

**New species and new records of Oriental Campopleginae and  
Nesomesochorinae (Hymenoptera: Ichneumonidae)**

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**Abstract** – Oriental species of the subfamilies Campopleginae and Nesomesochorinae of Ichneumonidae (Hymenoptera) are treated. *Hyposoter ara* sp. nov., *Hyposoter djalai* sp. nov., and *Venturia dayang* sp. nov. are described from Malaysia. *Casinaria leo* Maheshwary et Gupta, 1977 is reported for the first time from Vietnam, *Macrulus areolaris* Horstmann, 1978 is reported for the first time from Malaysia (representing its first record from the Oriental region), and *Chriodes chinensis* Gupta et Maheshwary, 1974, *Chriodes javensis* Gupta et Maheshwary, 1974, *Chriodes orientalis* Gupta et Maheshwary, 1974, and *Klutiana townesi* (Baltazar, 1961) are reported for the first time from Thailand.

**Key words** – taxonomy, species description, distribution, *Casinaria*, *Hyposoter*, *Macrulus*, *Venturia*, *Chriodes*, *Klutiana*

INTRODUCTION

In this paper, based on the Oriental Campopleginae and Nesomesochorinae (Hymenoptera: Ichneumonidae) material of the Hungarian Natural History Museum (HNHM, Budapest) and that of the Biological Museum of Lund University (MZLU, Lund), three new species of Oriental Campopleginae are described: *Hyposoter ara* sp. nov., *Hyposoter djalai* sp. nov., and *Venturia dayang* sp. nov. from Malaysia. Additionally, new distributional records of several species are provided. Regarding Campopleginae, *Casinaria leo* Maheshwary et Gupta, 1977 is reported for the first time from Vietnam, and *Macrulus areolaris* Horstmann, 1978 is reported for the first time from Malaysia; the latter represents the first record of the species from the Oriental region. Regarding Nesomesochorinae, *Chriodes chinensis* Gupta et Maheshwary, 1974, *Chriodes javensis* Gupta et Maheshwary, 1974, *Chriodes orientalis* Gupta et Maheshwary, 1974, and *Klutiana townesi* (Baltazar, 1961) are reported for the first time from Thailand.

Taxonomy and nomenclature follow YU & HORSTMANN (1997) and YU *et al.* (2016). Morphological terminology follows GAULD (1984, 1991) and GAULD *et al.* (1997); however, in cases of wing veins the corresponding terminology of TOWNES (1969) is also used. Terminology of body surface sculpturing follows HARRIS (1979). Identifications were based on the works of CRESSON (1872), CAMERON (1899, 1905, 1906), MORLEY (1913), VIERECK (1925), SONAN (1929), UCHIDA (1932), RAO (1953), TOWNES (1970), HORSTMANN (1978), MOMOI (1970), GUPTA & MAHESHWARY (1974, 1977), GUPTA (1980, 1983, 1987), GAULD (1984), CHEN *et al.* (2017), VAS (2019, 2020, 2023*a, b*), SHIMIZU & BROAD (2020), HAN *et al.* (2021), KLOPFSTEIN *et al.* (2022), GALSWORTHY *et al.* (2023), 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 specimens are given verbatim, with additions and explanations in square brackets if necessary. Taxa are listed alphabetically.

## TAXONOMY

Subfamily: Campopleginae Förster, 1869

Genus: *Hyposoter* Förster, 1869

Type species: *Limnerium parorgyiae* Viereck, 1910; subsequent designation by VIERECK (1910)

Diagnosis: TOWNES (1970), GAULD (1984)

### *Hyposoter ara* sp. nov.

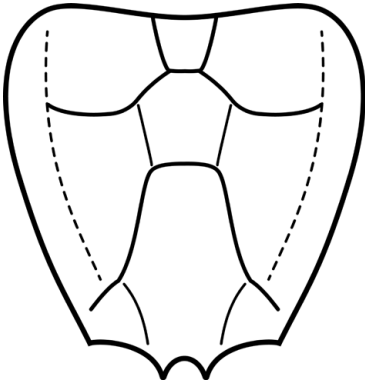
(Figs 1–3)

*Type material* – Holotype: female, “Malaysia: Sabah, Sipitang, Mendolong, A1L, 27.IV.1988, leg. S. Adebratt“, specimen card-mounted, id. MZLU 207019. Paratypes: one female, same label data as holotype but T1B/W4, 31.III.1989 (id. MZLU 207020); five males, same label data as holotype but 5.IV.1988 (id. MZLU 207131), 11.IV.1988 (id. MZLU 207132), T1B/W4, 5.V.1988 (id. MZLU 207130), 16.III.1989 (id. MZLU 207134), 19.III.1989 (id. MZLU 207133). Holotype and four male paratypes are deposited in the MZLU; one female paratype (id. HNHM-HYM 155179, originally MZLU 207020) and one male paratype (id. HNHM-HYM 155180, originally MZLU 207131) are deposited in the HNHM.

1



2



3



**Figs 1–3.** *Hyposoter ara* sp. nov., 1 = holotype female, 2 = propodeum, 3 = paratype male (MZLU 207131) (photos by Zoltán Vas, drawing by Viktória Szőke)

*Diagnosis* – The new species can be distinguished from the known species of the genus by the following character states in combination: preapical flagellomeres longer than wide; mesopleuron finely (in female) or more strongly (in male) rugose on granulate surface, around speculum coarsely rugose to reticulate-rugose; propodeum moderately short, distinctly convex in profile, rugose to reticulate-rugose on granulate surface; lateromedian longitudinal carina medially slightly weakened, lateral longitudinal carina obsolescent, anterior transverse carina distinct except its section between lateral longitudinal carina and pleural carina, posterior transverse carinae distinct, complete, medially more or less merged with transverse rugosity; area superomedia 1.0–1.1× as long as wide, posteriorly closed; areolet long-stalked, second recurrent vein (*2m-cu*) at distal corner of areolet; nervulus (*cu-a*) interstitial to slightly postfurcal; tarsal claws pectinate almost to apices; second tergite 1.3–1.5× as long as its apical width; posterior margins of apical tergites not excised; antenna brown, scapus and pedicellus ivory with a narrow, dark brown stripe on outer side; tegula ivory; second tergite apically and third tergite pale orange, following tergites predominantly pale orange in female, brown in male; fore and middle legs pale orange, except coxae, trochanters and trochantelli pale yellow; hind leg with coxa black, femur and tibia orange, the latter basally weakly, apically more extensively brownish, without distinct banded pattern.

*Description* – Female (Figs 1–2). Body length ca. 7 mm, fore wing length ca. 5 mm.

Head: Antenna with 38 flagellomeres; first flagellomere slender, ca. 5× as long as its apical width; preapical flagellomeres longer than wide. Head transverse, matt, granulate with indistinct punctures, and with dense, short hairs. Ocular-ocellar distance 1.0× as long as ocellus diameter, distance between lateral ocelli 1.1–1.2× as long as ocellus diameter. Inner eye orbits slightly indented, parallel. Gena very short, very strongly narrowed behind eyes, in dorsal view 0.2× as long as eye width. Occipital carina complete, reaching hypostomal carina almost at base of mandible; hypostomal carina slightly elevated. Frons flat, slightly impressed above toruli, median longitudinal carina indistinct. Face finely rugose on granulate surface, weakly convex in profile. Clypeus finely rugose on granulate surface, small, its basal half almost flat, apical half strongly convex (almost nose-like) in profile, its apical margin strongly impressed, sharp. Malar space 0.6–0.7× as long as basal width of mandible. Mandible short, lower margin of mandible with a wide flange from base towards teeth, flange gradually narrowed before teeth; upper mandibular tooth slightly longer and wider than lower tooth.

Mesosoma: Mesosoma matt with dense, short hairs. Pronotum with strong, transverse wrinkles on lower two-thirds, upper third rugose-granulate; epomia distinct. Mesoscutum granulate with dense, small punctures, weakly rugulose in the middle, slightly longer than wide, convex in profile; notaulus not developed. Scuto-scutellar groove wide and moderately deep. Scutellum granulate with weak punctures, finely rugulose, convex in profile, lateral carinae not developed.

Mesopleuron finely rugose on granulate surface, punctures indistinct, around speculum coarsely rugose to reticulate-rugose; speculum finely granulate, matt. Epicnemial carina complete, strong, pleural part bent to anterior margin of mesopleuron reaching it slightly below its middle height. Sternaulus indistinct. Posterior transverse carina of mesosternum complete, elevated. Metanotum ca. 0.4–0.5× as long as scutellum, anteriorly with a pair of foveae. Metapleuron finely rugose on granulate surface, lower half more coarsely rugose, without juxtacoxal carina; submetapleural carina complete, elevated. Pleural carina of propodeum complete, strong; propodeal spiracle elongate oval, separated from pleural carina by less than its length, connected to pleural carina by a distinct ridge. Propodeum moderately short, distinctly convex in profile, rugose on granulate surface. Lateromedian longitudinal carina distinct, medially slightly weakened and more or less merged with rugosity; lateral longitudinal carina obsolescent; anterior transverse carina distinct except its section between lateral longitudinal carina and pleural carina obsolete; posterior transverse carinae distinct, complete, medially more or less merged with transverse rugosity. Area basalis trapezoid, slightly longer than its anterior width. Area superomedia irregularly rugose, about pentagonal, 1.0–1.1× as long as wide, posteriorly weakly convergent and closed. Area petiolaris with coarse, dense, mostly transverse rugae, medially slightly impressed. Fore wing with long-stalked, petiolate areolet, its length as long as or slightly longer than its stalk, *3rs-m* present, second recurrent vein (*2m-cu*) at distal corner of areolet; distal abscissa of *Rs* almost straight; nervulus (*cu-a*) interstitial to slightly postfurcal, weakly inclivous; postnervulus (abscissa of *Cu1* between *1m-cu* and *Cu1a* + *Cu1b*) intercepted above its middle by *Cu1a*; lower external angle of second discal cell almost right-angled. Hind wing with nervellus (*cu-a* + abscissa of *Cu1* between *M* and *cu-a*) almost vertical, slightly curved, not intercepted by discoidella (*Cu1*); discoidella spectral, proximally not connected to nervellus. Coxae finely granulate with weak, indistinct traces of punctures. Hind femur 5.0–5.5× as long as high. Inner spur of hind tibia ca. 0.65–0.70× as long as first tarsomere of hind tarsus. Hind tarsus with an inconspicuous but discernible midventral row of closely spaced, short hairs. Tarsal claws small, as long as or slightly longer than arolium, distinctly pectinate almost to apices.

Metasoma: Metasoma compressed, very finely granulate to shagreened, and with dense, short hairs. First tergite slender, 3.2–3.4× as long as its apical width, 1.3–1.4× as long as second tergite; glymma virtually absent, however first tergite with a shallow, short, narrow lateral depression anterior to spiracle; dorsomedian carina of first tergite indistinct. Second tergite 1.3–1.5× as long as its apical width; thyridium oval, its distance from basal margin of tergite ca. 1.5× as long as its length. Posterior margin of sixth tergite almost straight, posterior margin of seventh tergite slightly concave, not excised. Ovipositor sheath shorter than apical depth of metasoma; ovipositor almost straight, dorsal preapical notch distinct.

Colour: Flagellum brown, scapus and pedicellus ivory with a narrow, dark brown stripe on outer side. Head black, palpi ivory, mandible pale yellow, mandibular teeth brownish. Mesosoma black, tegula ivory. Metasoma: first tergite black with pale orange apical band; basal two-thirds of second tergite blackish, apical third pale orange; third and following tergites pale orange, medially with more or less distinct, narrow, brownish patches. Wings hyaline, wing veins and pterostigma brown. Fore and middle legs pale orange, except coxae, trochanters and trochantelli pale yellow. Hind leg: coxa black, apically narrowly yellowish; trochanter and trochantellus pale orange; femur orange; tibia orange, basally weakly, apically more distinctly brownish, banded pattern weak, indistinct; tarsus brownish.

Male (Fig. 3): Similar to female in all characters described above, except: antenna with 36–38 flagellomeres, first flagellomere ca.  $4.5\times$  as long as its apical width; ocular-ocellar distance slightly shorter than ocellus diameter; surface sculpture (i.e., rugosity) of mesopleuron, metapleuron, and propodeum distinctly stronger, coarser than in female, more or less reticulate-rugose; midventral row of closely spaced, short hairs of hind tarsus more conspicuous than in female; first tergite slightly slenderer than in female,  $3.4\text{--}3.6\times$  as long as its apical width; thyridium more elongate than in female, its distance from basal margin of tergite subequal to its length; parameres apically wide, rounded; metasoma with fourth and following tergites predominantly brown.

*Distribution* – Malaysia (Borneo Island).

*Etymology* – The specific epithet is the name of the Bornean mythical creature Ara, a primeval creator spirit; noun in apposition, ending not to be changed.

*Remarks on generic placement* – The genus *Hyposoter* is large and suspected to be polyphyletic, intermingled with other genera such as *Olesicampe* Förster, 1869 or *Diadegma* Förster, 1869, making the determination of the generic placement difficult in some cases (GALSWORTHY *et al.* 2023). The hind tarsus of *Hyposoter ara* sp. nov. bears an inconspicuous but discernible midventral row of closely spaced, short hairs (which is somewhat more conspicuous in males than in females of the new species), similar in structure to that of *Eriborus* Förster, 1869 but less developed and not scale-like. This character state is not unknown but rare in *Hyposoter* (KLOPFSTEIN *et al.* 2022). Additionally, glymma of the new species is virtually absent, which is also a rare but known character state among *Hyposoter* species (TOWNES 1970). The structure of the hind tarsus and glymma could also point to *Melalophacharops* Uchida, 1928; however, the midventral row of the hind tarsus is much more strongly developed and scale-like in *Melalophacharops* and none of the other distinguishing characteristics of this genus are found in the new species (such as absent areolet or conspicuously narrow subbasal cell of hind wing) (TOWNES 1970, GAULD 1984, GUPTA 1987, VAS 2023b). In conclusion, following the current generic definition of *Hyposoter* (TOWNES 1970, GAULD 1984, GALSWORTHY *et al.* 2023), the

diagnostic characteristics of the new species (such as wide flange on the lower margin of mandible, impressed clypeal margin, very short, strongly narrowed gena, matt, granulate speculum, structure of propodeal carination, posteriorly closed area superomedia) clearly indicates its placement into the genus *Hyposoter*.

*Remarks on identification* – Regarding its colouration, the new species is somewhat similar to *Hyposoter volens* (Cameron, 1899), an Oriental species known from India. *Hyposoter volens* can be readily distinguished from the new species by its distinct glymma, dark scapus and hind trochanter, and much larger, short-stalked areolet with *2m-cu* placed distinctly proximad to distal corner of areolet.

*Hyposoter djalai* sp. nov.

(Figs 4–5)

*Type material* – Holotype: female, “Malaysia, Taman Negara, River Park, 6.III.1987, No. 40, leg. Hangay, Gy. & Vojnits, A.”, specimen card-mounted, id. HNHM-HYM 155181. Holotype is deposited in the HNHM.

*Diagnosis* – The new species can be distinguished from the known species of the genus by the following character states in combination: preapical flagellomeres slightly longer than wide; mesopleuron granulate with weak, dense punctures on lower half, and with dense, oblique wrinkles anterior to speculum; propodeum elongate, weakly convex in profile, granulate, posteriorly (behind posterior transverse carina) rugose; lateromedian and lateral longitudinal carinae obsolete, anterior and posterior transverse carinae strong; area superomedia 1.5× as long as wide, laterally barely delimited, posteriorly closed; areolet long-stalked, second recurrent vein (*2m-cu*) at distal corner of areolet; nervulus (*cu-a*) postfurcal by about its width; tarsal claws pectinate almost to apices; second tergite 1.35× as long as its apical width; posterior margins of apical tergites not excised; antenna brown, scapus and pedicellus ventrally and dorsally pale yellow; tegula ivory; metasoma predominantly pale orange; fore and middle legs pale orange, except coxae, trochanters and trochantelli ivory; hind leg with coxa pale yellow to pale orange, femur pale orange, tibia basally and medially yellowish, subbasally and apically brown, banded pattern distinct.

*Description* – Female (Figs 4–5). Body length ca. 6 mm, fore wing length ca. 4.5 mm.

Head: Antenna with 33 flagellomeres; first flagellomere slender, ca. 5.5× as long as its apical width; preapical flagellomeres slightly longer than wide. Head transverse, matt, finely granulate without distinct punctures, and with dense, short hairs. Ocular-ocellar distance 0.8× as long as ocellus diameter, distance between lateral ocelli 0.9× as long as ocellus diameter. Inner eye orbits slightly indented, parallel. Gena very short, very strongly narrowed behind eyes, in dorsal

view 0.25× as long as eye width. Occipital carina complete, reaching hypostomal carina distinctly before base of mandible; hypostomal carina slightly elevated. Frons almost flat, slightly impressed above toruli, median longitudinal carina absent. Face and clypeus very weakly convex in profile; clypeus moderately small, its apical margin weakly impressed, sharp. Malar space 0.7× as long as basal width of mandible. Mandible short, lower margin of mandible with a wide flange from base towards teeth, flange gradually narrowed before teeth; upper mandibular tooth slightly longer and wider than lower tooth.

Mesosoma: Mesosoma matt, granulate with weak, indistinct punctures, and with dense, short hairs. Pronotum with strong, transverse wrinkles on lower two-thirds; epomia distinct. Mesoscutum slightly longer than wide, convex in profile; notaulus not developed. Scuto-scutellar groove wide and deep. Scutellum convex in profile, lateral carinae not developed. Mesopleuron granulate with weak, dense punctures on lower half, and with dense, oblique wrinkles anterior to speculum; speculum finely granulate, matt. Epicnemial carina complete, strong, pleural part bent to anterior margin of mesopleuron reaching it at about its middle height. Sternaulus indistinct. Posterior transverse carina of mesosternum complete, elevated. Metanotum ca. 0.5× as long as scutellum, anteriorly with a pair of foveae. Metapleuron without juxtacoxal carina; submetapleural carina complete, elevated. Pleural carina of propodeum complete, strong; propodeal spiracle short oval, separated from pleural carina by about its length, connected to pleural carina by a distinct ridge. Propodeum elongate, weakly convex in profile, granulate, posteriorly (behind posterior transverse carina) rugose. Propodeal carination: lateromedian and lateral longitudinal carinae obsolete, their traces barely discernible; anterior and posterior transverse carinae distinct, strong. Area basalis narrowly triangular, posteriorly merged into a single carina. Area superomedia granulate, pentagonal, 1.5× as long as wide, laterally barely delimited, posteriorly closed. Area petiolaris rugose, separated from area superomedia. Fore wing with long-stalked, petiolate areolet, its length slightly longer than its stalk, *3rs-m* present, second recurrent vein (*2m-cu*) at distal corner of areolet; distal abscissa of *Rs* almost straight; nervulus (*cu-a*) postfurcal by about its width, almost vertical; postnervulus (abscissa of *Cu1* between *1m-cu* and *Cu1a* + *Cu1b*) intercepted slightly above its middle by *Cu1a*; lower external angle of second discal cell acute. Hind wing with nervellus (*cu-a* + abscissa of *Cu1* between *M* and *cu-a*) vertical, not intercepted by discoidella (*Cu1*); discoidella spectral, proximally not connected to nervellus. Coxae finely granulate. Hind femur ca. 5× as long as high. Inner spur of hind tibia ca. 0.65× as long as first tarsomere of hind tarsus. Hind tarsus without a distinct midventral row of closely spaced, short hairs (though a slightly darker, barely discernible line present). Tarsal claws small, about as long as arolium, distinctly pectinate almost to apices.



Metasoma: Metasoma moderately compressed, very finely granulate to shagreened, and with dense, short hairs. First tergite slender, 3.2× as long as its apical width, 1.2× as long as second tergite; glymma distinct, deep; dorsomedian carina of first tergite indistinct. Second tergite 1.35× as long as its apical width; thyridium oval, its distance from basal margin of tergite ca. 1.3× as long as its length. Posterior margin of sixth tergite almost straight, posterior margin of seventh tergite slightly concave, not excised. Ovipositor sheath shorter than apical depth of metasoma; ovipositor slightly upcurved, dorsal preapical notch distinct.

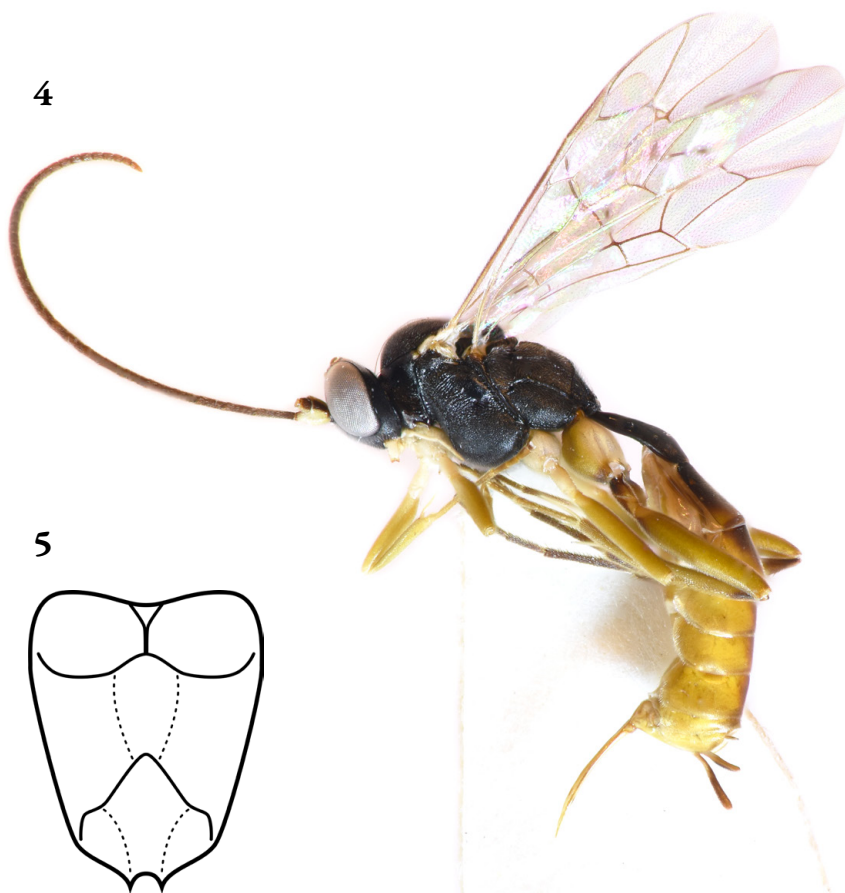
Colour: Flagellum brown, scapus and pedicellus ventrally and dorsally pale yellow, laterally with dark brown stripes. Head black, palpi ivory, mandible pale yellow, mandibular teeth brownish. Mesosoma black, tegula ivory. Metasoma: first tergite black, second tergite black except an orange apical band, third tergite with basal half brownish, apical half pale orange, following tergites pale orange with weak and narrow, longitudinal brownish patches in the midline. Wings hyaline, wing veins light brown, pterostigma yellowish ochre. Fore and middle legs pale orange, except coxae, trochanters and trochantelli ivory. Hind leg: coxa pale yellow to pale orange, apically narrowly brownish; trochanter and trochantellus pale orange, partly darkened; femur pale orange; tibia basally and medially yellowish, subbasally and apically brown, banded pattern distinct; tarsus brownish.

Male: Unknown.

*Distribution* – Malaysia (Peninsular Malaysia).

*Etymology* – The specific epithet is the name of the Malayan mythical sky goddess Djalai; noun in apposition, ending not to be changed.

*Remarks on identification* – Regarding the colouration of hind coxa and metasoma, the new species is not similar to, and cannot be confused with any other *Hyposoter* species of the Oriental region. It is most similar to *Hyposoter ventralis* (Walker, 1874), an Eastern Palaearctic species known from Japan. The two species can be readily distinguished by the following: in *Hyposoter ventralis* (cf. photos of the holotype in SHIMIZU & BROAD 2020: fig. 48) all coxae are reddish, and metasoma is predominantly reddish (while those of the new species are paler); hind tibia is conspicuously darker, reddish brown to brown, without distinct, contrasting banded pattern (that of the new species is basally and medially yellowish, subbasally and apically brown with distinct, contrasting banded pattern); propodeal carinae are obsolescent (while in the new species anterior and posterior transverse carinae are conspicuously strong); propodeum is short, strongly convex in profile (elongate and weakly convex in the new species); and pterostigma is dark brown (yellowish ochre in the new species).



Figs 4–5. *Hyposoter djalai* sp. nov., 4 = holotype female, 5 = propodeum  
(photo by Zoltán Vas, drawing by Viktória Szóke)

### Genus: *Venturia* Schrottky, 1902

Type species: *Venturia argentina* Schrottky, 1902; subsequent designation by VIERECK (1914)

Diagnosis: TOWNES (1970), GUPTA & MAHESHWARY (1977), GAULD (1984)

***Venturia dayang* sp. nov.**  
(Figs 6–8)

*Type material* – Holotype: female, “Malaysia: Sabah, Sipitang, Mendolong, T3/W5, 17.III.1989, leg. S. Adebratt”, specimen card-mounted, id. MZLU 207073. Paratype: male, same label data as holotype but 8.III.1989, id. MZLU 207074. Holotype and paratype are deposited in the MZLU.

*Diagnosis* – The new species can be distinguished from the known species of the genus by the following character states in combination: ocular-ocellar distance  $0.6\times$  as long as ocellus diameter; distance between lateral ocelli  $1.5\times$  as long as ocellus diameter,  $2.5\times$  as long as ocular-ocellar distance; gena very short, strongly narrowed behind eyes; frons finely rugose, face finely rugose-punctate on granulate background; scutellum strongly convex in profile; mesopleuron densely punctate on granulate, matt background, speculum mostly smooth; metapleuron finely rugose-punctate; propodeum weakly convex in profile, its apex reaching about middle length of hind coxa, its surface mainly rugose, area superomedia and area petiolaris strongly, densely, transversely striate; propodeal carinae distinct; area superomedia hexagonal, ca.  $1.8\times$  as long as wide, weakly convergent behind costulae, posteriorly opened; fore wing with long-stalked areolet, nervulus interstitial; second tergite in female  $2\times$ , in male  $3\times$  as long as its apical width; ovipositor sheath  $1.35\times$  as long as hind tibia; antenna brown, scapus and pedicellus ventrally pale yellow; tegula pale yellow; metasoma orange, except tergites 1–3 basally blackish in female, in male with brown, dorsal patches from third tergite on; all coxae predominantly dark; hind femur and tibia orange, the latter with subbasal and apical brownish bands in female, in male hind femur and tibia predominantly brown.

*Description* – Female (Figs 6–7). Body length ca. 7 mm, fore wing length ca. 4.5 mm.

Head: Antenna with 41 flagellomeres; first flagellomere ca.  $4\times$  as long as its apical width; preapical flagellomeres longer than wide. Head transverse, matt, with dense, moderately short hairs. Ocular-ocellar distance  $0.6\times$  as long as ocellus diameter, distance between lateral ocelli  $1.5\times$  as long as ocellus diameter, and  $2.5\times$  as long as ocular-ocellar distance. Inner eye orbits only weakly indented, about parallel. Gena very short, strongly narrowed behind eyes, in dorsal view  $0.3\times$  as long as eye width, granulate with fine, dense punctures. Occipital carina complete, reaching hypostomal carina at base of mandible; hypostomal carina slightly elevated. Frons finely rugose on granulate background, flat, slightly impressed above toruli, median longitudinal carina obsolescent. Face almost flat, finely rugose-punctate on granulate background. Clypeus flat in profile, relatively wide, its apical margin subtruncate. Malar space short,  $0.4\times$  as long as basal width of mandible. Mandible strong, lower margin of mandible with a moderately wide flange from base towards teeth, flange gradually narrowed before teeth; upper mandibular tooth slightly longer than lower tooth.

**Mesosoma:** Mesosoma matt, with dense, short hairs. Pronotum with strong, transverse to diagonal wrinkles on lower two-thirds, its hind corner rugulose-punctate; epomia distinct. Mesoscutum densely punctate and finely rugulose on roughly granulate background, about as long as wide, convex in profile; notaulus not developed. Scuto-scutellar groove wide and moderately deep. Scutellum rugose-punctate on granulate background, strongly convex in profile, lateral carinae developed only at extreme base. Mesopleuron densely punctate on roughly granulate background, with relatively weak, oblique wrinkles anterior to speculum; speculum mostly smooth, partly granulate. Epicnemial carina complete, strong, pleural part bent to anterior margin of mesopleuron reaching it slightly below its middle height. Sternaulus indistinct. Posterior transverse carina of mesosternum complete, slightly elevated. Metanotum rugose, ca.  $0.5\times$  as long as scutellum. Metapleuron finely rugose-punctate; juxtacoxal carina not developed; submetapleural carina complete, elevated. Pleural carina of propodeum complete; propodeal spiracle oval, separated from pleural carina by slightly less than its length, connected to pleural carina by a weak ridge. Propodeum weakly convex in profile, its apex reaching about middle length of hind coxa. Surface sculpture of propodeum mainly rugose, except area externa more or less punctate on granulate background, and area superomedia and area petiolaris strongly, densely, transversely striate. Propodeal carinae distinct, except median section of posterior transverse carina absent. Area basalis trapezoid, slightly shorter than its anterior width. Area superomedia hexagonal, ca.  $1.8\times$  as long as wide, reaching almost half length of propodeum, angulate at costulae, weakly convergent behind costulae, posteriorly opened. Area petiolaris confluent with area superomedia, their junction discernible. Fore wing with quadrate, long-stalked (petiolate) areolet, stalk about as long as areolet, *3rs-m* present, second recurrent vein (*2m-cu*) close to distal corner of areolet; distal abscissa of *Rs* almost straight; nervulus (*cu-a*) interstitial, slightly inclivous; postnervulus (abscissa of *Cu1* between *1m-cu* and *Cu1a* + *Cu1b*) intercepted distinctly above its middle by *Cu1a*; lower external angle of second discal cell acute. Hind wing with nervellus (*cu-a* + abscissa of *Cu1* between *M* and *cu-a*) weakly inclivous, weakly broken, intercepted by discoidella (*Cu1*) close to its posterior end; discoidella spectral, proximally connected to nervellus. Coxae finely granulate-punctate. Hind femur ca.  $5.5\times$  as long as high. Inner spur of hind tibia ca.  $0.5\times$  as long as first tarsomere of hind tarsus. Tarsal claws small, about as long as arolium, distinctly pectinate almost to apices.

**Metasoma:** Metasoma compressed, very finely granulate to shagreened with indistinct punctures, and with dense, short hairs. First tergite rather slender, almost  $5\times$  as long as its apical width,  $1.2\times$  as long as second tergite; glymma absent; dorsomedian carina of first tergite absent. Second tergite  $2\times$  as long as its apical width; thyridium small, oval, its distance from basal margin of tergite ca.  $4\times$  as long as its length, connected to basal margin of tergite by a shallow groove. Posterior margins of sixth and seventh tergites medially strongly excised.

Ovipositor sheath 1.35× as long as hind tibia, 1.75× as long as hind femur; fully exposed ovipositor 2.0× as long as hind tibia, 2.5× as long as hind femur, compressed and weakly, evenly upcurved.

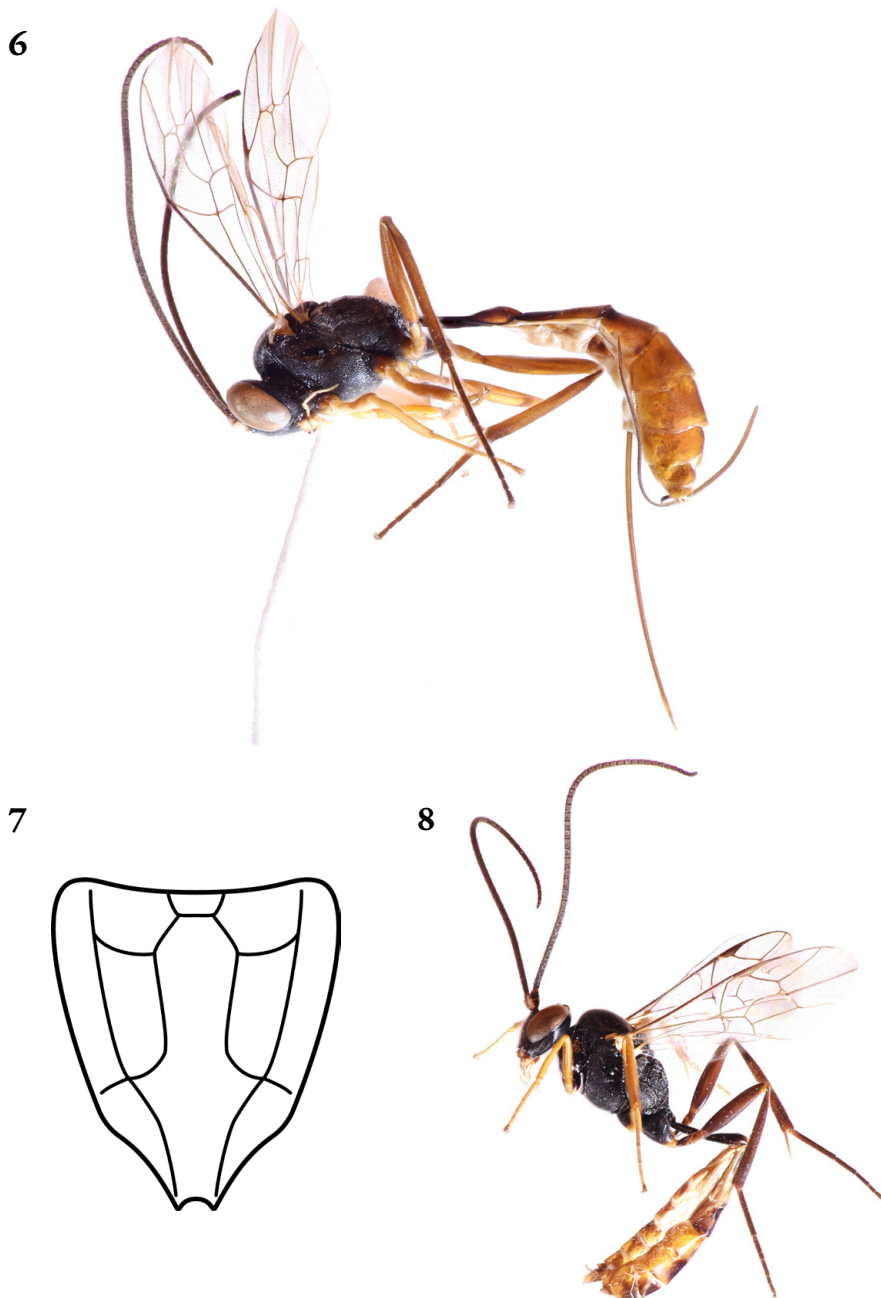
Colour: Antenna brown, except scapus and pedicellus ventrally pale yellow. Head black, palpi and mandible yellow, base of mandible narrowly blackish, mandibular teeth brownish. Mesosoma black, tegula pale yellow. Metasoma orange, except petiolus, basal half of second tergite, and a narrow basal spot on third tergite blackish. Wings hyaline, wing veins and pterostigma brown. Fore and middle legs: coxae predominantly blackish, apically yellowish; trochanters and trochantelli yellow; femora pale orange; tibiae and tarsi yellow, apical tarsomeres more or less brownish. Hind leg: coxa almost entirely black, apically narrowly yellowish; trochanter and trochantellus yellowish; femur orange; tibia orange, subbasal and apical bands brownish; tarsus brownish.

Male (Fig. 8): Similar to female in all characters described above, except: antenna with 39–40 flagellomeres, first flagellomere ca. 3.5× as long as its apical width; propodeal carinae somewhat stronger than in female; first tergite ca. 6×, second tergite ca. 3× as long as wide; posterior margins of apical tergites straight; pedicellus entirely brown; tergites from third on dorsally with brown patches; hind leg (except coxa) darker than in female, brown.

*Distribution* – Malaysia (Borneo Island).

*Etymology* – The specific epithet is the name of the Bornean mythical fire goddess Dayang Raca; noun in apposition, ending not to be changed.

*Remarks on identification* – The new species is superficially similar in colouration to *Venturia canescens* (Gravenhorst, 1829); however, *Venturia canescens* can be easily distinguished from the new species by its distinctly larger, sessile to very short-stalked areolet, weakly convex scutellum (in profile), less strongly sculptured and shinier mesopleuron, less strongly striate area supermedia and area petiolaris, and yellow fore and middle coxae. Other species with similar colouration is *Venturia junnanensis* Han, van Achterberg et Chen, 2021, which however cannot be confused with the new species due to its very different propodeal carination and sculpture, apically strongly upcurved ovipositor, and much shorter distance between lateral ocelli (cf. HAN *et al.* 2021: figs 13–14). By using the most complete identification key of the Oriental species of the genus (GUPTA & MAHESHWARY 1977), the new species keys out with the Indian species *Venturia longiterebrae* (Rao, 1953) which can be readily distinguished from the new species by its distinctly longer ovipositor (3.0–3.5× as long as hind femur).



**Figs 6–8.** *Venturia dayang* sp. nov., 6 = holotype female, 7 = propodeum, 8 = paratype male (photos by Zoltán Vas, drawing by Viktória Szőke)

## NEW DISTRIBUTION RECORDS

## Campopleginae

*Casinaria leo* Maheshwary et Gupta, 1977

*Material examined* – One female, “Vietnam, Da Lat, Thac Prenn waterfall, 1200m, 1994.XII.10., leg. [S.] Mahunka, [Gy.] Sziráki, [L.] Zombori”. Deposited in the HNHM.

*Remarks* – First record from Vietnam. The Vietnamese specimen belongs to the subspecies *Casinaria leo rufipedalis* Maheshwary et Gupta, 1977, which was hitherto known from Taiwan (GUPTA & MAHESHWARY 1977, YU *et al.* 2016).

*Macrulus areolaris* Horstmann, 1978

*Material examined* – One female, “Malaysia, Pahang, Cameron Highlands, Tanah Rata, edge of rainforest, at light, No. 72, 21.III.–2.IV.1995, leg. Merkl Ottó”. Deposited in the HNHM.

*Remarks* – First record from Malaysia. This apparently rare species has been known from Europe (Western Palaearctic region), then it was recently discovered in Japan (Eastern Palaearctic region) (HORSTMANN 1978, YU *et al.* 2016, WATANABE 2018); hereby it is reported for the first time from the Oriental region.

## Nesomesochorinae

*Chriodes chinensis* Gupta et Maheshwary, 1974

*Material examined* – One female, “Thailand, Chiang Mai, Doi Suthep N.P., 2 km down to Phuping Palace, over small waterfalls, 2004.10.28., leg. M. Földvári, A. Orosz, L. Papp (No. 3)”; one female, “Thailand, Doi Inthanon N.P., Pha Sum Ran Waterfall, forest & along the brook, 2004.10.30., leg. M. Földvári, A. Orosz, L. Papp (No. 8)”. Deposited in the HNHM.

*Remarks* – First records from Thailand. This species has been known from the Oriental part of China (GUPTA & MAHESHWARY 1974, YU *et al.* 2016).

*Chriodes javensis* Gupta et Maheshwary, 1974

*Material examined* – One female, “Thailand, Trang Prov., Khao Chong Botanic Garden, along the stream below waterfall, 2004.11.14., leg. M. Földvári, A. Orosz, L. Papp (No. 30)”. Deposited in the HNHM.

*Remarks* – First record from Thailand. This species has been known from Java (GUPTA & MAHESHWARY 1974, YU *et al.* 2016).

*Chriodes orientalis* Gupta et Maheshwary, 1974

*Material examined* – One female, “Thailand, Trang Prov., Khao Chong Nature and Wildlife Reserve Center, rain forest, beating and netting in the surroundings of the Ton Prew Waterfall, 2003.11.21., leg. A. Orosz, Gy. Sziráki (No. 10)”. Deposited in the HNHM.

*Remarks* – First record from Thailand. This species has been known from Sri Lanka, Sumatra, and Malaysia (state Sabah, Borneo Island) (GUPTA & MAHESHWARY 1974, YU *et al.* 2016).

*Klutiana townesi* (Baltazar, 1961)

*Material examined* – One male, “Thailand, Fang, Mac Fang N.P., Doi Pha Hom Pok, 2000m, swept along forest road and creeks, 2003.11.22–23., leg. M. Földvári (No. 11)”. Deposited in the HNHM.

*Remarks* – First record from Thailand. This species has been known from India and the Philippines (GUPTA & MAHESHWARY 1974, YU *et al.* 2016).

\*

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