

New species and records of Ichneumonidae III. (Hymenoptera)

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Abstract – Ichneumon wasps (Hymenoptera: Ichneumonidae) of the subfamilies Banchinae, Campopleginae, Cryptinae, Ctenopelmatinae, Mesochorinae, and Ophioninae are treated. *Hyposoter chrysostomus* sp. nov. is described from Taiwan. A new subjective synonymy is proposed: *Sinophorus striatus* Sanborne, 1984 = *Sinophorus latistrigis* Han, van Achterberg et Chen, 2021, syn. nov. New country records: *Hyposoter didymator* (Thunberg, 1822) from Afghanistan; *Enicospilus biimpressus* (Brullé, 1846), *Euryophion nigripennis* Cameron, 1906, *Euryophion titanius* Vas, 2022, *Laticoleus unicolor* (Szépligeti, 1908) and *Perilissus testaceoides* (Morley, 1926) from Angola; *Campoletis sonorensis* (Cameron, 1886) and *Venturia canescens* (Gravenhorst, 1829) from Argentina; *Diadegma erucator* (Zetterstedt, 1838) from Greece; *Glypta parvicaudata* Bridgman, 1889 and *Olesicampe proterva* (Brischke, 1880) from Hungary; *Diloba opaca* (Szépligeti, 1916) from Indonesia; *Enicospilus flavoscutellatus* (Brullé, 1846) from Martinique; *Mesochorus rubeculus* Hartig, 1838 from Montenegro; *Enicospilus undulatus* (Gravenhorst, 1829) from North Macedonia; *Gelis melanocephalus* (Schränk, 1781) from Serbia; and *Macrulus areolaris* Horstmann, 1987 from Vietnam.

Key words – taxonomy, species description, *Hyposoter*, *Sinophorus*, new synonym, distribution, Palearctic Region, Oriental Region, Afrotropical Region, Neotropical Region, Australasian Region

INTRODUCTION

Recent results of the ongoing taxonomical and biogeographical work on Ichneumonidae (Hymenoptera) in the Hungarian National Museum Public Collection Centre – Hungarian Natural History Museum, Budapest (HNHM) are presented in this paper. A new species is described from the Oriental Region (Taiwan), a new subjective synonymy is proposed, and new country records are presented from the Palearctic, Oriental, Afrotropical, Neotropical, and Australasian Regions for 17 species.

Taxonomy and nomenclature follow YU & HORSTMANN (1997) and YU *et al.* (2016). Morphological terminology follows GAULD (1991) and GAULD *et al.* (1997); however, for wing venation the corresponding terminology of TOWNES (1969) is also used. Terminology of body surface sculpturing follows HARRIS (1979). Identifications were based on the works of TOSQUINET (1903), MORLEY (1913), UCHIDA (1928, 1932), SONAN (1929, 1939), RAO (1953), BAJÁRI (1960), TOWNES *et al.* (1961, 1965), HORSTMANN (1969, 1978), TOWNES (1969, 1970*a, b*, 1971), MOMOI (1970), GUPTA & MAHESHWARY (1977), GAULD & MITCHELL (1978), GAULD (1984, 1988), SANBORNE (1984), GUPTA (1987), WAHL (1987), SCHWENKE (1999), SCHWARZ (2002), BROCK (2017), CHEN *et al.* (2017), VAS (2019, 2022*a, b*, 2023, 2024*a, b*, 2025, 2026), HAN *et al.* (2021), KLOPFSTEIN *et al.* (2022), GALSWORTHY *et al.* (2023), VAN NOORT (2026), and on examination of adequate type materials (at least from photos of scientific quality). The specimens were identified by the author using a Nikon SMZ645 stereoscopic microscope. Label data of type specimens are given verbatim, with additions and explanations in square brackets if necessary. All specimens mentioned in the Biogeography section are deposited in the HNHM, unless stated otherwise. Photos were taken with a Nikon-D7200 camera, equipped with Nikon AF-S Micro Nikkor 105mm objective and DCR-150 Raynox Macro Conversion lens, managed by Helicon Remote, stacked by Helicon Focus.

TAXONOMY

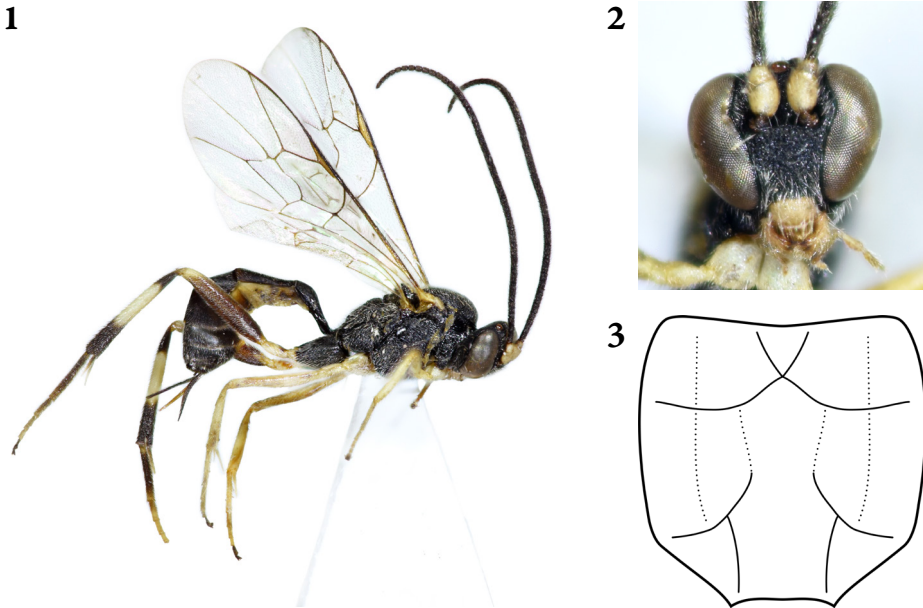
Hyposoter chrysostomus sp. nov.

(Figs 1–3)

Type material – Holotype: female, “Formosa [= Taiwan], [leg. H.] Sauter, Mt. Hoozan [now Kaohsiung: Fongshan District], 1910. I.”; specimen pinned, id. HNHM-HYM 155396, deposited in the HNHM.

Diagnosis – The new species can be distinguished from its congeners by the following character states in combination: clypeus weakly convex in profile; mesopleuron granulate with strong, mostly transverse rugae around the granulate, matt speculum; propodeum moderately short, convex in profile, posteriorly not produced, granulate-rugose; propodeal carinae distinct except median part of posterior transverse carina absent, lateromedian longitudinal carinae between transverse carinae and lateral longitudinal carinae obsolete; area basalis triangular; area superomedia pentagonal, about as long as wide, its lateral carinae obsolete, posteriorly opened; area petiolaris strongly rugose; fore wing without areolet, *3rs-m* absent, second recurrent vein (*2m-cu*) postfurcal, intercubitus (*2rs-m*) almost 3× as long as abscissa of M between *2rs-m* and *2m-cu*; hind tarsus with a clearly discernible midventral row of closely spaced, short hairs; second tergite 1.6× as long as its posterior width; posterior margins

of apical tergites not excised; ovipositor sheath distinctly longer than apical depth of metasoma, clearly protruding beyond apex of metasoma; scapus and pedicellus ventrally, clypeus entirely and tegula pale yellow; metasoma black; fore and middle coxae pale yellow, hind coxa black, apically narrowly yellowish; hind femur dark, at apex narrowly pale yellowish; hind tibia basally and apically widely black, medially ivory.



Figs 1–3. *Hyposoter chrysostomus* sp. nov., 1 = holotype, lateral habitus, 2 = head, frontal view, 3 = propodeum, dorsal view, surface sculpture not indicated (photos by Zoltán Vas, drawing by Viktória Szőke)

Description – Female (Figs 1–3). Body length ca. 6 mm, fore wing length ca. 5 mm.

Head: Antenna with 37 flagellomeres, first flagellomere $3.5\times$ as long as its apical width, preapical flagellomeres slightly longer than wide. Head transverse, matt, granulate-punctate, with rather dense and moderately short hairs. Ocular-ocular distance $0.8\times$ as long as ocellus diameter, distance between lateral ocelli $1.3\times$ as long as ocellus diameter. Inner eye orbits weakly indented, distinctly convergent ventrad. Gena in dorsal view $0.4\times$ as long as eye width, strongly narrowed behind eyes. Occipital carina complete, reaching hypostomal carina almost at base of mandible; hypostomal carina at most slightly elevated. Frons weakly convex, impressed above toruli, median longitudinal carina absent. Face weakly convex in profile, rugulose. Clypeus weakly convex in profile, small,

its apical margin weakly convex, impressed, sharp. Malar space quite short, $0.3-0.4\times$ as long as basal width of mandible. Mandible short and wide, lower margin of mandible with a conspicuously wide, out-turned flange from base towards teeth, flange abruptly narrowed before teeth; upper mandibular tooth slightly longer and wider than lower tooth.

Mesosoma: Mesosoma matt, coarsely granulate, partially rugose or rugulose, with dense but weak, indistinct traces of punctures, and with dense, short hairs. Pronotum with strong, transverse wrinkles, along upper margin granulate-rugose; epomia strong. Mesoscutum $1.2\times$ as long as wide, convex in profile; notaulus not developed. Scutellum convex in profile, lateral carinae not developed. Mesopleuron granulate with strong, mostly transverse rugae around the granulate, matt speculum. Epicnemial carina complete, strong, pleural part bent to anterior margin of mesopleuron reaching it at about its middle height, ventral part slightly elevated. Sternaulus indistinct. Posterior transverse carina of mesosternum complete, slightly elevated. Metanotum ca. $0.5\times$ as long as scutellum, anteriorly with a pair of deep foveae. Metapleuron without juxtacoxal carina; submetapleural carina complete, elevated. Pleural carina of propodeum complete, distinct; propodeal spiracle subcircular, separated from pleural carina by about its length, connected to pleural carina by a distinct ridge. Propodeum moderately short, convex in profile, posteriorly not produced but weakly impressed, granulate-rugose. Propodeal carinae partly distinct, partly obsolete: anterior transverse carina, including costulae, distinct; posterior transverse carina distinct except median part absent; lateromedian longitudinal carinae distinct except obsolete between transverse carinae; lateral longitudinal carinae obsolete. Area basalis triangular, slightly longer than its anterior width. Area superomedia rugose on granulate background, pentagonal, about as long as wide, its lateral carinae obsolete, posteriorly opened. Area petiolaris strongly, mostly transversely rugose, confluent with area superomedia, their junction distinct. Fore wing without areolet, *3rs-m* absent, second recurrent vein (*2m-cu*) postfurcal, intercubitus (*2rs-m*) almost $3\times$ as long as abscissa of *M* between *2rs-m* and *2m-cu*, their angle obtuse; distal abscissa of *Rs* straight; nervulus (*cu-a*) interstitial, subvertical; postnervulus (abscissa of *Cu1* between *1m-cu* and *Cu1a* + *Cu1b*) intercepted at about its middle by *Cu1a*; lower external angle of second discal cell weakly acute. Hind wing with nervellus (*cu-a* + abscissa of *Cu1* between *M* and *cu-a*) weakly inclivous, not intercepted by discoidella (*Cu1*); discoidella spectral, proximally not connected to nervellus. Coxae granulate. Hind femur ca. $5\times$ as long as high. Inner spur of hind tibia $0.6-0.7\times$ as long as first tarsomere of hind tarsus. Hind tarsus with a clearly discernible midventral row of closely spaced, short hairs. Tarsal claws small, about as long as arolium, basally pectinate.

Metasoma: Metasoma short, compressed, granulate to shagreened, and with dense, short hairs. First tergite slender, almost $3\times$ as long as its posterior width, about as long as second tergite; glymma distinct; dorsomedian carina of first tergite indistinct. Second tergite $1.6\times$ as long as its posterior width; thyridium

oval, its distance from anterior margin of tergite ca. $1.5\times$ as long as its length. Third tergite about as long as wide, following tergites transverse. Posterior margins of sixth and seventh tergites not excised. Ovipositor sheath distinctly longer than apical depth of metasoma, conspicuously protruding beyond apex of metasoma, $0.45\times$ as long as hind tibia. Ovipositor straight, dorsal subapical notch distinct.

Colour: Antenna dark brown, except scapus and pedicellus ventrally pale yellow. Head black, except clypeus and mandible yellow, mandibular teeth brownish, and palpi yellowish. Mesosoma black, tegula pale yellow. Metasoma black, second and following sternites pale yellowish with dark patches. Wings hyaline, wing veins and pterostigma brown. Fore and middle legs, including coxae, pale yellowish, more or less distinctly, irregularly suffused with brown, apical tarsomeres brownish. Hind leg: coxa black, apically narrowly yellowish; trochanter blackish, apically narrowly yellowish; trochantellus pale yellow; femur dark brown, at base blackish, at apex narrowly pale yellowish; tibia basally and apically widely black, medially ivory; tibial spurs brownish, apically paler but without distinct contrast; tarsus brown, except extreme base of first tarsomere very narrowly, third and fourth tarsomeres entirely yellowish.

Male: Unknown.

Distribution – Taiwan.

Etymology – The specific epithet *chrysostomus* is the masculine form of the Latinised Greek adjective *chrysostomus*, *-a*, *-um*, meaning “golden-mouthed”; it refers to the yellow clypeus of the new species.

Remarks on identification – The new species belongs to the group of Oriental and Australasian *Hyposoter* species which possess a quite distinct midventral row of closely spaced, short hairs on the hind tarsus, very much like that of *Eriborus* Förster, 1869; this character state, the previously known species concerned, and the consequences for the genus-level distinction of *Hyposoter* and *Eriborus* were documented and discussed in detail by VAS (2024a, 2026). Since the newly described species not only possesses a clearly discernible midventral row of closely spaced, short hairs on the hind tarsus but also lacks areolet of the fore wing, it may be easily misidentified as *Eriborus*. Especially, it may be confused with *Eriborus earias* (Sonan, 1939), a somewhat similarly coloured species also known from Taiwan. However, the latter species can be readily distinguished from the new species by its black and typical *Eriborus*-like clypeus (wide, apically not impressed, blunt), clearly punctate mesopleuron, and much longer ovipositor sheath (longer than hind tibia). Among the *Hyposoter* species, the new species can be readily identified by the combination of the following character states: clypeus entirely yellow (but malar space black), fore wing without areolet, ovipositor sheath distinctly longer than apical depth of metasoma ($0.45\times$ as long as hind tibia). A superficially similar species sharing the rare character state of a yellow clypeus is *Hyposoter pallidirostris* (Schmiedeknecht, 1909), known from the Western Palearctic Region; it can be

easily distinguished from the new species by its yellow malar space, fore wing with areolet present, and much shorter ovipositor sheath (about as long as apical depth of metasoma, not protruding beyond apex of metasoma).

Sinophorus striatus Sanborne, 1984

Sinophorus striatus Sanborne, 1984. Original description: SANBORNE (1984: 178); holotype: [Ukraine:] Włodzimierz; Zoologische Staatssammlung München. *Sinophorus latistrigis* Han, van Achterberg et Chen, 2021, **syn. nov.** Original description: HAN *et al.* (2021: 120); holotype: China: Neimenggu, Baotou Wudangzhao; Zhejiang University, Hangzhou.

Remarks – HAN *et al.* (2021) described *Sinophorus latistrigis* from China (Inner Mongolia Autonomous Region). However, based on its original description and accompanying illustrations, this species is clearly conspecific with *Sinophorus striatus*, described by SANBORNE (1984) from Ukraine (holotype examined), later found also in Georgia (RIEDEL *et al.* 2018), and in Mongolia (the yet unpublished first Mongolian record with exact locality data will be formally reported soon in a following paper). HAN *et al.* (2021) stated that “[t]his species [i.e., *Sinophorus latistrigis*] runs in the key by Sanborne (1984) to *S. exartemae* (Uchida, 1928)”, and they provided a differential comparison with the latter species. However, most probably because SANBORNE (1984) used an unconventional and hardly replicable method for measuring the length of the ovipositor, HAN *et al.* (2021) likely misinterpreted (specifically, overestimated) this character at couplet 24 of SANBORNE (1984) and followed the wrong lead (24b) of the couplet. This led them to *Sinophorus exartemae* in the key and ultimately caused them to overlook the identical diagnostic characters shared by their specimens and *Sinophorus striatus*, taxa that would have been keyed out correctly had they chosen the appropriate lead (24a) of that couplet. It is to be emphasised that the identification key in SANBORNE (1984) should be used with extreme care and practice, and with careful understanding of his often unusual and cumbersome ways of measurements and interpretations detailed in the Materials and Methods chapter of SANBORNE (1984). In conclusion, *Sinophorus striatus* unambiguously agrees with *Sinophorus latistrigis* in all characters of diagnostic value, including the ratio of length of ovipositor sheath and hind femur; therefore, *Sinophorus latistrigis* is hereby downgraded to a junior subjective synonym of *Sinophorus striatus*.

BIOGEOGRAPHY

Banchinae*Glypta parvicaudata* Bridgman, 1889

Material examined – **Hungary**: Jász-Nagykun-Szolnok County, Túrkeve, floodplain of the River Berettyó, 30.V.–1.VII.2025, leg. K. Amri, K. Surányi, V. Szóke & Z. Vas, one female.

Remarks – First record from Hungary. This species is widely distributed in the Palaearctic Region (YU *et al.* 2016). The voucher specimen was collected during the Biodiversity Days in Túrkeve, organised by the Hungarian Biodiversity Research Society.

Campopleginae*Campoletis sonorensis* (Cameron, 1886)

Material examined – **Argentina**: Mendoza, Uspallata, 24.I.1950, leg. M. Aczél, one female and one male.

Remarks – First record from Argentina. This species is widely distributed in the Neotropical and Nearctic Regions (YU *et al.* 2016).

Diadegma erucator (Zetterstedt, 1838)

Material examined – **Greece**: Crete. Canea [= Chania], III.1906, leg. L. Bíró, one female.

Remarks – First record from Greece. This species is widely distributed in the Western Palaearctic Region (YU *et al.* 2016).

Hyposoter didymator (Thunberg, 1822)

Material examined – **Afghanistan**: Kabul, Bend-Karghah [= Band-e-Qargha], 23.VIII.1962, leg. K. Lindberg, one female, deposited in the Lund University Biological Museum.

Remarks – First record from Afghanistan. This species is widely distributed in the Palaearctic Region, and is also known to occur in the Australasian Region (YU *et al.* 2016).

Macrulus areolaris Horstmann, 1987

Material examined – **Vietnam**: Đà Lạt, Núi Lang-Biang, 12.XII.1994, leg. S. Mahunka, Gy. Sziráki & L. Zombori, one male.

Remarks – First record from Vietnam. This species is known from several countries of the Western Palaearctic Region (YU *et al.* 2016), and VAS (2024a) recently reported it from the Oriental Region (Malaysia).

Olesicampe proterva (Brischke, 1880)

Material examined – **Hungary**: Somogy County, Örtilos, Szentmihályhegy, floodplain of the River Dráva, 27–29.VI.2025, leg. V. Szőke & Z. Vas, one male.

Remarks – First record from Hungary. This species is widely distributed in the Western Palaearctic Region (YU *et al.* 2016). YU *et al.* (2016) erroneously listed it as known from Hungary, citing ZILÁHI-KISS (1924, 1926), but the localities cited in the latter work, namely Dicsőszentmárton [= Târnăveni], Oroszmező [= Rus] and Keisd [= Saschiz], all pertain to Romania, not to Hungary.

Venturia canescens (Gravenhorst, 1829)

Material examined – **Argentina**: Buenos Aires, 1928, leg. Á. Vezényi, one female.

Remarks – First record from Argentina. This species has a worldwide distribution (YU *et al.* 2016).

Cryptinae*Diloba opaca* (Szépligeti, 1916)

Material examined – **Indonesia**: West Papua, Batanta Island, left side stream of Waridor River, 30–55 m, 13.II.2025, leg. T. Kovács, one female.

Remarks – First record from Indonesia. This species has been known from Papua New Guinea (YU *et al.* 2016).

Gelis melanocephalus (Schränk, 1781)

Material examined – **Serbia**: Moravica, Lučani, Rti, outlet brook at Rčanska cave, 400 m, 7.X.2025, leg. T. Kovács, A. Eichert, K. Földi & D. Murányi, one female.

Remarks – First record from Serbia. This species is widely distributed in the Palaearctic Region (YU *et al.* 2016).

Ctenopelmatinae

Perilissus testaceoides (Morley, 1926)

Material examined – **Angola:** Malanje Province, Mussolo, Escarpment Forest, Miombo Campsite on the plateau, 1177 m, 20–22.II.2026, leg. Sz. Sáfián, D. Bartsch & P. Vas Pinto, one female.

Remarks – First record from Angola. This species is widely distributed in the Afrotropical Region (YU *et al.* 2016).

Mesochorinae

Mesochorus rubeculus Hartig, 1838

Material examined – **Montenegro:** Play, Visitor Mts, forest stream and brooks along Katun road, 1515 m, 4.X.2025, leg. T. Kovács, A. Eichert, K. Földi & D. Murányi, one female.

Remarks – First record from Montenegro. This species is widely distributed in the Palaearctic Region (YU *et al.* 2016).

Ophioninae

Enicospilus biimpressus (Brullé, 1846)

Material examined – **Angola:** Malanje Province, Mussolo, Escarpment Forest, Miombo Campsite on the plateau, 1177 m, 20–22.II.2026, leg. Sz. Sáfián, D. Bartsch & P. Vas Pinto, one female.

Remarks – First record from Angola. This species is widely distributed in the Afrotropical Region (YU *et al.* 2016, VAS 2022*b*, 2024*b*).

Enicospilus flavoscutellatus (Brullé, 1846)

Material examined – **Martinique:** Saint-Pierre, 24.VI.–16.VII.2018, leg. Sz. Kiss, one male; Saint-Pierre outskirts, 14.7522°N, 61.1565°W, II.2026, leg. Á. Mészáros, Sz. Kiss. M. Medvegý & Zs. Sági, one female.

Remarks – First records from Martinique. This species is widely distributed in the Neotropical Region (YU *et al.* 2016).

Enicospilus undulatus (Gravenhorst, 1829)

Material examined – **North Macedonia**: Southeastern Region, Velmej, Gorni Istok Spring and its outlet, 865 m, 26.VI.2024, leg. T. Kovács, A. Ambrus & K. Harmos, one female.

Remarks – First record from the Republic of North Macedonia. This species is widely distributed in the Palaearctic Region (YU *et al.* 2016).

Euryophion nigripennis Cameron, 1906

Material examined – **Angola**: Huambo Province, Morro do Moco, rocky montane grassland near Kanjonde village, 12°25'33.03"S, 15°8'52.65"E, 1930 m, 21–23.II.2025, leg. Sz. Sáfián, one female.

Remarks – First record from Angola. This species is widely distributed in the Afrotropical Region (YU *et al.* 2016).

Euryophion titanius Vas, 2022

Material examined – **Angola**: Malanje Province, Mussolo, Escarpment Forest, Miombo Campsite on the plateau, 1177 m, 20–22.II.2026, leg. Sz. Sáfián, D. Bartsch & P. Vas Pinto, one female.

Remarks – First record from Angola. This species was recently described from Liberia and the Republic of the Congo, and subsequently reported from Cameroon (VAS 2022a, b).

Laticoleus unicolor (Szépligeti, 1908)

Material examined – **Angola**: Malanje Province, Luando Special Reserve, Congolo River Ranger Camp, 1070 m, 17–19.II.2026, leg. Sz. Sáfián, D. Bartsch & P. Vas Pinto, one male.

Remarks – First record from Angola. This species is widely distributed in the Afrotropical Region (YU *et al.* 2016).

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