuticus* Wesmael, 1835 – 1 ♀: Gafsa. – Frequent to common in Europe, in northern Africa so far unknown, closest to Tunisia known from Sicily (Italy) and France.

\**Microchelonus contractus* (Nees, 1816) – 1 ♂ (ZMLU): 25 km SW from Bizerta, 10.IV.1994, RD. – Frequent to common in the Palaearctic region, closest to Tunisia known from Italy and Crete (Greece).

\**Microchelonus incisus* Tobias, 1986 – 1 ♂ (as *M. microphthalmus* Wesmael in Papp 1979: 175): Ca 3 km west from Haffouz, 3.IV.1977, SM (loc. no. 53). – Described from European Russia: Chelyabinsk oblast (Ural Mts), reported from the Netherlands (TOBIAS 2010: 197) and Hungary (PAPP 1996: 146).



\**Microchelonus kopetdagicus* (Tobias, 1966) (= *Chelonus caucasicus* Abdinbekova, 1967) – 1 ♀: Béja, Testour, 28.V.1995, AP. – Widely distributed in the southern half of the western Palaearctic region, closest to Tunisia known from Crete (Greece) and Spain.

*Microchelonus microphthalmus* (Wesmael, 1838) (= *M. dilatatus* Papp, 1971) – 1 ♀: 25 km S from Kairouan, 11.IV.1994, RD. – Frequent in the semidesert-forest steppe zone of the Palaearctic region. Reported from Tunisia (PAPP 1979: 175).

\**Microchelonus nigrtibialis* (Abdinbekova, 1971) – 1 ♀: N of Sousse, 3 km S from Hergla, 12.IV.1994, RD. – Described from Azerbaijan, reported from five European countries (Turkey, Greece, Bulgaria, France and Nederland) (TOBIAS 2010: 129).

#### Euphorinae

\**Leiophron deficiens* (Ruthe, 1856) – 1 ♀ (ZMLU): 12 km E from Mateur, 12.IV.1994, RD. – Known from nine countries of Europe, closest to Tunisia in Greece and Turkey.

*Meteorus rubens* (Nees, 1811) – 1 ♀ + 5 ♂ (ZMLU): 17 km SE of Zaghuwan, 7.IV.1994, RD. – One of the most common braconid species in the Palaearctic Region; reported from Tunisia (PAPP 1979: 176 under the name *M. rubens* var. *leviventris* Wesmael).

\**Perilitus falciger* (Ruthe, 1856) – 1 ♂ (ZMLU): N of Sfax, 2 km E from Djebeniana, 11.IV.1994, RD. – Frequent in many European countries, closest to Tunisia, known from Turkey and France.

\**Townesilitus bicolor* (Wesmael, 1835) – 1 ♀: 17 km SE from Zaghuwan, 7.IV.1994, RD. – In Europe a common euphorine species, closest to Tunisia known from Italy, Greece and Spain.

#### Helconinae

\**Diospilus capito* (Nees, 1834) – 1 ♂: Hoegen. 2 ♀ (1 ♀ ZMLU): N of Sousse, 3 km S from Hergla, 12.IV.1994, RD. – Frequent to common in Europe, in northern Africa reported from Morocco, in South Europe closest to Tunisia known from Italy and Crete (Greece).

\**Diospilus morosus* Reinhard, 1862 – 1 ♀ (ZMLU): 1 km E of Tabarka, 9.IV.1994, RD. – In Europe frequent, reported from 15 countries, closest to Tunisia known from Italy, Greece and Turkey (BEYARSLAN & ÇOBAN 2014: 94).

\**Taphaeus hiator* (Thunberg, 1824) – 2 ♀ (1 ♀ ZMLU): 1 km E of Tabarka, 9.IV.1994, RD. – Distributed in the Holarctic region, closest to Tunisia known from Italy, France, Greece and Turkey (BEYARSLAN & ÇOBAN 2014: 95).

## Homolobinae

\**Homolobus truncatoides* van Achterberg, 1979 – 1 ♀: Boughara, garden of agricultural college, taken with MV lamp at night, 22–16 °C, slight wind, open sky, full moon, 3.IV.1977, LG & SM. – Widely distributed in the Old World, closest to Tunisia known from Egypt, Italy, France, Greece and Turkey.

## Hormiinae

\**Hormius moniliatus* (Nees, 1811) – 1 ♂: Zaghuan, Si Naoul, 27.V.1995, AP. – Frequent to common in the Old World, closest to Tunisia known from Morocco, Italy, France and Greece.

\**Hormius radialis* Telenga, 1941 – 1 ♀ (det. Belokobylskij 2000): Boughara, agricultural college, taken with MV-lamp at night, about 20–15 °C, soft wind, partly overcast sky, 4.IV.1977, LG & SM. – Distributed in the southern part of the western Palaearctic region, closest to Tunisia known from Greece and Spain.

## Microgastrinae

\**Apanteles arcticus* Nixon, 1965 – 1 ♀: Skanés, 10 km Monastir, netted from Chaenopodiaceae, 14.IX.1977, LM & SM (loc. no. 149). – Described from Senegal (NIXON 1965: 112), reported from Turkey.

\**Apanteles metacarpalis* Thomson, 1895 – 1 ♀: 2 km W from La Hencha, taken from *Ferula* flowers, 9.IV.1977, SM (loc. no. 93). – In Europe frequent to common, closest to Tunisia known from Italy and Crete (Greece).

\**Apanteles obscurus* (Nees, 1834) – 1 ♂ (ZMLU): 1 km S of Tabarka, 8.IV.1994, RD. – In Europe common, closest to Tunisia known from several South European countries.

\**Choeras dorsalis* (Spinola, 1808) – 1 (ZMLU): 25 km SW of Bizerte, 10.IV.1994, RD. 1 ♀ (ZMLU): N of Sousse, 3 km S from Hergla, 12.IV.1994, RD. – Common in Europe, closest to Tunisia known from Sardinia, Sicily (Italy) and Crete (Greece).

\**Cotesia judaica* (Papp, 1970) – 5 ♀ + 2 ♂ (3 ♀ + 1 ♂ ZMB): “Tunis”, 3.V.1912, Z. – The Tunisian specimens match the original description (PAPP 1970: 67) and run to this species in PAPP’s key (1987) except pterostigma: that of the Tunisian specimens is 2.6–2.8 times as long as wide, that of the type 3 times. Described from Israel, known from Italy, Hungary, Ukraine and Kazakhstan.

\**Cotesia kazak* (Telenga, 1949) – 1 ♂: Ferme Shitta, Djebell Eddy, about 7 km from El Kef, taken from *Asphodelina* sp., 29.III.1977, LG (loc. no. 34). 1 ♀: Thyna, 12 km on the Gafsa road, singled from seacoast vegetation, 6.IV.1977, SM (loc. no. 76). 2 ♀: 2 km W of La Hencha, taken from *Ferula* flowers, 9.IV.1977, SM (loc. no. 93). – A Palaearctic / Oriental species, closest to Tunisia reported from Greece and Turkey.

\**Cotesia plutellae* (Kurdjumov, 1912) – 1 ♂: “Tunis / Hoegen”. – A common Holarctic species, introduced to other regions. Known from Morocco and Libya.

\**Cotesia telengai* (Tobias, 1972) – 2 ♀: Kairouan, El Aorussa, 28.V.1995, AP. 1 ♂: Zaghouan, Si Naoul, 27.V.1995, AP. – Frequent in the southern part of the western Palaearctic Region, introduced to India and New Zealand. In northern Africa known from Morocco and Algeria.

\**Cotesia vanessae* (Reinhard, 1880) – 1 ♀: Thyna, 12 km on the road to Gafsa, taken from seacoast vegetation, 6.IV.1977, SM (loc. no. 76). – A Palaearctic and fairly frequent species, in northern Africa reported from Morocco.

\**Cotesia zygaeenarum* (Marshall, 1885) – 2 ♀ (ZMLU): N of Sousse, 3 km S from Hergla, 12.IV.1994, RD. 2 ♀: El Kef, 27 III and 2.IV.1977, SM (loc. nos 25 and 46). 1 ♀: Zaghouan, Si Naoul, 27.V.1995, AP. – Distributed in the Palaearctic Region, in Europe frequent, closest to Tunisia known from Italy, Greece and Turkey.

\**Diolcogaster claritibia* (Papp, 1959) (= *Protomicroplitis orontes* Nixon, 1965) – 1 ♀: Carthago, 13.IV.1913. – Known from many western Palaearctic countries, closest to Tunisia from Spain, Greece, Turkey.

\**Dolichogenidea appellator* (Telenga, 1949) – 2 ♀: Thyna, 12 km on the road to Gafsa, taken from marsh vegetation, 6.IV.1977, SM (loc. no. 83). 1 ♀: Degache, agricultural school, taken with MV-lamp at night, 25–15 °C, overcast sky before storm, 15.IV.1977, SM (loc. no. 116). 2 ♀: Skanés, 10 km Monastir, taken from Chenopodiaceae vegetation, 14.IX.1977, SM (loc. no. 149). 1 ♀ + 3 ♂ (2 ♂ NMW): Oase Grat bei Douz, 14.IV.1986, M. – Frequent in the southern half of the Palaearctic Region, in northern Africa known from Egypt.

\**Dolichogenidea celsa* (Papp, 1975) – 4 ♂: Le Sers, taken from weedy vegetation (many Apiaceae), 3.IV.1977, SM (loc. no. 48). 1 ♂: about 2 km NW from Maktar, netted from *Thymus* etc. flowers, 3.IV.1977, SM (loc. no. 50). – Described from Hungary, known from Bosnia-Herzegovina and Montenegro.

\**Dolichogenidea coleophorae* (Wilkinson, 1938) – 1 ♀: Sousse, 3 km S from village, netted from vegetation (*Polygonum*, *Erigeron* etc.), LM & SM (loc. no. 180). – A Holarctic albeit rather sporadic species, closest to Tunisia reported from Turkey, Hungary and Romania (Transylvania).

\**Dolichogenidea ensiformis* (Ratzeburg, 1844) – 2 ♀: Boughrara, garden of agriculture, netted from plants: mimosa shrubs etc., 6–12.IV.1977, SM (loc. no. 73). – In Europe known from eight countries, closest to Tunisia from Italy and Spain.

\**Dolichogenidea gallicola* (Giraud, 1869) – 1 ♀: 2 km W of La Hencha, taken from *Ferula* flowers, 9.IV.1977, SM (loc. no. 93). – Described from and so far known from Algeria.

\**Dolichogenidea lactea* (Nees, 1834) – 1 ♂: Monastir, 3 km N of village, swept from ruderal vegetation, 15.IX.1977, LM & SM (loc. no. 156). – Sporadic

to frequent in the western Palaearctic Region as far eastwards as Middle Asia and Armenia. Closest to Tunisia known from Italy and Greece.

\**Dolichogenidea litae* (Nixon, 1972) – 1 ♀: El Kef, netted from weedy vegetation, 2.IV.1977, SM (loc. no. 46). 1 ♂: Sahline, taken from bushes *Eucalyptus* and *Tamarix*, 14.IX.1977, SM (loc. no. 146). 1 ♀ (in Lun\*): 17 km SE Zaghuan, 12.IV.1994, RD. 1 ♂: Kairouan, Si Saad, 27–30.V.1995, AP. – In Africa reported from Egypt and Ghana, in Europe rather sporadic albeit widely distributed eastwards as far as Kazakhstan and Iran.

\**Dolichogenidea mycale* (Nixon, 1972) (= *Apanteles coniferoides* Papp, 1972) – 2 ♂: Skanés, 10 km from Monastir, netted from *Juncus* at dry lake, 14.IX.1977, SM (loc. no. 147). 1 ♂: Qued (near Sousse), Hamonda, 18.IX.1977, SM (loc. no. 169). – In Europe known from eight countries, closest to Tunisia from Bulgaria and Turkey.

\**Dolichogenidea princeps* (Wilkinson, 1941) – 4 ♀ + 7 ♂: Skanés, 10 km from Monastir, netted from *Juncus* at dry lake, 14.IX.1977, SM (loc. no. 147). 2 ♀: Monastir, 3 km N of village, netted from riparian vegetation, 15.IX.1977, LM & SM (loc. no. 155). 1 ♂: Sahline, along salt lakes, taken from *Tamarix* etc. vegetation, 20.IX.1977, LM & SM (loc. no. 188). – In South Europe fairly frequent, closest to Tunisia known from Spain, Italy, Turkey.

\**Dolichogenidea seripha* (Nixon, 1972) – 1 ♂: Le Sers, taken from weedy vegetation (many Apiaceae). 3.IV.1977, SM. – Distributed in Central and South Europe, closest to Tunisia in Italy and Greece.

\**Dolichogenidea sicaria* (Marshall, 1885) – 1 ♀ (ZMLU): Bou Hedma, Oasen, 11.IV.1976, MO. 1 ♀: Le Sers, taken from weedy vegetation (many Apiaceae), 3.IV.1977, SM (loc. no. 48). 1 ♀: 2 km W of La Hencha, taken from *Ferula* flowers, 9.IV.1977, SM (loc. no. 93). 3 ♀ (2 ♀ ZMLU): 25 km S from Kairouan, 11.IV.1994, RD. 6 ♀ + 1 ♂ (4 ♀ + 1 ♂ ZMLU): N of Sfax, 2 km E from Djebeniana, 11.IV.1994, RD. – In the Palaearctic Region a frequent to common species, in northern Africa known from Morocco.

\**Dolichogenidea soikai* (Nixon, 1972) – 1 ♀: Béja, Testour, 28.V.1995, AP. 1 ♀: Kairouan, Si Saad, 27–30.V.1995, AP. – In Europe known from six countries, closest to Tunisia from Italy and Greece.

\**Iconella myeloenta* (Wilkinson, 1937) – 1 ♂: Qued Esmara, between Mahares – Gabes, 59 km S from Sfax, beaten from plants, 10.IV.1977, SM (loc. no. 97). – A Ponto–Mediterranean species, closest to Tunisia known from Spain, Greece and Turkey.

\**Illidops biroicus* (Papp, 1973) – 1 ♀: Qued Esmara, between Mahares – Gabes, 59 km S from Sfax, beaten from plants, 10.IV.1977, SM (loc. no. 97). 1 ♀: Skanés, 10 km from Monastir, netted from Chenopodiaceae, 14.IX.1977, LM & SM (loc. no. 149). – Described from Hungary, reported from Romania (Transylvania).

\**Illidops brevimetacarpus* (Hedqvist, 1965) – 1 ♂: Skanés, 10 km Monastir, netted from *Juncus* at dry lake, 14.IX.1977, SM (loc. no. 147). – Described from and so far known only in Cape Verde Islands.

*Illidops butalidis* (Marshall, 1888) – 1 ♀: Le Sers, netted from weedy vegetation, 3.IV.1977, SM (loc. no. 48). – Distributed sporadically in Europe (Great Britain, Sweden, Germany, Hungary, former Yugoslavia, Bulgaria, European Russia); reported from Tunisia (PAPP 1981b: 275, TOBIAS 1986a: 424).

\**Illidops electilis* (Tobias, 1964) – 1 ♀: 2 km W from La Hencha, taken from *Ferula* flowers, 9.IV.1977, SM (loc. no. 93). – Described from Kazakhstan, reported from Hungary, Croatia, Serbia.

\**Illidops mutabilis* (Telenga, 1955) (= *Apanteles szaboi* Papp, 1972) – 1 ♂: Sahline, netted from bushes *Eucalyptus* and *Tamarix*, 14.IX.1977, LM & SM (loc. no. 146). 1 ♀: Skanés, about 10 km from Monastir, netted from Chenopodiaceae, 14.IX.1977, LM & SM (loc. no. 149). – Described from European Russia, reported from several countries in Europe, closest to Tunisia from Spain and Turkey.

\**Microgaster luctuosa* Haliday, 1834 (= *M. curvicrus* Thomson, 1895) – 1 ♂ (ZMLU): 4 km E Ain Sebaa, 23 km E from Tabarka, 9.IV.1994, RD. – In Europe frequent, in Palaearctic Asia rather sporadic; closest to Tunisia known from Greece and Turkey.

*Microplitis adunca* (Ruthe, 1860) – 1 ♂ (ZMLU): 1 km E from Tabarka, 9.IV.1994, RD. 1 ♀ (ZMLU): 25 km S of Kairouan, 11.IV.1994, RD. – Reported from Tunisia (PAPP 1979: 178), widely distributed in Europe.

\**Microplitis mandibularis* Thomson, 1895 – 1 ♀: Kairouan, El Aorussa, 28.V.1995, AP. – In Europe a frequent to common species, closest to Tunisia known from Spain and Turkey.

\**Pholetesor bicolor* (Nees, 1834) – 2 ♂: Skanés, 10 km from Monastir, netted from Chenopodiaceae, 14.IX.1977, LM & SM (loc. no. 147). – In the western Palaearctic Region common, closest to Tunisia known from Spain, Italy, Greece (Crete).

\***Pholetesor moczari sp. n.** – See in the section “Descriptions of two new species”.

\**Pholetesor exiguus* (Haliday, 1834) – 2 ♂: Skanés, 10 km from Monastir, netted from Chenopodiaceae, 14.IX.1977, LM & SM (loc. no. 147). – A Palaearctic species, in Europe widely distributed albeit rather sporadically, closest to Tunisia reported from Italy.

\**Protapanteles immunis* (Haliday, 1834) – 2 ♂: Thyna, 12 km on the Gafsa road, netted from marsh vegetation (largely *Salsola*, *Juncus* etc.) near seacoast, 7.IV.1977, SM (loc. no. 83). 1 ♂: 2 km W from La Hencha, taken from *Ferula* flowers, 9.IV.1977, SM (loc. no. 93). – In the western Palaearctic Region common to frequent, closest to Tunisia known from Italy.

## Opiinae

\**Biosteres (Chilotrichia) toulonus* Fischer, 1964 – 1 ♀: Sfax, III.1903, LB. – Described from and so far known only in France.

*Frekius barbieri* (Fischer, 1962) – 1 ♂: Sfax, X, LB. – Described from Algeria (FISCHER 1962: 89), reported from Tunisia (FISCHER 1964: 432). 1 ♂ (in HNHM): Spain, Malaga, Torremolinos, 10.IV.1978, leg. G. E. Bohart; new to Spain.

\**Hypocynodus latipes* Fischer, 1958 – 1 ♀: “Tunis / Hoeger”. – Widely distributed in the western Palaearctic Region, closest to Tunisia known from Spain, Italy, Greece.

*Hypocynodus tunensis* Fischer, 1962 – 1 ♂ (holotype, in HNHM, no. 10792): Sfax, 1903, LB. 1 ♀ (paratype, in HNHM, no. 10973): Gafsa, 1903, LB. 1 ♀ (paratype, in HNHM, no. 10794): Mahares near Sfax, LB. – Described from Tunisia (FISCHER 1962: 104), reported from Turkey (FISCHER & BEYARSLAN 2005: 40).

\**Opius (Opiothorax) levis* Wesmael, 1835 – 1 ♀: “Tunis / 26.II.1903, LB”. – Very common species in the Palaearctic and Afrotropic Regions, in Africa known from Algeria and Sudan.

\**Opius (Opius) lugens* Haliday, 1837 – 1 ♀ (ZMLU): Bou Hedme, 11.IV.1976, MO. 1 ♀ (ZMLU): 25 km S from Kairouan, 11.IV.1994, RD. – Common to frequent in the Palaearctic and Afrotropic Regions, in Africa known from Algeria and Sudan.

\**Opius (Opiothorax) turcicus* Fischer, 1960 – 1 ♂ (ZMLU): 12 km E from Mateur, 12.IV.1994, RD. – Described from Turkey (FISCHER 1960: 93; female holotype and two female + one male paratypes in HNHM, nos 10782–10785), frequent in Europe, closest to Tunisia known from Algeria, Israel and Jordan.

\**Xynobius rudis* (Wesmael, 1835) – 3 ♀ (2 ♀ ZMLU): N of Sousse, 3 km S from Hergla, 12.IV.1994, RD. – Distributed in the Holarctic region, closest to Tunisia known from Algeria.

\**Xynobius scutellatus* (Fischer, 1962) – 1 ♂ (holotype, in HNHM, no. 10830): Tunis, II.1903, LB. – Described from Tunisia (FISCHER 1962: 100), reported from Israel, Iran and Hungary.

## Rogadinae

*Aleiodes (Chelonorhogas) dimidiatus* (Spinola, 1808) – 2 ♀ (ZMLU): 4 km E from Ain Sebaa, 23 km E from Tabarka, 9.IV.1994, RD. – A common species in the Palaearctic Region, closest to Tunisia known from Morocco and Algeria, reported from Tunisia (PAPP 1990: 90).

\**Aleiodes (Aleiodes) nocturnus* (Telenga, 1941) – 1 ♂: Degache, 13.IV.1977, taken at night with MV lamp, 22–24 °C, mild wind LG & SM (loc. no. 102). – The male specimen represents the albinic form (“var. *flavus*” by Telenga) of the species: body ochre yellow, tergites 1–3 pale yellow (nominat form: body brownish

yellow with brown pattern). Widely distributed in the semidesert-steppe zone of the Palaearctic Region. Closest to Tunisia reported from Turkey.

\**Aleiodes (Aleiodes) signatus* (Nees, 1811) – 1 ♂ (ZMLU): N of Sousse, 3 km S from Hergla, 12.IV.1994, RD. – A common species in the Palaearctic Region, closest to Tunisia known from Italy and Greece.

#### DESCRIPTIONS OF TWO NEW SPECIES

The following abbreviations are applied in the descriptions (after VAN ACHTERBERG 1993: 5, Figs H–K):

*Eye* – OOL = shortest distance between hind ocellus and compound eye.  
POL = shortest distance between hind two ocelli.

*Forewing venation* – *m-cu* = nervus recurrens or transverse medio-cubital vein, *r* = transverse or first section of the radial vein, *SR1* = third section of the radial vein, *1-M* = basal vein, *1-R1* = first section of the metacarpal vein, *1-SR-M* = first section of the median vein, *2-SR* = first transverse section of the radial vein, *3-SR* = second section of the radial vein.

Surface sculpture terminology is used after HARRIS (1979). Structure terminology is used after GAULD & BOLTON (1988: 58–74).

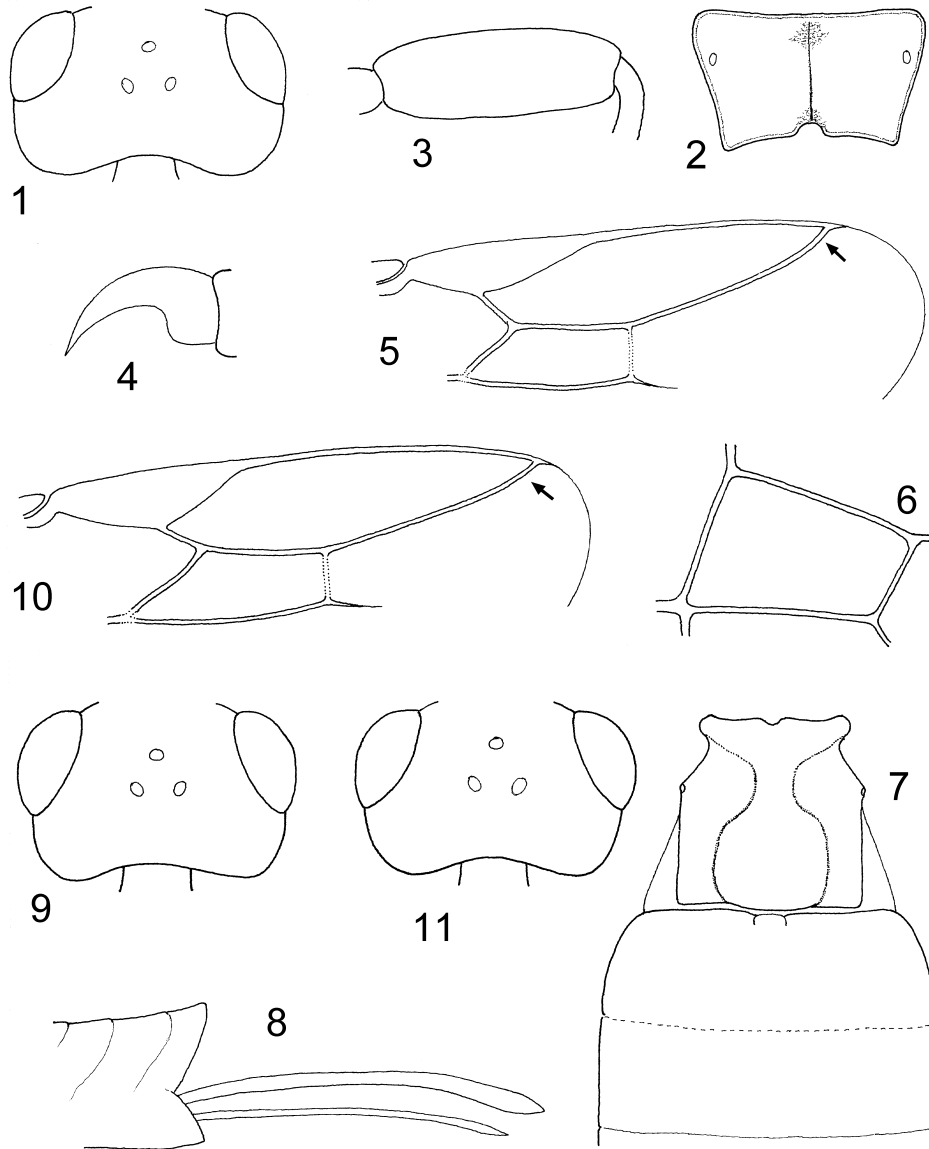
#### **Bracon (Glabrobracon) flavobasis** sp. n.

(Figs 1–8)

*Material examined* – Female holotype: Tunisia, Kairouan, Si Saad, 27–30 May 1995, leg. A. Podlussány. Type condition: (1) glued on a card point by mesosternum, (2) left antenna damaged: with 20 antennomeres. Holotype is deposited in HNHM, Hym. Typ. No. 12209.

*Etymology* – The specific epithet “*flavobasis*” refers to the yellow tergites 1–2.

*Description of the female holotype* – Body length 3 mm. Antenna short, about as long as head, mesosoma and tergites 1–3 combined and with 28 antennomeres (right antenna). First flagellomere 1.6 times as long as broad, further 9–10 flagellomeres shortening so that middle flagellomeres cubic, penultimate 7–8 flagellomeres longer than broad so that penultimate flagellomere subcubic (8:7). – Head in dorsal view transverse (Fig. 1), 1.7 times as broad as long, eye not protruding, and about as long as temple (18:17), temple rounded, occiput weakly excavated. Ocelli small, OOL nearly twice longer than POL (13:7). Eye in lateral view 1.7 times as high as wide and as wide as temple (17:16). Horizontal diameter of oral opening one-fourth longer than shortest distance between eye and oral opening. Face 2.5 times as wide as high, inner margin of eyes parallel. Head polished, face laterally uneven.



**Figs 1–8.** *Bracon (Glabrobracon) flavobasis* sp. n., female holotype: 1 = head in dorsal view, 2 = propodeum, 3 = hind femur, 4 = claw, 5 = distal part of right forewing, 6 = first discal cell of forewing, 7 = tergites 1–3, 8 = hind half of metasoma. – **Figs 9–10.** *Bracon (Glabrobracon) flagellaris* Thomson, 1894, female: 9 = head in dorsal view, 10 = distal part of right forewing. – **Fig. 11.** *Bracon (Glabrobracon) dallatorrei* Szépligeti, 1901, female: head in dorsal view



Mesosoma in lateral view 1.5 times as long as high, polished. Notaulix anteriorly distinct, smooth. Propodeum polished, with a medio-longitudinal weak carina (Fig. 2). Hind femur 2.6 times as long as broad medially and almost parallel-sided (Fig. 3). Hind tibia and tarsus equal in length. Hind basitarsus almost as long as tarsomeres 2–4 combined. Claw less downcurved, its basal lobe large (Fig. 4).

Forewing just shorter than body (2.8 mm). Pterostigma (Fig. 5) four times as long as wide and issuing *r* proximally from its middle, *r* almost as long as width of pterostigma (9:10). Second submarginal cell long: 3–SR 1.4 times as long as 2–SR; SRI almost straight, twice longer than 3–SR (42:20) and approaching tip of wing (Fig. 5, see arrow). First discal cell less high, 1–M 1.5 times as long as *m-cu*, 1–SR–M 1.4 times longer than 1–M (Fig. 6).

First tergite (Fig. 7) quadrate in form: as long as broad posteriorly and beyond pair of spiracles parallel-sided; scutum rounded, margin laterally from scutum wide; tergite entirely polished. Tergites 2–3 equal in length, second tergite 2.1 times as broad behind as long medially, border between tergites 2–3 hardly visible. Tergites polished. Hypopygium less large, pointed, ovipositor sheath long, just shorter than length of hind tibia + tarsus combined (Fig. 8).

Antenna brownish black. Head and mesosoma black. Pronotum and metanotum yellowish brown. Tergites 1–2 and sternites yellow, rest of tergites and hypopygium brown. Ground colour of legs brown with much yellow pattern: fore tibia (medially brownish) and tarsus, middle tibia (apically brownish), hind tibia basally; last tarsomeres of legs 1–2 brown. Wings subhyaline, pterostigma and veins opaque yellowish brownish.

Male and host unknown.

*Distribution* – Tunisia.

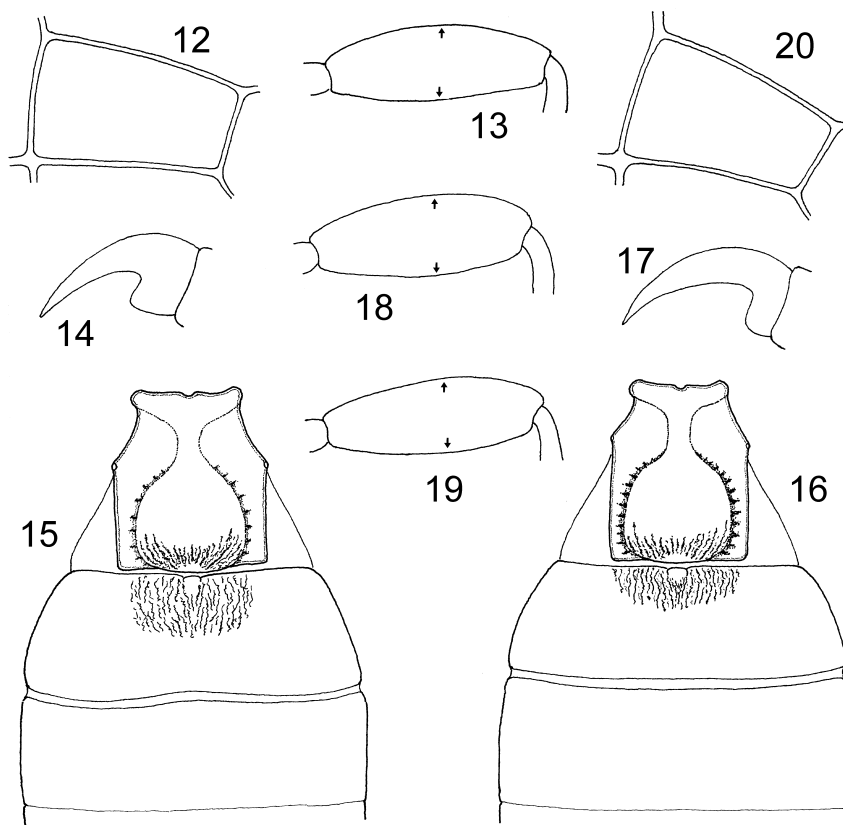
*Taxonomic position* – The new species, *Bracon (Glabrobracon) flavobasis*, is closest to two species: *B. (Gl.) flagellaris* Thomson (THOMSON 1894: 1823) and *B. (Gl.) dallatorrei* Szépligeti (SZÉPLIGETI 1901: 264 in key), the three species are distinguished as follows.

Distinction between *B. flagellaris* and *B. flavobasis*:

- 1 (2) Eye in dorsal view 1.4–1.8 times longer than temple, and a bit protruding (Fig. 9). Forewing: SRI reaching tip of wing (Fig. 10, see arrow). Margin of first tergite (laterally from scutum) less wide, second tergite (at most baso-medially) striolate (Fig. 15). Hind femur broadening medially, 2.7–3.6 times as long as broad (Fig. 13, see arrows). Scutum of first tergite brownish to blackish, second tergite yellow and medially brownish. ♀♂: 3.2–3.5 mm. – Sweden, Germany, Hungary, Spain, Bulgaria ..... *Bracon (Glabrobracon) flagellaris* Thomson, 1894
- 2 (1) Eye in dorsal view as long as temple and not protruding (Fig. 1). Forewing: SRI approaching tip of wing (Fig. 5, see arrow). Margin of first tergite (laterally from scutum) wide, second tergite entirely polished (Fig. 7). Hind femur almost parallel-sided, 2.6 times as long as broad (Fig. 3). First and second tergites entirely yellow. <sup>3</sup>: 3 mm. – Tunisia .....  
 ..... ***Bracon (Glabrobracon) flavobasis* sp. n.**

Distinction between *B. dallatorrei* and *B. flavobasis*:

- 1 (2) Scutum of first tergite posteriorly striolate, its margin crenulated; second tergite baso-medially striolate (Fig. 16). Claw basally with small lobe (Fig. 17). Eye in dorsal view 1.6–1.7 times longer than temple, and a bit protruding, temple more rounded (Fig. 11). Forewing: *SRI* reaching tip of wing (cf. Fig. 10, see arrow). Hind femur thick, broadening distally, (2.4–)2.6–2.7 times as long as broad (Figs 18–19, see arrows). First tergite brown, second (and third) tergite(s) yellow, rest of metasoma light brown to blackish. ♀: 2.5–3.5 mm. – England, Sweden, Hungary, Slovenia, Croatia, Romania (Transylvania), Italy (= *facialis* Thomson, 1894) ..... *Bracon (Glabrobracon) dallatorrei* Szépligeti, 1901
- 2 (1) First and second tergites polished, margin of scutum of first tergite not crenulated (Fig. 7). Claw basally with large lobe (Fig. 4). Eye in dorsal view as long as temple and not protruding, temple less rounded (Fig. 1). Forewing: *SRI* approaching tip of wing (Fig. 5, see arrow). Hind femur thin, almost parallel-sided, 2.6 times as long as broad (Fig. 3). First and second tergites yellow, rest of metasoma brown. ♀: 3 mm. – Tunisia ..... *Bracon (Glabrobracon) flavobasis* sp. n.



**Figs 12–15.** *Bracon (Glabrobracon) flagellaris* Thomson, 1894, female: 12 = first discal cell, 13 = hind femur, 14 = claw, 15 = tergites 1–3. – **Figs 16–20.** *Bracon (Glabrobracon) dallatorrei* Szépligeti, 1901, female: 16 = tergites 1–3, 17 = claw, 18–19 = hind femur, 20 = first discal cell of forewing

Distinction of the three species: *B. dallatorrei*, *B. flagellaris* and *B. flavobasis*:

- 1 (2) Eye in dorsal view as long as temple, and not protruding, temple rounded (Fig. 1). Tergites 2–3 equal in length, polished, margin of scutum of first tergite not crenulate (Fig. 7). Propodeum with a medio-longitudinal weak carina (Fig. 2). Forewing: *SRI* approaching tip of wing, pterostigma issuing *r* proximally from its middle (Fig. 5). Hind femur thick, almost parallel-sided (Fig. 3). Tergites 1–2 yellow. ♀: 3 mm. – Tunisia ..... **Bracon (Glabrobracon) flavobasis** sp. n.
- 2 (1) Eye in dorsal view 1.3–1.6 times as long as temple and a bit protruding, temple more rounded (Figs 9, 11). Tergites 2–3 variable in length: third tergite either slightly longer (Fig. 16) or shorter (Fig. 15) than second tergite, tergites 1–2 striolate, margin of scutum of first tergite crenulated (Figs 15–16). Propodeum above lunule with a short carina, hind margin of propodeum crenulated. Forewing: *SRI* reaching tip of wing, pterostigma issuing *r* distally from its middle (Fig. 10, see arrow). Hind femur less thick, broadest medially (Fig. 13, see arrow) or distally (Fig. 18–19, see arrows).
- 3 (4) First tergite 1.25 times as long as broad posteriorly, margin of scutum of first tergite more crenulated; third tergite just longer than second tergite (Fig. 16). Forewing: first discal cell minutely higher as in Fig. 20. Claw less downcurved, its basal lobe less large (Fig. 17). Hind femur broadest distally (Figs 18–19, see arrows). Hind coxa brown. ♂: 2.5–3.5 mm. – England, Sweden, Hungary, Slovenia, Croatia, Romania (Transylvania), Italy (= *facialis* Thomson, 1894) ..... **Bracon (Glabrobracon) dallatorrei** Szépligeti, 1901
- 4 (3) First tergite slightly (1.1 times) as long as broad posteriorly, margin of scutum less crenulated; third tergite just shorter than second tergite (Fig. 15). Forewing: first discal cell minutely less high as in Fig. 12. Hind femur broadest medially (Fig. 13, see arrow). Claw more downcurved, its basal lobe large (Fig. 14). Hind coxa yellow. ♂: (2.6–)3.2–3.5 mm. – Sweden, Spain, Hungary, Bulgaria ..... **Bracon (Glabrobracon) flagellaris** Thomson, 1894

**Pholetesor moczari** sp. n.

(Figs 21–27)

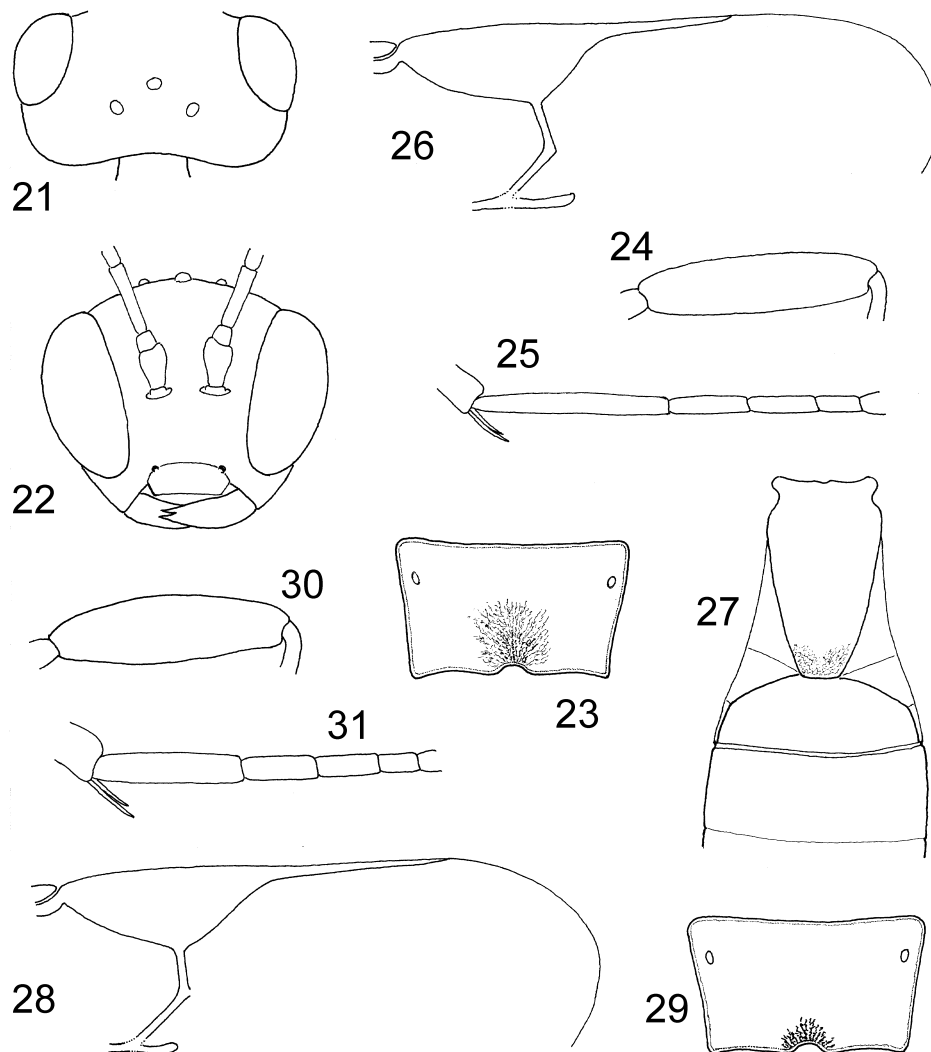
*Material examined* – Female holotype: Tunisia, Degache, 16 April 1977, leg. S. Mahunka (loc. no. 122). Type is in fairly good condition: (1) glued on a card point by its mesosternum and four hind coxae, (2) tarsomeres 2–5 of hind left leg missing, (3) eye, right pterostigma and hind half of metasoma (hypopygium) deformed (by killing?). Holotype is deposited in HNHM, Hym. Typ. No. 12210.

*Etymology* – The new species is dedicated to Prof. Dr. L. Móczár, doyen of the Hungarian entomologists, celebrating his 100th birthday in 2014.

*Description of the female holotype* – Body length 2.5 mm. Antenna as long as head, mesosoma and first tergite combined, and with 18 antennomeres. First flagellomere 3.3 times as long as broad, further flagellomeres gradually shortening so that penultimate flagellomere 1.5 times as long as broad. – Head in dorsal view transverse (Fig. 21), almost twice as broad as long (60:31), eye twice longer than temple (20:11), temple rounded. Occiput excavated. Ocelli middle-sized, forming a low triangle, OOL somewhat shorter than POL (10:12). Eye in lateral view twice (30:16) as high as wide and one-fourth wider than temple, temple ven-

trally narrowing. In frontal view inner margin of eyes converging ventrally, face twice (30:16) as wide as high, clypeus 2.5 times as wide as high and its lower edge faintly concave (Fig. 22). Head subpunctate and shiny, gena densely colliculate.

Mesosoma in lateral view 1.3 times as long as high. Mesoscutum colliculate and subshiny, scutelleum uneven, shiny. Mesopleuron polished. Propodeum pol-



**Figs 21–27.** *Pholetesor moczari* sp. n., female holotype: 21 = head in dorsal view, 22 = head in frontal view, 23 = propodeum, 24 = hind femur, 25 = tarsomeres 1–4 of hind leg, 26 = distal part of right forewing, 27 = tergites 1–3. – **Figs 28–31.** *Pholetesor bicolor* (Nees, 1834), female and male: 28 = distal part of right forewing, 29 = propodeum, 30 = hind femur, 31 = tarsomeres 1–4 of hind leg

ished, around lunule with concentric (fan-like) striolation (Fig. 23). Hind femur thin, 4.1 times as long as broad medially, subparallel-sided (Fig. 24). Hind tarsus also thin: basitarsus ten times as long as broad and as long as tarsomeres 2–4 combined (Fig. 25).

Forewing as long as body. Pterostigma fairly wide (Fig. 26), 2.6 times as long as wide and issuing *r* distally from its middle. *1–R1* one-fourth shorter than length of pterostigma (or pterostigma 1.3 times longer than *1–R1*). *2–SR* slightly longer (10:9) than *r*. First discal cell: *1–SR–M* almost three times (30:11) longer than *m–cu*.

First tergite 1.8 times as long as broad and narrowing posteriorly, apically half as broad as basally (Fig. 27). Second tergite transverse, three times as wide behind as long medially; third tergite slightly longer than second tergite, suture between tergites 2–3 just curved and smooth. Tergites polished, first tergite apically uneven (Fig. 27). Hypopygium fairly large, pointed, ovipositor sheath straight and as long as hind basitarsus.

Body ochre. Antenna proximo-distally ochre yellow to brownish. Tergites 2–3 yellowish. Legs: fore leg yellow, middle and hind coxae to femora ochre, tibiae + tarsi yellow. Wings hyaline, pterostigma and veins opaque yellow.

Male and host unknown.

*Distribution* – Tunisia.

*Taxonomic position* – The new species, *Pholetesor moczari*, is closest to the light coloured form of *Ph. bicolor* (Nees) by their common features: first tergite narrowing baso-apically (Fig. 27), tergites polished; the two species are distinct by the traits keyed:

- 1 (2) Forewing: *1–R1* one fourth shorter than pterostigma (30:40, Fig. 26). Propodeum around lunule with concentric (or fan-like) striolations, otherwise polished (Fig. 23). Hind femur thin, 4.1 times as long as broad (Fig. 24); hind tarsus also thin: basitarsus ten times as long as broad and as long as tarsomeres 2–4 combined (Fig. 25). Body ochre, legs yellow.  $\varphi$ : 2.5 mm. – Tunisia ..... ***Pholetesor moczari* sp. n.**
- 2 (1) Forewing: *1–R1* as long as pterostigma, exceptionally either somewhat shorter (Fig. 28) or longer. Propodeum around lunule at most with short striae otherwise polished (Fig. 29). Hind femur thick, 3.5–3.3 times as long as broad medially (Fig. 30). Hind tarsus also thick: basitarsus five times as long as broad apically and as long as tarsomeres 2–3 + half of 4 combined (Fig. 31). Body black with more or less yellow(ish) pattern on tergites 1–3(–4), legs lemon yellow.  $\varphi$ : 1.8–2.5 mm. – Western Palaearctic Region ..... *Pholetesor bicolor* (Nees, 1834)

The new species is also near to *Pholetesor rufulus* (Tobias) by their yellow corporal ground colour, however, clearly differing from each other by the features keyed:

- 1 (2) First tergite parallel-sided and rounded apically (Fig. 6 in PAPP 1983: 277). Forewing: pterostigma narrow, 3–3.3 times longer than wide, *I–RI* as long as length of pterostigma (Fig. 7 in PAPP 1983: 277). Pterostigma brown, basally yellow(ish). *q*: 2–2.2 mm. – Rather sporadic in southern part of western Palaearctic Region ..... *Pholetesor rufulus* (Tobias, 1964)
- 2 (1) First tergite from its base evenly narrowing posteriorly (Fig. 27). Forewing: pterostigma wide, 2.5 times longer than wide, *I–RI* one-fourth shorter than length of pterostigma (Fig. 26). Pterostigma evenly yellow. *q*: 4–4.2 mm. – Tunisia ..... ***Pholetesor moczari*** sp. n.

*Taxonomic remark* – TOBIAS (1986a: 378–386) arranged the species *Ph. rufulus* in the species group *vitripennis* which group is identical with the genus *Glyptapanteles* revalidated by MASON (1981). In my opinion *Ph. rufulus* is transitional between the genera *Pholetesor* Mason, 1981 and *Glyptapanteles* Ashmead, 1904. The generic assignment depends mainly on the deliberation that which generic feature composition is considered more decisive to *Pholetesor* or to *Glyptapanteles*.

\*

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## REFERENCES

- ACHTERBERG C. VAN 1993: Illustrated key to the subfamilies of the Braconidae (Hymenoptera: Ichneumonoidea). – *Zoologische Verhandlungen Leiden* **283**: 1–189. Online: <http://www.repositorio.naturalis.nl/document/150389> [Accessed 15 November 2014.]
- BEYARSLAN A. & ÇOBAN E. 2014: Checklist of Turkish Helconinae with a new species (Hymenoptera, Braconidae). – *Turkish Journal of Zoology* **38**: 89–95. DOI 10.3906/zoo-1304-34
- FISCHER M. 1960: Die europäischen Arten der Gattung *Opius* Wesm. (Hymenoptera, Braconidae), Teil IV/a. – *Annales Zoologici* (Warszawa) **19**(2): 33–112.
- FISCHER M. 1962: Neues über paläarktische *Opius*-Fauna (Hymenoptera, Braconidae). – *Polskie Pismo Entomologiczne* **32**(8): 89–107.
- FISCHER M. 1964: Über *Opiinae* der westlichen Paläarktis (Hym., Braconidae). – *Annalen des Naturhistorischen Museums in Wien* **67**: 409–433. Online: [http://www.landesmuseum.at/pdf\\_frei\\_remote/ANNA\\_67\\_0409-0433.pdf](http://www.landesmuseum.at/pdf_frei_remote/ANNA_67_0409-0433.pdf) [Accessed 15 November 2014.]
- FISCHER M. & BEYARSLAN A. 2005: A survey of *Opiinae* (Hymenoptera: Braconidae) of Turkey. – *Fragmenta Faunistica* **48**(1): 27–62.
- GAULD I. D. & BOLTON B. (eds) 1988: The Hymenoptera. – *British Museum (Natural History), Oxford University Press*, p. I–XI + 1–332.
- GOZMÁNY L. & MAHUNKA S. 1977: The collectings of the Hungarian Natural History Museum in Tunisia 1. Report of the zoological results of the first collecting trip in 1977. – *Folia entomologica hungarica* **30**(2): 53–66.
- HARRIS R. A. 1979: A glossary of surface sculpturing. – *Occasional Papers in Entomology* **28**: 1–31.
- KOKUJEV N. R. 1898: Symbolae ad cognitionem Braconidarum Imperii Rossici et Asiae Centralis. – *Trudy Russkogo Entomologicheskogo Obshchestva* **32**: 345–411.

- MAHUNKA S. & MAHUNKA-PAPP L. 1978: The collectings of the Hungarian Natural History Museum in Tunisia 4. Report of the zoological results of the second collecting trip in 1977. – *Folia entomologica hungarica* **31**(1): 11–16.
- NEES AB ESSENBECK C. D. 1834: *Hymenopterorum Ichneumonibus affinium, Monographiae, Genera Europaea et species illustrantes. Ichneumonibus adsciti. Monographia Ichneumonidum Braconideorum.* – Sumptibus J. G. Cottae, Stuttgart & Tübingen, 320 pp.
- NIXON G. E. J. 1943: A revision of the European Dacnusiini (Hym., Braconidae, Dacnusiini). – *The Entomologist's Monthly Magazine* **79**: 20–34, 159–168.
- NIXON G. E. J. 1946: A revision of the European Dacnusiini (Hym., Braconidae, Dacnusiinae). – *The Entomologists's Monthly Magazine* **82**: 279–300.
- NIXON G. E. J. 1965: A reclassification of the tribe Microgasterini (Hymenoptera: Braconidae). – *Bulletin of the British Museum (Natural History), Entomology Supplement* **4**: 1–284.
- PAPP J. 1970: A contribution to the braconid fauna of Israel I. – *Israel Journal of Entomology* **5**: 63–76.
- PAPP J. 1979: Braconidae (Hymenoptera) from Tunisia, 1. – *Folia entomologica hungarica* **32**(2): 175–187.
- PAPP J. 1981a: Braconidae (Hymenoptera) from Tunisia, 2. – *Folia entomologica hungarica* **42**(1): 155–162.
- PAPP J. 1981b: A survey of the European species of Apanteles Först. (Hymenoptera, Braconidae: Microgastrinae), V. The lacteus-, longipalpis-, ultor-, butalidis- and vipio-group. – *Annales historico-naturales Musei nationalis hungarici* **73**: 263–291. Online: [http://publication.nhmus.hu/pdf/annHNHM/Annals\\_HNHM\\_1981\\_Vol\\_73\\_263.pdf](http://publication.nhmus.hu/pdf/annHNHM/Annals_HNHM_1981_Vol_73_263.pdf) [Accessed 15 November 2014.]
- PAPP J. 1983: A survey of the European species of Apanteles Först. (Hymenoptera, Braconidae: Microgastrinae), VII. The carbonarius-, circumscriptus-, fraternus-, pallipes-, parasitellae-, vitripennis-, octonarius- and thompsoni-group. – *Annales historico-naturales Musei nationalis hungarici* **75**: 247–283. Online: [http://publication.nhmus.hu/pdf/annHNHM/Annals\\_HNHM\\_1983\\_Vol\\_75\\_247.pdf](http://publication.nhmus.hu/pdf/annHNHM/Annals_HNHM_1983_Vol_75_247.pdf) [Accessed 15 November 2014.]
- PAPP J. 1987: A survey of the European species of Apanteles Först. (Hymenoptera, Braconidae: Microgastrinae), X. The glomeratus-group 2 and the cultellatus-group. – *Annales historico-naturales Musei nationalis hungarici* **79**: 207–258. Online: [http://publication.nhmus.hu/pdf/annHNHM/Annals\\_HNHM\\_1987\\_Vol\\_79\\_207.pdf](http://publication.nhmus.hu/pdf/annHNHM/Annals_HNHM_1987_Vol_79_207.pdf) [Accessed 15 November 2014.]
- PAPP J. 1990: Braconidae (Hymenoptera) from Tunisia, 3. – *Folia entomologica hungarica* **51**: 89–96.
- PAPP J. 1996: Contribution to the Braconid fauna of Hungary, XI. Cheloninae and Sigalphinae (Hymenoptera: Braconidae). – *Folia entomologica hungarica* **57**: 131–156.
- PAPP J. 1999: Braconidae (Hymenoptera) from Greece, 4. – *Annales Musei Goulandris* **10**: 223–247.
- PAPP J. 2008: A revision of the Bracon (subgenera Bracon s. str., Cyanopterobracon, Glabrobracon, Lucobracon, Osculobracon subgen. n., Pigeria) species described by Szépligeti from the western Palaearctic Region (Hymenoptera: Braconidae, Braconinae). – *Linzer biologische Beiträge* **40**(1): 1741–1837. Online: [http://www.landesmuseum.at/pdf\\_frei\\_remote/LBB\\_0040\\_2\\_1741-1837.pdf](http://www.landesmuseum.at/pdf_frei_remote/LBB_0040_2_1741-1837.pdf) [Accessed 15 November 2014.]
- PAPP, J. 2009: Contribution to the braconid fauna of the former Yugoslavia, V. Ten subfamilies (Hymenoptera, Braconidae). – *Entomofauna* (Ansfelden) **30**(1): 1–35. Online: [http://www.landesmuseum.at/pdf\\_frei\\_remote/ENT\\_0031\\_0389-0404.pdf](http://www.landesmuseum.at/pdf_frei_remote/ENT_0031_0389-0404.pdf) [Accessed 15 November 2014.]
- PAPP J. 2012: A revision of the Bracon Fabricius species in Wesmael's collection deposited in Brussels (Hymenoptera: Braconidae: Braconinae). – *European Journal of Taxonomy* **21**: 1–154. <http://dx.doi.org/10.5852/ejt.2012.21>
- PERIS-FELIPO F. J. 2013: Aspilota-group in natural parks of Valencia and European Dinotrema revision. – *Universitat de Valencia, Facultat de Ciències Biològiques, Doctoral Thesis*, vol. 1: 517 pp.
- SMITS VAN BURGS C. A. L. 1913: *Tunesian Hymenoptera.* – Den Haag, Privatdruck, 37 pp.

- SZÉPLIGETI GY. 1901: A palearktikus Braconidák meghatározó táblázatai. Besimmungstabelle der paläarktischen Braconiden. Pótfüzetek a Természettudományi Közlönyhöz. – *Allattani Közlemények* 33: 174–184 (in Hungarian), 261–288 (in German).
- TELENGA N. A. 1936: Sem. Braconidae, podsem. Braconinae. [Family Braconidae, subfamily Braconinae.] – *Fauna SSSR, Pereponchatokrylye* 5(2), Nauka, Leningrad, 403 pp.
- THOMSON C. G. 1894: Bidrag till Braconidernas kännedom. I. Cyclostomi. [Contribution to the knowledge of braconid wasps. I. Cyclostomi.] – *Opuscula Entomologica* 17: 1777–1861.
- TOBIAS V. I. 1986a: 27. otryad Hymenoptera – Pereponchatokrylye. Semeystvo Braconidy (I.) – In: MEDVEDEV G. S. (ed.): *Opredelitel' nasekomykh evropejskoj chasti SSSR. Tom III. Pereponchatokrylye. Chetverstaya Chast'. [Key to the Insects of the European Part of the USSR Volume III. Hymenoptera. Part four.]* Nauka, Leningrad, 501 pp.
- TOBIAS V. I. 2010: Palearkticheskie vidy roda Micochelonus Szépligeti (Hymenoptera: Braconidae, Cheloninae): opredelitel'naya tablitsa. [Palaeartic species of the genus Micochelonus Szépligeti (Hymenoptera: Braconidae, Cheloninae): key to species.] – *Trudy Russkovo Entomologicheskovo Obshchestva* 81(1): 1–354.
- TOBIAS V. I. 2011: Rod Chelonus Jurine (Hymenoptera, Braconidae, Cheloninae). V. faune Rossii i sopredel'nykh territoriy. Gruppy vidov Ch. olgae Kok. [Genus Chelonus Jurine (Hymenoptera, Braconidae, Cheloninae) in the fauna of Russia and adjacent territories. Ch. olgae Kok. species group.] – *Entomologicheskoe Obozrenie* 90(2): 416–438. [English version: 2011, *Entomological review* 91(8): 1011–1030. <http://dx.doi.org/10.1134/S0013873811080070>]
- WESMAEL C. 1838: Monographie des Braconides de Belgique. – *Nouveaux mémoires de l'Académie royale des Sciences et Belles-Lettres Bruxelles* 11: 1–166.
- YU D. S. K., ACHTERBERG C. VAN & HORSTMANN K. 2012: *Taxapad 2012. World Ichneumonoidea 2011. Taxonomy, Biology, Morphology and Distribution.* <http://www.taxapad.com>, Ottawa, Ontario, Canada.