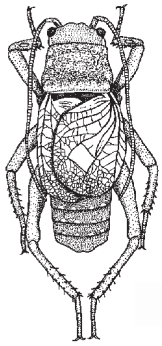

Far Eastern Entomologist

Дальневосточный энтомолог

Journal published by Far East Branch of the Russian Entomological Society and Laboratory of Entomology, Federal Scientific Center of the East Asia Terrestrial Biodiversity, Vladivostok

Number 547: 1-27 | ISSN 1026-051X (print edition) ISSN 2713-2196 (online edition) | May 2026

https://doi.org/10.25221/fee.547.1
https://elibrary.ru/linynp
https://zoobank.org/References/53B78422-8597-4974-9758-77667B052802

NEW BRACONID PARASITOIDS OF THE SUBFAMILIES HORMIINAE, RHYSIPOLINAE AND DORYCTINAE (HYMENOPTERA: BRACONIDAE) IN THE FAUNA OF KOREAN PENINSULA, WITH NOTES ON THE ASIAN GENUS *PLESIOCEDRIA* VAN ACHTERBERG ET CHEN, 2004 OF THE SUBFAMILY PAMBOLINAE

S. A. Belokobylskij[1*)], D.-S. Ku[2)]

1) *Zoological Institute, Russian Academy of Sciences, St Petersburg 199034, Russia. *Corresponding author. E-mail: doryctes@gmail.com*

2) *The Science Museum of Natural Enemies, Geochang 50147, Republic of Korea. E-mail: bracon2700@hanmail.net*

Summary. Two new species of the subfamily Hormiinae, *Parahormius breviradialis* **sp. n.** (Avgini) and *Aulosaphes pallipes* **sp. n.** (Lysitermini), are described and illustrated from South Korea. Six species from the subfamilies Rhysipolinae [*Pachystigmus* (*Pachystigmus*) *facialis* (Foerster, 1863) and *P.* (*Pseudavga*) *flavicoxa* (Tobias, 1964)] and Hormiinae (Lysitermini) (*Acanthormius crustatus* Belokobylskij, 1986, *A. rossicus* Tobias et Belokobylskij, 1981, *A. rugosivertex* Belokobylskij, 1988, and *A. takadai* Watanabe, 1968) as well as two species from subfamily Doryctinae [*Spathiostenus formosanus* (Watanabe, 1934) and *Spathius tsushimus* Belokobylskij, 2009] are new to the fauna of Korean Peninsula. The taxonomy and distribution of the genus *Plesiocedria* van Achterberg et Chen, 2004 (Pambolinae) are discussed. The species *Pambolus unicolor* Belokobylskij, 1992

is transferred to the genus *Plesiocedria*; as result, a new combination is proposed: *Plesiocedria unicolor* (Belokobylskij, 1992), **comb. n.** New synonymy is established: *Plesiocedria unicolor* (Belokobylskij, 1992) = *Plesiocedria intermediata* van Achterberg et Chen, 2004, **syn. n.**

Key words: parasitoids, Ichneumonoidea, taxonomy, new species, fauna, new records, East Asia.

С. А. Белокобыльский, Д.-С. Ку. Наездники-бракониды подсемейств Hormiinae, Rhysipolinae и Doryctinae (Hymenoptera: Braconidae) в фауне Корейского полуострова с замечаниями по азиатскому роду *Plesiocedria* van Achterberg et Chen, 2004 из подсемейства Pambolinae // Дальневосточный энтомолог. 2026. N 547. С. 1-27.

Резюме. Из Южной Кореи описаны и проиллюстрированы два новых вида браконид из подсемейства Hormiinae: *Parahormius breviradialis* **sp. n.** (Avgini) и *Aulosaphes pallipes* **sp. n.** (Lysitermini). Шесть видов из подсемейств Rhysipolinae [*Pachystigmus* (*Pachystigmus*) *facialis* (Foerster, 1863) и *P.* (*Pseudavga*) *flavicoxa* (Tobias, 1964)] и Hormiinae (Lysitermini) (*Acanthormius crustatus* Belokobylskij, 1986, *A. rossicus* Tobias et Belokobylskij, 1981, *A. rugosivertex* Belokobylskij, 1988 и *A. takadai* Watanabe, 1968), а также два вида из подсемейства Doryctinae [*Spathiostenus formosanus* (Watanabe, 1934) и *Spathius tsushimus* Belokobylskij, 2009] впервые указываются для фауны Корейского полуострова. Обсуждается таксономия и распространение азиатского рода *Plesiocedria* van Achterberg et Chen, 2004 (Pambolinae). Вид *Pambolus unicolor* Belokobylskij, 1992 перенесен в род *Plesiocedria*, в результате чего предложена новая комбинация: *Plesiocedria unicolor* (Belokobylskij, 1992), **comb. n.** Установлена новая синонимия: *Plesiocedria unicolor* (Belokobylskij, 1992) = *Plesiocedria intermediata* van Achterberg et Chen, 2004, **syn. n.**

INTRODUCTION

The parasitoids of the family Braconidae in the fauna of Eastern Asia are very diverse and peculiar having some taxa penetrating in this territory from the Oriental region. In spite the fact that Korean peninsula is located distinctly norther then the assumed upper border of the Oriental region, the taxa with possible oriental origin are constantly recorded in this fauna increased its number.

The some information about current small cyclostome subfamilies of Braconidae which was former included in the subfamily Exothecinae sensu lato (Belokobylskij, 1993), namely, Exothecinae, Hormiinae, Pambolinae, Rhysipolinae, and Rhyssalinae, of the Korean Peninsula has been published in a few faunistic papers and surveys (Papp, 1996, 2018; Belokobylskij, 1998; Ku *et al.,* 2001; Belokobylskij & Ku, 2023, 2025a, 2025b; Belokobylskij *et al.*, 2024).

In this paper, two species of the hormiine genera *Parahormius* Nixon, 1940 and *Aulosaphes* Muesebeck, 1935 are described from South Korea as a new for science, and eight species from the genera *Pachystigmus* Hellén, 1927, *Acanthormius* Ashmead, 1906, *Spathiostenus* Belokobylskij, 1992 and *Spathius* Nees, 1819 are recorded on the Korean Peninsula for the first time.

MATERIAL AND METHODS

The terminology employed for the morphological features, sculpture, and body measurements follow Belokobylskij & Maetô (2009) and Belokobylskij *et al*. (2024). The wing venation nomenclature follows Belokobylskij & Maetô (2009) and Belokobylskij *et al*. (2024), with the terminology of van Achterberg (1993) shown in parentheses. The new distribution records presented in this paper are marked with an asterisk (*).

The specimens were examined using an Olympus SZ51 stereomicroscope. Photographs were taken with an Olympus OM-D E-M1 digital camera mounted on an Olympus SZX10 microscope (Zoological Institute of the Russian Academy of Sciences, St Petersburg, Russia). Image stacking was performed using Helicon Focus 5.0. The figures were produced using the Adobe Photoshop CS6 program.

The specimens (including types) examined in this study were deposited in the collections of the National Institute of Biological Resources (Incheon, Republic of Korea; **NIBR**), the Science Museum of Natural Enemies (Geochang, Republic of Korea; **SMNE**), and the Zoological Institute of the Russian Academy of Sciences (St Petersburg, Russia; **ZISP**). Abbreviation of the traps: MT – Malaise trap; LT – light trap. Abbreviations of Korean provinces used in this paper as follow: CB – Chungcheongbuk-do, CN – Chungcheongnam-do, GB – Gyeongsangbuk-do, GG – Gyeonggi-do, GN – Gyeongsangnam-do, GW – Gangwon-do, JB – Jeollabuk-do, JJ – Jeju-do, JN – Jeollanam-do.

TAXONOMIC PART

Class Hexapoda Blainville, 1816

Order Hymenoptera Linnaeus, 1758

Family Braconidae Nees, 1811

Subfamily Hormiinae Foerster, 1863

Tribe Avgini Belokobylskij, 1992

Genus *Parahormius* Nixon, 1940

Parahormius Nixon, 1940: 474; Granger, 1949: 188; Hedqvist, 1963: 49; Belokobylskij, 1990: 123; Wharton, 1993: 150; van Achterberg, 1995: 61; Yu *et al.*, 2016.

Type species: *Parahormius jason* Nixon, 1940.

***Parahormius breviradialis* Belokobylskij et Ku, sp. n.**

https://zoobank.org/NomenclaturalActs/38A7C41B-63C4-493B-B4D8-88BCD6D6C131

Figs 1, 2

TYPE MATERIAL. Holotype: female, **South Korea**: Jeollanam-do (JN), Hwasun-gun, Chunhyang-myeon, Gabong-ri, 34°55'47.64″N 126°57'49.37″E, MT, 9–23.X 2017 (Hyung-Keun Lee) (NIBR). Paratypes: South Korea: Chungcheongnam-do [CN] Geumsan-gun, Nami-myeon, Seokdong-ri, Temple Boseoksa, 22.V 1993 (Deokseo Ku), 1 male (SMNE); Gyeonggi-do [GG] Gapyeong-gun, Seolak-myeon, Gail-ri, 14.VI 1992 (Deokseo Ku), 1 female (SMNE); Gyeongsangnam-do [GN] Geochang-gun, Science Museum Natural Enemy, MT, 1.V–18.VI 2014 (Deokseo Ku), 1 female (SMNE); Geoje-si, Hacheong-myeon, Eoon-ri, Chilcheollyangsup-gil, 34°59'24.6″ N 128°38'27″ E, 2.VII 2023 (E.Tselikh), 1 female (ZISP); Gangwon-do [GW], Hoengseong-gun, Gonggeun-myeon, Hakdam 2-ri, 24.V 1993 (Deokseo Ku), 1 male (SMNE); Hwacheon-gun, Gandong-myeon, 25.V 1993 (Deokseo Ku), 1 male (SMNE); Hongcheon-gun Naechon-myeon, Waya-ri, Mt. Baekam, LT, 31.VII 2002 (Deokseo Ku), 1 female (SMNE); Jeollabuk-do [JB], Muju-gun, Anseong-myeon, Gongjeong-ri, Mt. Deokyu, Chilyeon falls, 24.VII 1999 (Geonghee Gang), 1 male (SMNE); Gunsan-si, Okdo-myeon, Sinsido-ri, 35°49'7.31″ N 126°28'30.97″ E, MT, 26.V–8.VI 2017 (Hyung-Keun Lee), 1 male (ZISP); Jeju-do [JJ], Jeju-si, Sanbuk-ro 593-40 near Temple Gwaneumsa, rest area, Livestock Research Institute, MT, 5.X–7.XII 2022 (Deokseo Ku, Jeongjun Ahn), 1 female (SMNE); Jeollanam-do [JN], Hwasun-gun, Chunhyang-myeon, Gabong-ri, 34°55'47.64″N 126°57'49.37″E, MT, 22.V–9.VI 2017 (Hyung-Keun Lee), 2 males (SMNE, ZISP); same label, but 25.IX–9.X 2017, 1 female (ZISP); same label, but 28.VIII–11.IX 2017, 1 male (SMNE); same label, but 11–25.IX 2017, 1 female (ZISP); Goheung-gun, Geumsan-myeon, Eojeon-ri, Geogeumdo Island, MT, 29.VIII–12.IX 2020 (Deokseo Ku, Jaehyeon Lee), 1 male (SMNE); Goheung-gun, Bongrae-myeon, Oenarodo, MT, 21–26.IX 2020 (Deokseo Ku, Jaehyeon Lee), 1 female (ZISP); Suncheon-si, Seokhyeon-dong, MT, 34°58'56.59″N 127°27'40.56″E, 9–24.X 2017 (Hyung-Keun Lee), 1 female (SMNE); same label, but 1–15.VIII 2017, 1 female (ZISP); Hwasun-gun, Dong-myeon, Mupo-ri, 35°03'23″ N 127°03'39″ E, LT, 22.VII 2022 (Hyung-Keun Lee), 1 female (SMNE).

COMPARATIVE DIAGNOSIS. This new species is similar to *Parahormius bikinus* Belokobylskij, 1996 from the Russian Far East (Belokobylskij, 1996a), but differs from it by having the second abscissa of medial vein (2-SR+M) long, about 0.5 times as long as recurrent vein (m-cu) [short, 0.3–0.4 times as long as recurrent vein (m-cu) in *P. bikinus*], first metasomal tergite dark brown to black, long and narrow posteriorly, 0.8–0.9 times as long as its posterior width (yellow, short and wide posteriorly, 0.7–0.8 times as long as its posterior width in *P. bikinus*), ovipositor short, 1.5–1.8 times longer than first metasomal tergite (long, 2.3–2.5 times longer than first metasomal tergite in *P. bikinus*), body mostly dark brown or dark reddish brown, only rarely widely reddish brown (body mostly brownish yellow or light reddish brown in *P. bikinus*).

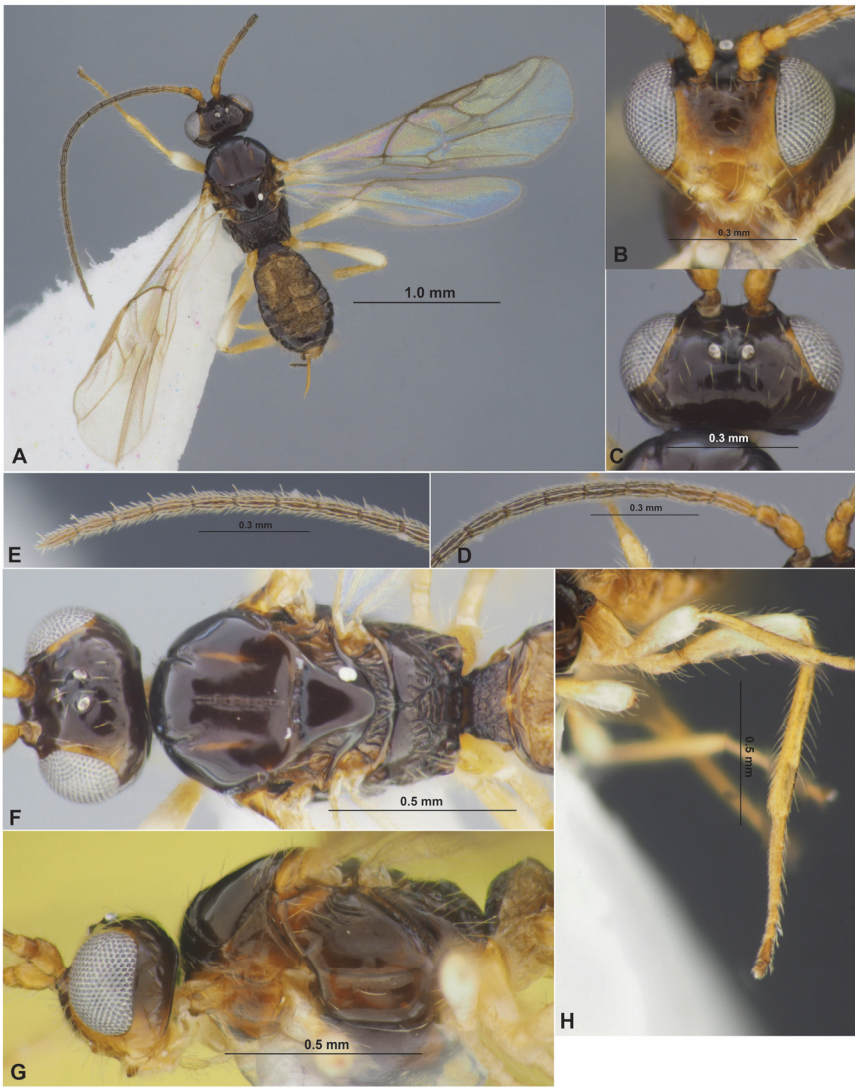

Fig. 1. *Parahormius breviradialis* sp. n. (female, holotype). A – habitus, dorsal view; B – head, front view; C – head, dorsal view; D – basal segments of antenna; E – apical segments of antenna; F – head and mesosoma, dorsal view; G – head and mesosoma, lateral view; H – hind leg.

Also *P. breviradialis* sp. nov. is similar to *P. albipes* (Ashmead, 1906) from Japan (Ashmead, 1906), but differs from it by having the radial (marginal) cell distinctly shortened, metacarp (1-R1) 0.8–0.9 times as long as pterostigma [only weakly shortened, metacarp (1-R1) 1.3 times longer than pterostigma in *P. albipes*],

second radial abscissa (3-SR) short, 0.6–0.7 times as long as first abscissa (r) [long, 1.2 times longer than first abscissa (r) in *P. albipes*], body mostly dark brown or dark reddish brown, rarely widely reddish brown, metasoma on wide medial area light brown, dark brown laterally and posteriorly (body mostly light brown, metasoma entirely light brown in *P. albipes*).

DESCRIPTION. FEMALE. Body length 1.7–2.3 mm; fore wing length 1.6–2.4 mm.

Head. Head 1.7–1.8 times as wide as median length, 1.1 times wider than maximum width of mesoscutum. Head behind eyes distinctly curvedly narrowed (dorsal view). Transverse diameter of eye 1.5–1.7 times longer than temple (dorsal view). Ocelli medium-sized, arranged in almost equilateral triangle; POL 1.0–1.3 times Od, 0.4–0.6 times OOL. Eye large, its maximum (vertical) diameter 1.3–1.4 times minimum (transverse) diameter. Malar suture absent. Malar space about 0.2 times eye height, 0.7–1.0 times basal width of mandible. Face width about 1.2 times height of face and clypeus combined, 0.8–0.9 times maximum diameter of eye. Clypeus weakly convex. Tentorial pits distinct. Width of hypoclypeal depression almost equal to distance from edge of depression to eye, about 0.4 times width of face. Head below eyes strongly and almost linearly narrowed.

Antenna. Antenna weakly thickened, weakly setiform, 20–24-segmented, 1.1–1.2 times longer than body. Scape short and wide, 1.3–1.5 times longer than maximum width, 1.6–1.8 times longer than pedicel. First flagellar segment 3.0–3.5 times longer than its apical width, 1.0–1.1 times as long as second segment. Penultimate segment 3.0–3.2 times longer its medial width, about 0.8 times as long as first flagellar segment, 0.8–1.0 times as long as apical segment; the latter distinctly acuminated and with short apical ‘spine’.

Mesosoma. Mesosoma 1.5–1.6 times longer than high. Neck of prothorax very short, its anterior margin (dorsal view) almost straight. Mesoscutum highly and perpendicularly elevated above pronotum (lateral view); its medial lobe (dorsal view) weakly curvedly convex anteriorly, without anterolateral corners; with distinct and smooth notauli in its anterior 0.4, notauli absent posteriorly; with distinct and sparsely crenulate medial furrow in its posterior 0.6. Prescutellar depression distinct but short to very short, sparsely crenulate. Scutellum without lateral carinae. Precoxal sulcus wide, straight, smooth, running along anterior 0.6–0.7 of lower part of mesopleuron.

Wings. Fore wing 2.7–3.0 times longer than its maximum width. Radial (marginal) cell of fore wing shortened; metacarp (1-R1) 0.8–0.9 times as long as pterostigma, 3.0–5.0 times longer than distance from apex of radial (marginal) cell to apex of wing. Radial vein (r) arising before middle of pterostigma. First abscissa (r) of radial vein long, 1.3–1.5 times longer than maximum width of pterostigma, forming very obtuse angle with second abscissa (3-SR). Second radial abscissa (3-SR) 0.6–0.7 times as long as first abscissa (r), about 0.2 times as long as the weakly curved or almost straight third abscissa (SR1), 0.4–0.5 times as long as first radiomedial vein (2-SR). Second radiomedial (submarginal) cell relatively short, 1.7–2.3 times longer than wide, 1.1–1.2 times longer than brachial (subdiscal) cell. First abscissa of medial vein (1-SR+M) almost straight or weakly sinuate. Recurrent vein

(m-cu) relatively short, 0.5–0.7 times as long as first radiomedial vein (2-SR) and distinctly postfurcal to it. Distance (1-CU1) between basal vein (1-M) and nervulus (cu-a) about 0.1 times nervulus (cu-a) length or nervulus (cu-a) interstitial. Parallel vein (CU1a) arising almost from or weakly before middle of vein (3-CU1) closed brachial (subdiscal) cell distally. Hind wing 4.0–4.2 times longer than its maximum

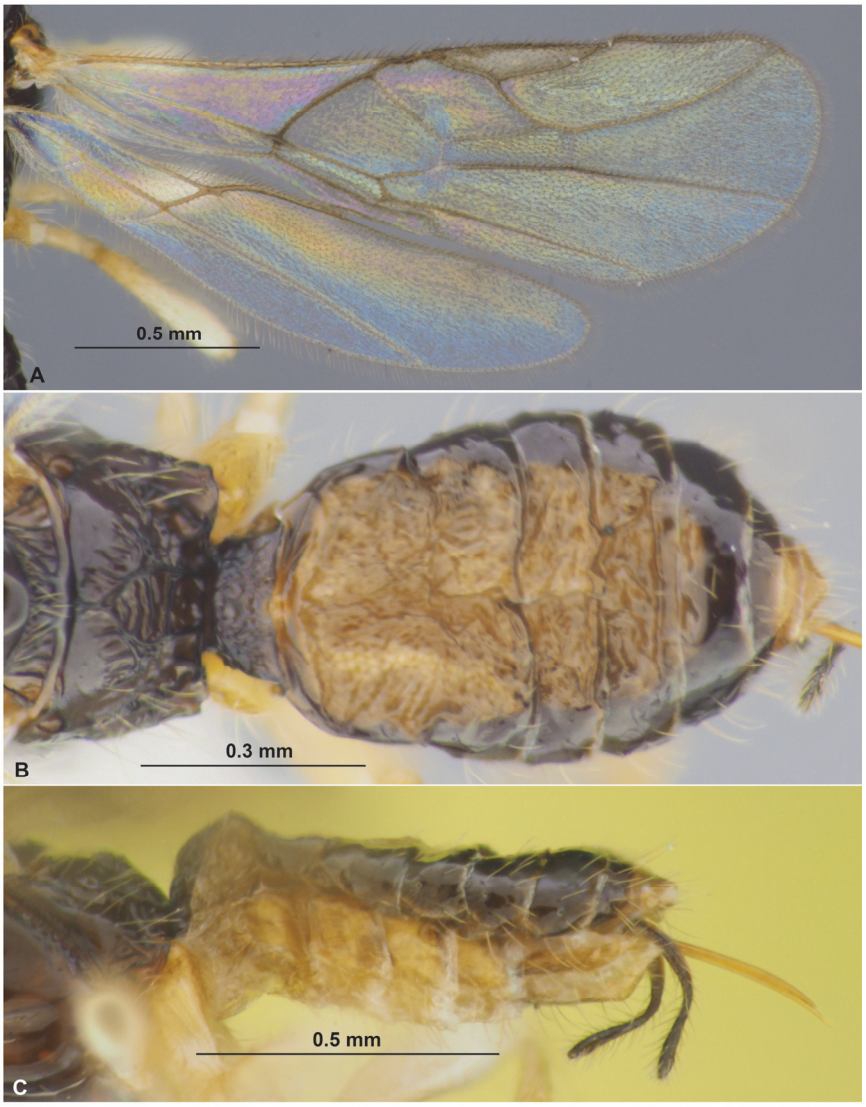

Fig. 2. *Parahormius breviradialis* sp. n. (female, holotype). A – wings; B – propodeum and metasoma, dorsal view; C – propodeum and metasoma, lateral view.

width. Submedial (subbasal cell) enlarged; first abscissa of mediocubital vein (M+CU) 1.0–1.2 times as long as second abscissa (1-M). Recurrent vein (m-cu) present, long, curved towards base of wing, discolored.

Legs. Hind femur 3.4–3.8 times longer than wide. Hind tarsus 0.8–0.9 times as long as hind tibia. Hind basitarsus 0.6–0.7 times as long as second to fifth segments combined. Second segment of hind tarsus 0.4 times as long as basitarsus, almost as long as fifth segment (without pretarsus).

Metasoma. Length 1.8–2.0 times its maximum width. First tergite rather wide and short, with distinct and widely separated, weakly curved and long longitudinal carinae, distinctly and almost linearly widened from base towards apex, length of tergite 0.8–0.9 times its posterior width. Second suture shallow and weakly sinuate. Median length of second and third tergites combined 1.1–1.2 times its anterior width, 0.7–0.8 times their maximum width. Tergites from second to sixth soft, weakly sclerotised and pale widely medially, but strongly sclerotised and dark in their rather wide lateral areas and in posterior half of sixth tergite. Ovipositor sheath 1.5–1.8 times longer than first metasomal tergite, 0.3–0.4 times as long as metasoma, 0.5–0.6 times as long as hind tibia, 0.15–0.20 times as long as fore wing.

Sculpture and pubescence. Head entirely smooth. Mesoscutum, scutellum and mesopleuron smooth, subalar depression of mesopleuron curvedly striate. Propodeum with areas delineated by high carinae, antero-lateral areas relatively short and wide, smooth in anterior half and crenulate in posterior half; other part of propodeum coarsely and usually transversely striate; anterior medial carina very short, areola long and wide, 1.3–1.6 times longer than wide. First metasomal tergite entirely densely rugose-reticulate; following tergites smooth and chewed. Mesoscutum mostly glabrous, only anteriorly on notauli with short and sparse white setae. Hind tibia with long and sparse, almost erect white setae, their length on dorsal margin of tibia 1.0–1.6 times maximum width of tibia.

Colour. Body mostly dark brown or dark reddish brown, sometimes widely reddish brown, face and head below partly or entirely yellow to light brown, metasoma on wide medial area light brown, dark brown laterally and posteriorly. Antenna mostly dark brow to black, 2–4 basal segments light brown to light reddish brown. Palpi pale yellow. Legs entirely yellow, and partly pale yellow. Fore wing hyaline. Pterostigma entirely light brown to yellow.

MALE. Body length 2.0–2.2 mm; fore wing length 1.8–1.9 mm. Antenna 21–22-segmented. Sometimes crenulate medial furrow on mesoscutum wide. Metasoma narrow; second suture indistinct. Otherwise similar to female except sexual characters.

DISTRIBUTION. Korean Peninsula.

ETYMOLOGY. This species is named from the combination of the Latin words "brevis" (= short) and “radialis” (radial), because its radial (marginal) cell of fore wing is distinctly shortened.

Key to East Palaearctic species of the genus *Parahormius* Nixon

1. Head behind eyes strongly and almost linearly narrowed (dorsal view); transverse diameter of eye about 2.0 times longer than temple (dorsal view). Radial (marginal) cell not shortened or only weakly shortened, metacarp (1-R1) about as long as pterostigma. Second abscissa of radial vein (3-SR) 1.2–1.3 times longer than first abscissa (r). Length of body 1.5–1.9 mm ……..…….... ***P. albipes*** (Ashmead, 1906)

– Head behind eyes not strongly and distinctly curvedly narrowed (dorsal view); transverse diameter of eye 1.5–1.9 times longer than temple (dorsal view). Radial (marginal) cell rather distinctly shortened, metacarp (1-R1) 0.8–0.9 times as long as pterostigma. Second abscissa of radial vein (3-SR) 0.6–0.7 times as long as first abscissa (r) …..…. 2

2. Second abscissa of medial vein (2-SR+M) longer, about 0.5 times as long as recurrent vein (m-cu). First metasomal tergite yellow, short and wide posteriorly, 0.7–0.8 times as long as its posterior width. Ovipositor long, its sheath 2.3–2.5 times longer than first metasomal tergite. Body mostly brownish yellow or light reddish brown. Length of body 1.8–2.1 mm ……..……..……..... ***P. bikinus*** Belokobylskij, 1990

– Second abscissa of medial vein (2-SR+M) shorter, 0.3–0.4 times as long as recurrent vein (m-cu). First metasomal tergite dark brown to black, long and narrow posteriorly, 0.8–0.9 times as long as its posterior width. Ovipositor short, its sheath 1.5–1.8 times longer than first metasomal tergite. Body mostly dark brown or dark reddish brown, only rarely widely reddish brown. Body length 1.7–2.3 mm ..… ***P. breviradialis*** Belokobylskij et Ku, **sp. n.**

Tribe Lysitermini Tobias, 1968

Genus *Aulosaphes* Muesebeck, 1935

Aulosaphes Muesebeck, 1935: 248; Hedqvist, 1963: 42; Belokobylskij, 1990: 133; Wharton, 1993: 116; van Achterberg, 1995: 80; Chen & He, 1996: 223; He *et al.*, 2000: 675; Yu *et al.*, 2016.

Type species: *Rhyssalus unicolor* Ashmead, 1905.

Aulosaphes pallipes Belokobylskij et Ku, sp. n.

https://zoobank.org/NomenclaturalActs/2C1D6C71-CEF3-4BAF-919A-707ED2A0B8E5

Figs 3, 4

TYPE MATERIAL. Holotype: female, **South Korea**: Gyeongsangnam-do (GN), Geoje-si, Sadeung-myeon, Oryang-ri, N 34°52'50.67", E 128°30'30.48", MT, 10–24.X 2017 (Hyung-Keun Lee) (NIBR). Paratypes: **South Korea**: (GN) Gyeongsangnam-do, Geoje-si, Hacheong-myeon, Yeongu-ri, Chicheondo Island, MT, 27.VIII–15.IX 2023 (Deokseo Ku, Danbi Yun), 1 female (SMNE); Mt. Daewanggisan, san55–11, Sinsu-dong (Island), Sacheon-si, MT, 3–17.VI 2024 (Deokseo Ku, Jiwon Park, Danbi Yun), 1 male (ZISP); [JJ] Jeju-do, Sanghyowon, Seongwipo-si, MT, 26.III–15.IV 2024 (Deokseo Ku, Muncheol Kwon), 1 female (SMNE); same label, but 15–30.IV 2024, 2 females (SMNE, ZISP); Sanghyo-dong 1479, Seongwipo-si, MT-no-06, 15–30. IX & 1–15.XI 2023 (Deokseo Ku, Muncheol Kwon), 2 females (SMNE, ZISP).

COMPARATIVE DIAGNOSIS. This new species is similar to *Aulosaphes psychidivorus* Musebeck, 1935 (Muesebeck, 1935) from Indonesia and Philippines, but differs from him by having the precoxal sulcus on mesopleuron distinct (absent in *A. psychidivorus*), pronotum and metapleuron entirely and distinctly rugulose-reticulate (smooth in *A. psychidivorus*), first radial abscissa (r) of fore wing about as long as second abscissa (3-SR) and distinctly shorter than first radiomedial vein (2-SR) [distinctly longer than second abscissa (3-SR) and about as long as first radiomedial

Fig. 3. *Aulosaphes pallipes* sp. n. (female, holotype). A – habitus, dorsal view; B – head, front view; C – head, dorsal view; D – head and anterior part of mesosoma, lateral view; E – basal segments of antenna; F – apical segments of antenna; G – mesosoma and first metasomal tergite, dorsal view; H – mesosoma, lateral view; I – hind leg; J – posterior part of metasoma, dorsal view.

vein (2-SR) in *A. psychidivorus*], hind tarsus 0.7–0.8 times as long as hind tibia (about as long as hind tibia in *A. psychidivorus*), first tergite of metasoma 0.7–0.8 times as long as its posterior width (slightly longer its posterior width in *A. psychidivorus*), body with dark to black posterior part of mesosoma and most part of metasoma (mostly brownish yellow in *A. psychidivorus*).

Also *A. pallipes* sp. n. is very similar to Chinese *A. chinensis* Chen et He, 1996 (Chen & He, 1996), but differs by having the ovipositor sheath only weakly longer than tibia of hind leg (1.5 times longer in *A. chinensis*), first abscissa of radial vein (r) arising weakly before or from middle of pterostigma (distinctly behind middle in *A. chinensis*), pterostigma mostly brown (mostly light brown in *A. chinensis*), and precoxal sulcus present (absent in *A. chinensis*).

DESCRIPTION. FEMALE. Body length 2.3–2.5 mm; fore wing length 2.1–2.4 mm.

Head. Head 1.8–2.0 times as wide as its median length, 1.1 times wider than maximum width of mesoscutum. Head behind eyes strongly and distinctly-curvedly narrowed (dorsal view). Transverse diameter of eye 1.7–1.8 times longer than temple (dorsal view). Ocelli medium-sized, arranged in almost equilateral triangle; POL 0.7–1.0 times Od, 0.3–0.4 times OOL. Eye large, its maximum (vertical) diameter 1.3–1.4 times minimum (transverse) diameter. Malar suture present, but shallow and rather fine. Malar space 0.15–0.20 times eye height, 0.4–0.7 times basal width of mandible. Face width 1.0–1.1 times height of face and clypeus combined, about 0.8 times maximum diameter of eye. Clypeus distinctly convex. Tentorial pits relatively large. Width of hypoclypeal depression 1.2–1.3 times distance from edge of depression to eye, about half width of face. Head below eyes strongly and almost linearly narrowed.

Antenna. Antenna weakly thickened, weakly setiform, 21-segmented, weakly shorter than body. Scape short and wide, 1.1–1.3 times longer than maximum width, 1.5–2.0 times longer than pedicel. First flagellar segment 3.0–3.2 times longer than its apical width, 1.0–1.1 times as long as second segment. Penultimate segment 2.8–3.3 times longer its medial width, about 0.8 times as long as first flagellar segment, 0.7–0.8 times as long as apical segment; the latter distinctly acuminated and with short apical ‘spine’.

Mesosoma. Mesosoma 1.5–1.6 times longer than high. Neck of prothorax short, its anterior margin (dorsal view) weakly and evenly concave, with shallow and small rounded medial hole (pronope ?). Mesoscutum high and subperpendicularly elevated above pronotum (lateral view); its medial lobe (dorsal view) weakly convex anteriorly, with weak anterolateral corners, with notauli deep and crenulate in anterior half, shallow and weakly visible in posterior half; mesoscutum without or with weak medial furrow. Prescutellar depression deep and rather long, with distinct median and two incomplete lateral carinae, weakly rugulose to almost smooth. Scutellum without or only with short basolateral carinae. Precoxal sulcus narrow, straight, oblique, weakly crenulate to smooth, running along anterior half of lower part of mesopleuron.

Fig. 4. *Aulosaphes pallipes* sp. n. (female, holotype). A – fore wing; B – hind wing; C – propodeum and metasoma, dorsal view; D – metasoma, lateral view.

Wings. Fore wing 2.8–3.0 times longer than maximum width. Radial (marginal) cell of fore wing very weakly shortened; metacarp (1-R1) 1.1 times longer than pterostigma. Radial vein (r) arising weakly before middle of pterostigma. First abscissa (r) of radial vein long, 1.4–1.6 times longer than maximum width of pterostigma,

forming obtuse angle with second abscissa (3-SR). Second radial abscissa (3-SR) 0.9–1.0 times as long as first abscissa (r), about 0.3 times as long as the almost straight third abscissa (SR1), 0.6–0.7 times as long as first radiomedial vein (2-SR). Second radiomedial (submarginal) cell short, 2.5–2.7 times longer than wide, 1.3–1.4 times longer than brachial (subdiscal) cell. First abscissa of medial vein (1-SR+M) distinctly curved. Recurrent vein (m-cu) relatively short, 0.4–0.5 times as long as first radiomedial vein (2-SR) and distinctly postfurcal to it. Distance (1-CU1) between basal vein (1-M) and nervulus (cu-a) about equal to nervulus (cu-a) length. Brachial (subdiscal) cell very weakly widened distally. Parallel vein (CU1a) arising from middle of vein (3-CU1) closed brachial (subdiscal) cell distally. Hind wing 4.3–4.6 times longer than maximum width. Submedial (subbasal) cell enlarged; first abscissa of mediocubital vein (M+CU) 1.1–1.3 times longer than second abscissa (1-M). Recurrent vein (m-cu) present, long, distinctly curved towards base of wing, strongly desclerotised and discolored.

Legs. Hind femur 4.0–4.5 times longer than wide. Hind tarsus 0.7–0.8 times as long as hind tibia. Hind basitarsus 0.7–0.8 times as long as second to fifth segments combined. Second segment of hind tarsus 0.3 times as long as basitarsus, 0.8–1.0 times as long as fifth segment (without pretarsus).

Metasoma. Length of three first tergites (carapace) 1.6–1.8 times their maximum width. First tergite wide and short, strongly and almost linearly widened from base towards apex, with coarse transverse carina in anterior 0.2, with two subparallel, weakly curved and widely separated complete dorsal carinae, length of tergite 0.7–0.8 times its posterior width. Second suture distinct, crenulate and weakly sinuate or curved. Median length of second tergite 0.9 times its anterior width, 0.7 times its maximum width, 1.2–1.3 times medial length of third tergite (with flange). Third tergite evenly and weakly curvedly narrowed posteriorly, with undulated, short medially and weakly elongate laterally posterior flange (dorsal view), with single distinct and apically rounded teeth on middle of lower margin of tergite (lateral view). Ovipositor sheath 0.6–0.7 times as long as metasoma, weakly longer than hind tibia, 0.3 times as long as fore wing.

Sculpture and pubescence. Head mostly smooth, frons widely transverse aciculate. Mesoscutum mostly densely granulate, finely coriaceous to smooth in posterior 0.2–0.3, distinctly longitudinally undulately striate with rugulosity in medioposterior 0.4–0.5. Scutellum smooth. Mesopleuron mostly smooth. Propodeum with distinct areas delineated by high carinae, its antero-lateral areas large and mostly smooth to weakly coriaceous at least partly; other part of propodeum sparsely and transversely striate with rugulosity; its anterior medial carina very short, areola long and rather narrow, 2.0–2.2 times longer than wide. First and second metasomal tergites entirely rather sparsely longitudinally striate with distinct and dense reticulation between striae; third tergite with rather dense and curved striae and with distinct and dense reticulation between them. Mesoscutum mostly with medium length and relatively dense white setae, glabrous on long medial areas of lateral lobes. Hind tibia with rather long and dense semi-erect white setae, their length on dorsal margin of tibia 0.7–1.3 times maximum width of tibia.

Colour. Head and most anterior part of mesosoma brownish yellow or yellow, mesosoma partly with dark stripes or spots; propodeum and metathorax dark reddish brown to black; metasoma widely dark reddish brown to almost black, first tergite widely and second tergite medio-anteriorly or medially light reddish brown at least partly, often laterally at least partly light brown. Antenna mostly brownish yellow or brown, darker in apical half or third. Palpi pale yellow. Legs entirely yellow. Fore wing subhyaline or faintly infuscate especially medially along veins. Pterostigma brown, yellow in basal quarter.

MALE. Body length 1.8 mm; fore wing length 1.7 mm. Frons mostly smooth, weakly rugulose anteriorly. Antenna 18-segmented. Mesosoma 1.7 times longer than high. Neck without visible rounded medial hole. Radial (marginal) cell of fore wing weakly shortened; metacarp (1-R1) about as long as pterostigma. Second radial abscissa (3-SR) 1.2 times longer than first abscissa (r), 0.4 times as long as third abscissa (SR1), 0.9 times as long as first radiomedial vein (2-SR). Metasoma narrow; length of three first tergites (carapace) 2.1 times their maximum width. First tergite 0.9 times as long as its posterior width. Median length of second tergite almost equal to its anterior width, 0.8 times its maximum width. Third tergite with weakly undulated posterior flange, without distinct teeth on middle of lower margin of tergite (lateral view). First metasomal tergite weakly striate; third tergite with weakly oblique striae. Colour. Head infuscate dorsally; mesosoma mostly brownish yellow, only posteriorly propodeum and metathorax infuscate. First and second metasomal tergites mostly yellow, third tergite black. Antenna mostly brown, darker in apical half or third. Fore wing subhyaline and faintly infuscate along veins. Otherwise similar to female.

DISTRIBUTION. Korean Peninsula.

ETYMOLOGY. This species is named from combination of the Latin words "pallidis" (= pale) and “pes” (= leg), because the leg of this new species is pale colour.

NEW RECORDS OF THE BRACONID SPECIES IN THE FAUNA OF KOREAN PENINSULA

Subfamily Rhysipolinae

Genus *Pachystigmus* Hellén, 1927

Noserus Foerster, 1863: 241 (type species: *Noserus facialis* Foerster, 1863), preocc., not *Noserus* LeConte, 1862, Coleoptera: Zopheridae); Shenefelt, 1975: 1150; Belokobylskij, 1998: 124; Yu *et al.*, 2016.

Pachystigmus Hellén, 1927: 54; Foley et al., 2003:104; Yu *et al.*, 2016.

Pseudavga Tobias, 1964b: 60 (type species: *Pseudavga flavicoxa* Tobias, 1964); 1976: 48; Shenefelt, 1975: 1154; Belokobylskij & Tobias, 1986: 64 (as synonym of *Noserus*); Shaw & Sims, 2015: 22 (as valid genus); Garcia-Acosta *et al.*, 2025: 74 (as subgenus of *Pachystigmus*).

Type species: *Pachystigmus nitidulus* Hellén, 1927.

**Pachystigmus* (*Pachystigmus*) *facialis* (Foerster, 1863)

Noserus facialis Foerster, 1863: 241; Hedqvist, 1963: 228; Shenefelt, 1975: 1150; Belokobylskij & Tobias, 1986: 64; Belokobylskij, 1994: 41; 1998: 126.

Pachystigmus facialis: Foley *et al.*, 2003: 104; Yu *et al.*, 2016.

Oncophanes brevicauda Tobias, 1964a: 180; Belokobylskij & Tobias, 1986: 64 (as synonym); Yu *et al.*, 2016.

MATERIAL EXAMINED. **South Korea**: [GG] Yangpyeong-gun, Okcheon-myeon, Yongcheon-ri, Mt. Yongmunsan, LT, 28–29.VII 2000 (An Tae-Ho), 2 males (NIBR; ZISP); [GN] Ulsan, Ulju-gun, Duseo-myeon, Naewari, Topgol, Mt. Baikunsan, sweeping, 5.VII 2001 (Jun-Seong Shin), 1 female (SMNE).

HOST. Lepidoptera: *Bucculatrix ulmella* Zeller (Bucculatricidae).

DISTRIBUTION. *Korean Peninsula; Europe (rarely), Belarus, Moldova, Ukraine, Kazakhstan, Mongolia, Russia (European part, Siberia, Far East).

**Pachystigmus* (*Pseudavga*) *flavicoxa* (Tobias, 1964)

Pseudavga flavicoxa Tobias, 1964b: 61; 1976: 48; Shenefelt, 1975: 1154; Shaw & Sims, 2015: 22.

Noserus flavicoxa: Belokobylskij & Tobias, 1986: 64; Belokobylskij, 1994: 41; 1998: 125; Yu *et al.*, 2016.

Pachystigmus (*Pseudavga*) *flavicoxa*: Garcia-Acosta *et al.*, 2025: 74.

MATERIAL EXAMINED. **South Korea**: [GN] Temple Daegoksa, Hacheong-myeon, Chilcheondo, Geoje-si, MT, 27.VIII–15.IX. 2023 (Deokseo Ku, Danbu Yun), 3 females (NIBR, SMNE, ZISP).

HOST. Lepidoptera: *Bucculatrix frangulella* (Goeze, 1783), *B. thoracella* (Thunberg, 1794), *B. ulmella* Zeller, 1848 (Bucculatricidae) (Shaw & Sims, 2015); *Leucoptera malifoliella* (Costa, 1836) (Lyonetiidae) (Belokobylskij, 1998).

DISTRIBUTION. *Korean Peninsula; Europe (rarely), Belarus, Moldova, Tajikistan, Kazakhstan, Russia (European part, south of Far East).

Subfamily Hormiinae

Tribe Lysitermini

Genus *Acanthormius* Ashmead, 1906

Acanthormius Ashmead, 1906: 200; Watanabe, 1968: 57; Belokobylskij, 1988: 29; 1990: 135; 1998: 134; Papp, 1991: 150; van Achterberg, 1995: 66; Chen *et al.*, 2000: 9; He *et al.*, 2000: 673; Huang *et al.*, 2010: 231; Yu *et al.*, 2016.

Type species: *Acanthormius japonicus* Ashmead, 1906.

NOTES. Only single species of this genus, *Acanthormius japonicus* Ashmead, 1906 (Figs 5B, G; 6C, D) was previously found in the fauna of Korean peninsula (Belokobylskij, 1998; Ku *et al.*, 2001). Four additional species of this rare genus are recorded in the fauna of South Korea in this study.

***Acanthormius crustatus* Belokobylskij, 1986**
Figs 5A, F; 6A, B

Acanthormius crustatus Belokobylskij, 1986: 62; van Achterberg, 1991: 16; Belokobylskij, 1994: 62; 1998: 136; Yu *et al.*, 2016; Belokobylskij *et al.*, 2019: 283.

MATERIAL EXAMINED. **South Korea**: [CB] Chungbuk, Mt. Sobaeksan, Nancheon-yaegok, 14.VIII 1994 (Deokseo Ku), 1 female (NIBR).

HOST. Unknown.

DISTRIBUTION. *Korean Peninsula; Russia (south of Far East).

***Acanthormius rossicus* Tobias et Belokobylskij, 1981**
Figs 5C, J; 6E, F

Acanthormius rossicus Tobias & Belokobylskij, 1981: 357; Belokobylskij & Tobias, 1986: 63; Belokobylskij, 1987: 87; van Achterberg, 1991: 17; Belokobylskij, 1994: 63; 1998: 136; Yu *et al.*, 2016; Belokobylskij *et al.*, 2019: 283.

MATERIAL EXAMINED. **South Korea**: [GN] Namhae-gun, Seo-myeon, Nogu-ri, Temple Mangunsa, sweeping, 8.XI 2022 (Deokseo Ku, Jaehyeon Lee, Hyojin Jeong), 1 female (NIBR).

HOST. Unknown.

DISTRIBUTION. *Korean Peninsula; Russia (south of Far East).

***Acanthormius rugosivertex* Belokobylskij, 1988**
Figs 5D, H; 6G, H

Acanthormius rugosivertex Belokobylskij, 1988: 34; van Achterberg, 1991: 17; He *et al.*, 2000: 674 (as *A. rugivertex*); Huang *et al.*, 2010: 232; Yu *et al.*, 2016.

MATERIAL EXAMINED. **South Korea**: [GB] Daehyeon-ri, Bukhu-myeon, Andong-si, MT, 13–30.IX 2020 (Gimyon Kwon), 1 female (NIBR); [GN] Uiryeong-gun, MT, 15–27.X 2018 (Hyung-Keun Lee), 1 female (ZISP); [GG] Suwon Mt. Yeogi, MT, 6–13.VII 1994 (Deokseo Ku), 1 female (SMNE); [GW] Mt. Seolaksan, Misiryeong-gogye, MT, 2.VIII–19.X 2002 (Deokseo Ku), 1 female (SMNE); [JN] Hwasun-gun, Chunyang-myeon, Gabong-ri, 34°55′47.64″N 126°57′49.37″E, MT, 19.VI–3.VII 2017 (Hyung-Keun Lee), 1 female (SMNE).

HOST. Unknown.

DISTRIBUTION. *Korean Peninsula; China (Taiwan).

***Acanthormius takadai* Watanabe, 1968**
Figs 5E, I; 6I, J

Acanthormius takadai Watanabe, 1968: 60; Belokobylskij, 1987: 85; 1994; 64; 1998: 136; van Achterberg, 1991: 16; Yu *et al.*, 2016.

MATERIAL EXAMINED. **South Korea**: [GW] Inje-gun, Girin-myeon, Jindong-ri, Mt. Jeombong (Gombaeryeong), MT, 38°1'58.52"N 128°27'54.19"E, 13.V–22.VI 2017 (Hyung-Keun Lee), 1 female (NIBR).

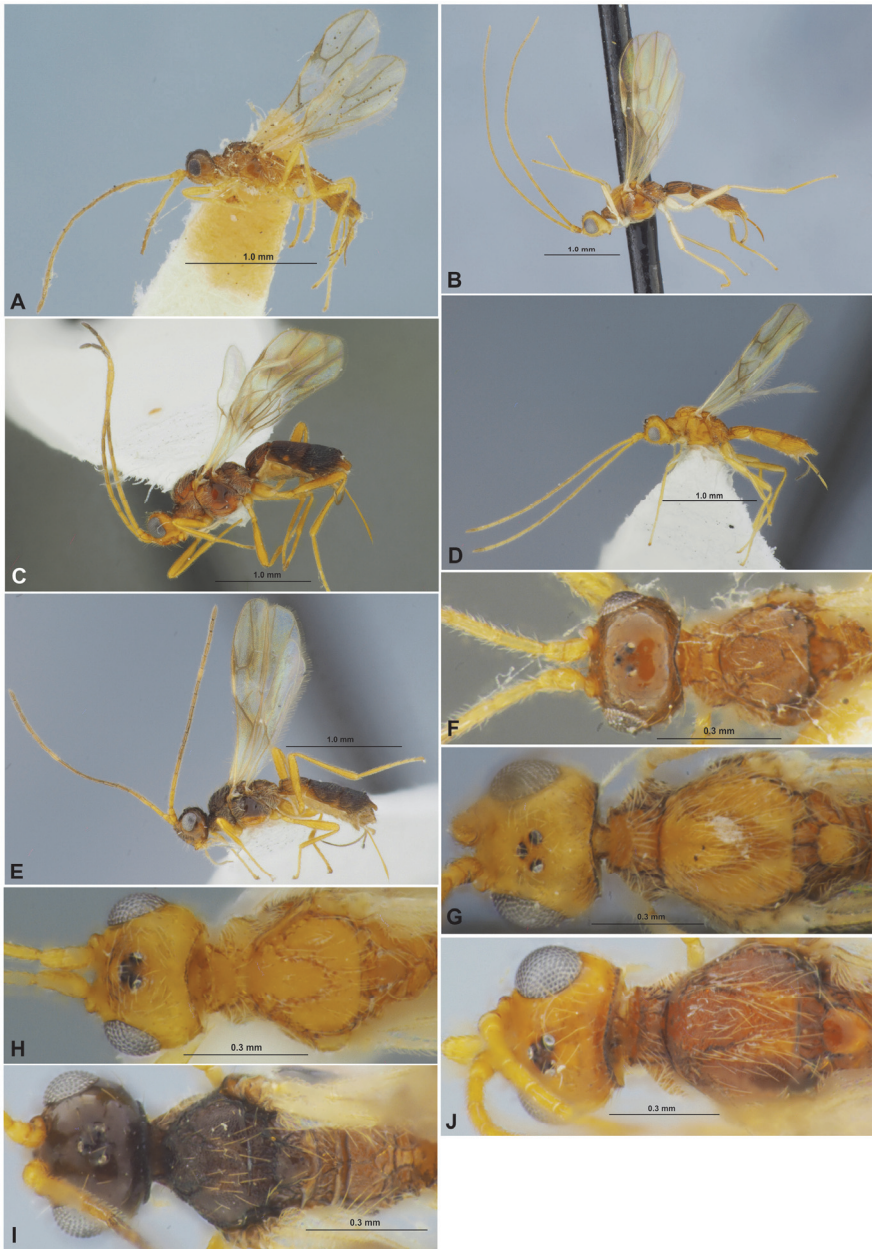

Fig. 5. Habitus of *Acanthormius* spp.: lateral view (A–E), head and anterior part of mesosoma, dorsal view (F–J). A, F – *A. crustatus* Belokobylskij; B, G – *A. japonicus* Ashmead; C, J – *A. rossicus* Tobias et Belokobylskij; D, H – *A. rugosivertex* Belokobylskij; E, I – *A. takadai* Watanabe.

HOST. Unknown.

DISTRIBUTION. *Korean Peninsula; Japan (Hokkaido, Honshu, Shikoku, Kyushu).

Subfamily Doryctinae

Genus *Spathiostenus* Belokobylskij, 1992

Spathiostenus Belokobylskij, 1992a: 922; 1996b: 177; Belokobylskij *et al.*, 2004: 98; 2009: 485; Yu *et al.*, 2016.

Type species: *Eucorystes formosanus* Watanabe, 1934.

**Spathiostenus formosanus* (Watanabe, 1934)

Eucorystes formosanus Watanabe, 1934: 191; 1937: 41.

Eucorystoides formosanus: Shenefelt & Marsh, 1976: 1354; Chen & Shi, 2004: 63.

Spathiostenus formosanus: Belokobylskij, 1992a: 922; 1996b: 177; 2007: 438; Belokobylskij *et al.*, 2004: 98; 2009: 485; Yu *et al.*, 2016; Belokobylskij *et al.*, 2024: 46.

Eucorystes tenuis Nixon, 1943a: 265 (synonymised by Belokobylskij, 2007).

MATERIAL EXAMINED. **South Korea**: [GN] Jahye-ri, Geumseo-myeon, Sancheong-gun, 35.429560 N, 127.8126 E, sweeping, 26.VI 2025 (E. Tselikh), 1 female (NIBR); [GN] Yang-ri, Dalseong-gun, Daegu, 35.71331 N, 128.5114 E, sweeping, 12.VII 2025 (S. Belokobylskij), 1 female (ZISP).

HOST. Unknown.

DISTRIBUTION. *Korean Peninsula; India, China, Japan (Hokkaido), Vietnam, Indonesia.

Genus *Spathius* Nees, 1819

Spathius Nees, 1819: 301; Nixon, 1943b: 190; Shenefelt & Marsh, 1976: 1386; Belokobylskij, 2003: 348; Chen & Shi, 2004: 88; Belokobylskij & Maeto, 2009: 492; Tang *et al.*, 2015: 1; Yu *et al.*, 2016; Zaldívar-Riverón *et al.*, 2018: 723; Belokobylskij *et al.*, 2024: 280.

Type species: *Cryptus clavatus* Panzer, 1809 (= *Ichneumon exarator* Linnaeus, 1758).

**Spathius tsushimus* Belokobylskij, 2009

Spathius tsushimus Belokobylskij, 2009: 461; Belokobylskij & Maeto, 2009: 734; Yu *et al.*, 2016.

MATERIAL EXAMINED. **South Korea**: [CB] San30, Jeongok-ri, Susan-myeon, Jecheon-si, LT, 10.VIII 2024 (Hyung-Keun Lee), 1 female (NIBR).

HOST. Unknown.

DISTRIBUTION. *Korean Peninsula; Japan (Tsushima).

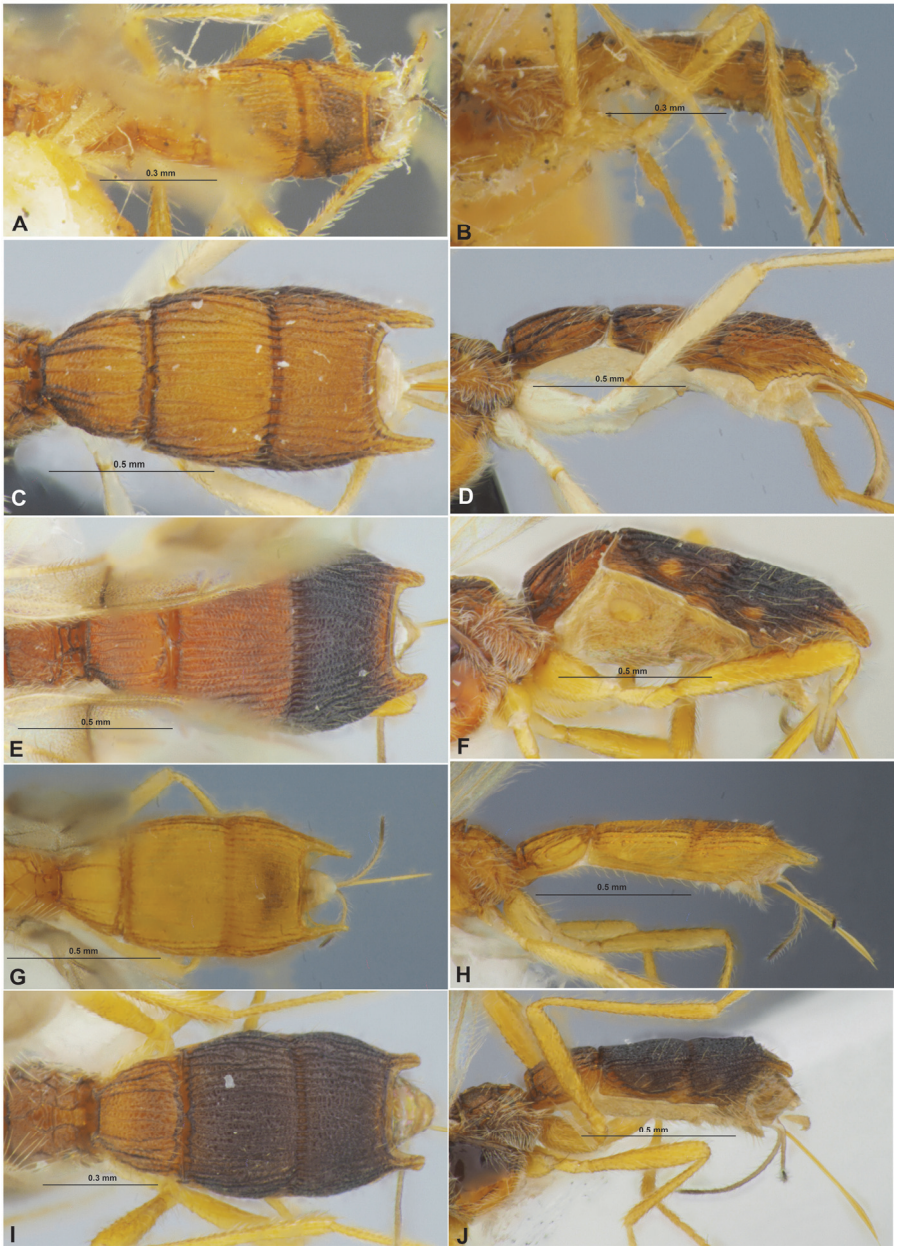

Fig. 6. Metasoma of *Acanthormius* spp.: dorsal (A, C, E, G, I) and lateral (B, D, F, H, J) views. A, B – *A. crustatus* Belokobylskij; C, D – *A. japonicus* Ashmead; E, F – *A. rossicus* Tobias et Belokobylskij; G, H – *A. rugosivertex* Belokobylskij; I, J – *A. takadai* Watanabe.

Genus *Plesiocedria* van Achterberg et Chen, 2004

Plesiocedria van Achterberg & Chen, 2004: 91; Belokobylskij & Villemant, 2016: 390; Yu *et al.*, 2016.

Type species: *Plesiocedria intermediata* van Achterberg et Chen, 2004 [= *Pambolus* (*Phaenodus*) *unicolor* Belokobylskij, 1992].

NOTES. The rare monotypic genus *Plesiocedria* van Achterberg et Chen, 2004 was originally described from South China (Fujian Province) on the basis of two specimens (female and male) (van Achterberg & Chen, 2004). Unfortunately, the authors overlooked the other species of this genus described early from Vietnam as *Pambolus* (*Phaenodus*) *unicolor* Belokobylskij, 1992 (Belokobylskij, 1992b), characterised the same diagnostic characters as the type species *Plesiocedria intermediata* van Achterberg et Chen, 2004. The comparison of the holotype of *P. unicolor* and description of *Pl. intermediata* showed clear similarity of these taxa.

Additionally, several specimens (females and males) of the genus *Plesiocedria* were collected on the Honshu Island (Japan) having partly darker coloration of the body. The study of the Japanese specimens and their comparison with holotype from Vietnam and with description of the *P. intermediata* are showed the strong similarity of all this material. As result, we are here synonymised *Plesiocedria intermediata* van Achterberg et Chen, 2004 with *Pambolus* (*Phaenodus*) *unicolor* Belokobylskij, 1992 (**syn. n.**) and transfer the later species to the genus *Plesiocedria.* The discovery of this genus and species in the fauna of Korean Peninsula is also very likely.

Plesiocedria unicolor (Belokobylskij, 1992), comb. n.

Figs 7, 8

Pambolus (*Phaenodus*) *unicolor* Belokobylskij, 1992b: 165; Papp, 1996: 56; Yu *et al.*, 2016.

Plesiocedria intermediata van Achterberg et Chen, 2004: 91, **syn. n.**

MATERIAL EXAMINED. **Vietnam:** "Vietnam, Tam Dao, pr.[ovince] Vinh Phu, 1000 m, forest, 12.11.1990, Belokobylskij [leg.]" [holotype of *Pambolus* (*Phaenodus*) *unicolor*]. **Japan:** Honshu, Aichi, Toyota, Takiwaki, MT, 8–14.VII 2002 (Y. Kurahashi), 1 female; Honshu, Aichi, Toyota, Sanage, Evergreen forest, MT, 16–22.IX 2002 (M. Kiyota), 1 female; same label, but, 24–30.VI & 22–28.VII 2002, 1 female, 2 males; Honshu, Nagoya, Higashiyama park, MT, 11–20.VIII 2001 (M. Watanabe), 1 female; Honshu, Gifu, Kani, Katabira, MT, 2–9.IX 2004 (K. Ito), 1 male; Honshu, Hyogo Prefecture, Kobe, Rokko Mts, Maya Mt., forest, 11.IX 2005 (S. Belokobylskij), 2 females.

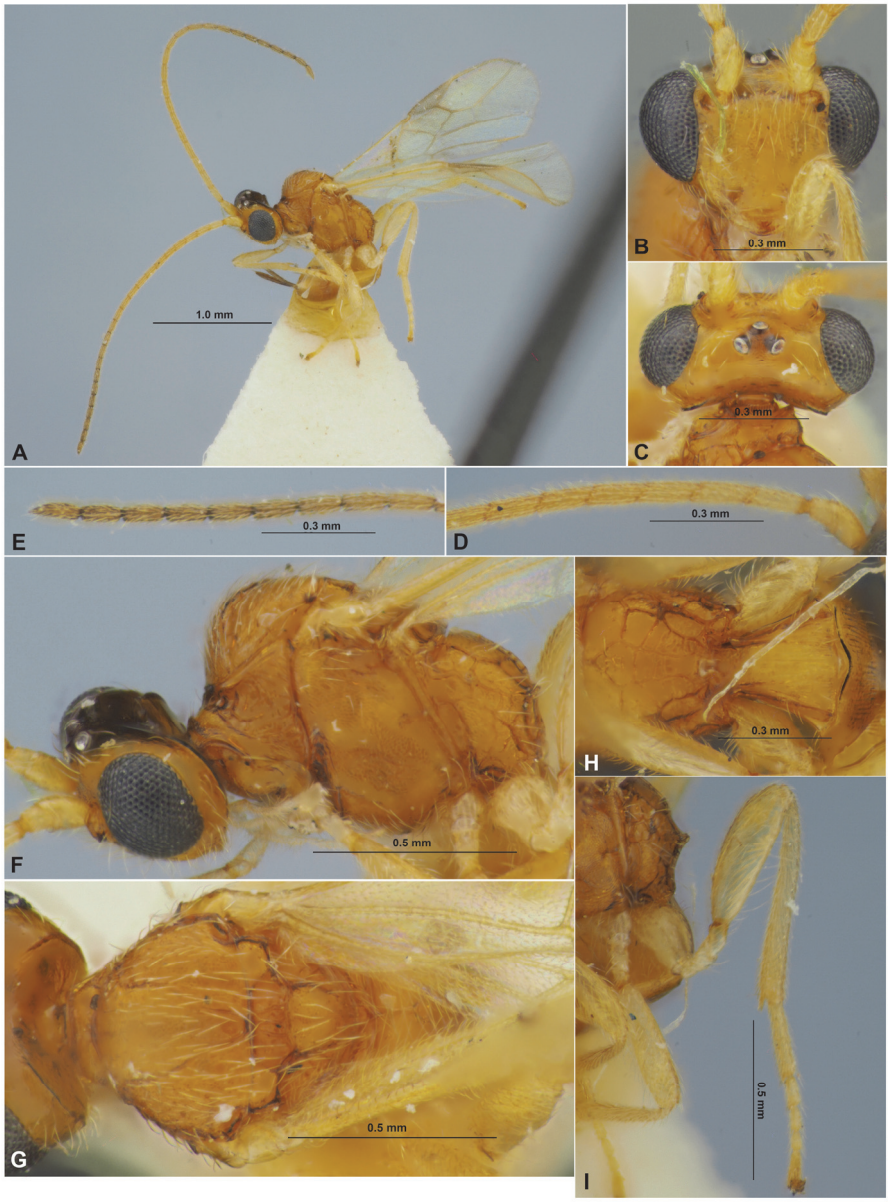

Fig. 7. *Plesiocedria unicolor* (Belokobylskij), comb. n. (female, holotype). A – habitus, dorsal view; B – head, front view; C – head, dorsal view; D – basal segments of antenna; E – apical segments of antenna; F – head and mesosoma, lateral view; G – mesosoma, dorsal view; H – propodeum and first metasomal tergite, dorsal view; I – hind leg.

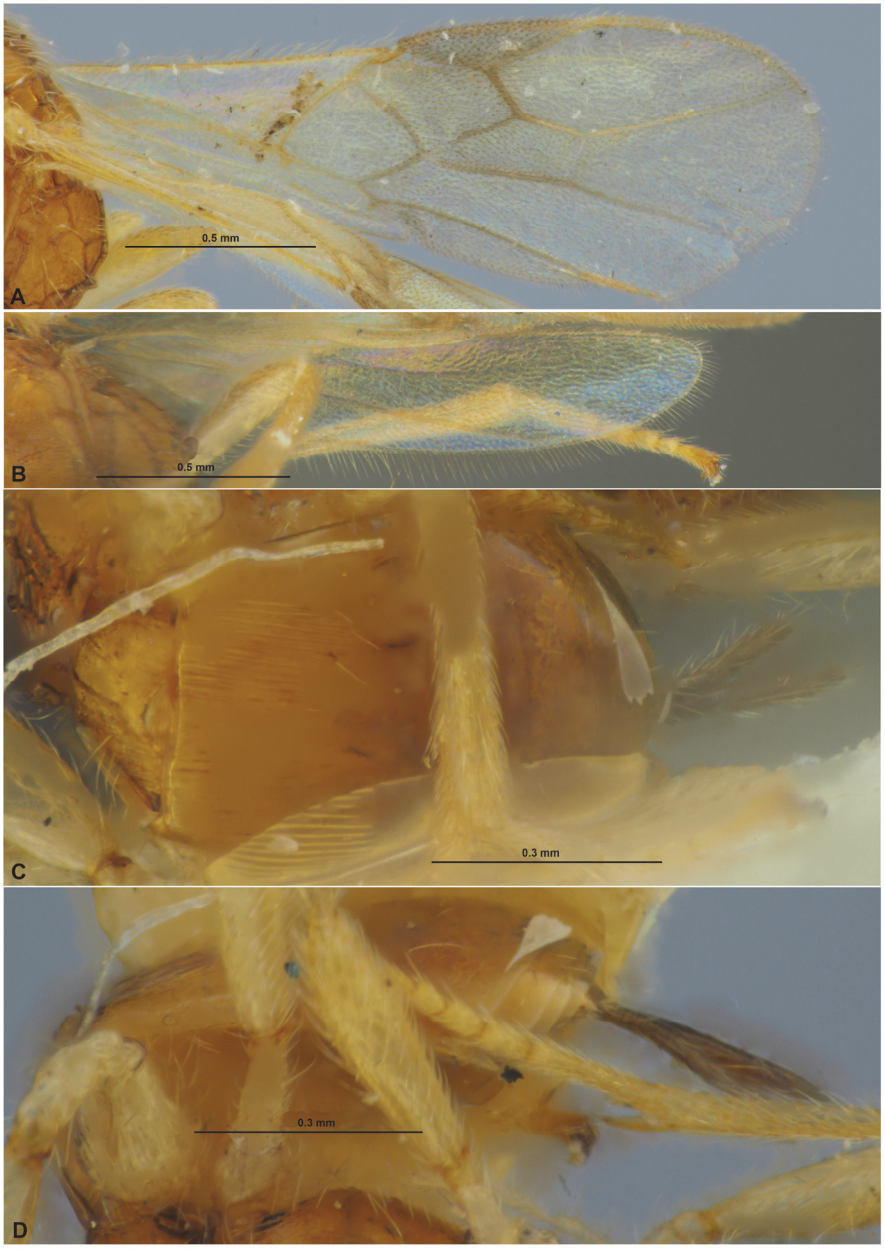

Fig. 8. *Plesiocedria unicolor* (Belokobylskij), comb. n. (female, holotype). A – fore wing; B – hind wing; C – metasoma, dorsal view; D – metasoma and ovipositor, lateral view.

VARIATION. Body length 1.9–2.9 mm; fore wing length 1.6–2.4 mm. Antenna 23–28-segmented. Hind femur 2.6–3.2 times longer than its maximum width. Suture between second and third metasomal tergites very fine, sometimes almost invisible medially, but mostly this suture rather distinct laterally. Second tergite distinctly striate medially in anterior 0.5–0.8, laterally usually widely smooth. Colour of body variable: metasoma pale brown or yellowish brown to reddish brown, sometimes at least dorsally infuscate to reddish brown colour; rarely head dorsally and dorso-posteriorly and second and third tergites widely dark reddish brown to dark brown. Fore wing faintly infuscate under pterostigma.

MALE. Body length 1.8–2.0 mm; fore wing length 1.7–1.9 mm. Antenna long, 26–28-segmented. Second metasomal tergite widely and almost entirely striate. Otherwise similar to female.

DISTRIBUTION. *Japan (Honshu), China (Fujian), Vietnam (Vinh Phu).

CONCLUSION

According to the published data, the following genera from discussed small cyclostome subfamily were already recorded in the fauna of Korean Peninsula previously (Papp, 1996, 2018; Belokobylskij, 1998; Ku *et al.*, 2001; Yu *et al.*, 2016; Belokobylskij & Ku, 2023, 2025a, 2025b; Belokobylskij *et al.*, 2024): *Colastes* Haliday, 1833, *Colastinus* Belokobylskij, 1984, *Xenarcha* Foerster, 1863 (Exothecinae s.str.); *Acanthormius* Ashmead, 1900, *Aulosaphanes* Belokobylskij, 2004*, Aulosaphoides* van Achterberg, 1995, *Hormius* Nees, 1819, *Parahormius* Nixon,1940, *Taiwanhormius* Belokobylskij, 1988 (Hormiinae); *Pambolus* Haliday, 1836 (Pambolinae); *Pachystigmus* Hellén, 1927*, Rhysipolis* Foerster, 1863 (Rhysipolinae); *Acrisis* Foerster, 1863, *Dolopsidea* Hincks, 1944, *Histeromerus* Wesmael, 1838, *Lysitermoides* van Achterberg, 1995, *Oncophanes* Foerster, 1863, *Proacrisis* Tobias, 1983, and *Tobiason* Belokobylskij, 2004 (Rhyssalinae).

Here, two hormiine species, *Parahormius breviradialis* sp. n. and *Aulosaphes pallipes* sp. n. are described as a new for science. In addition, the following species are recorded in the fauna of South Korea for the first time: in Rhysipolinae – *Pachystigmus* (s. str.) *facialis* (Foerster, 1863) and *P.* (*Pseudavga*) *flavicoxa* (Tobias, 1964); in Hormiinae (Lysitermini) – *Acanthormius crustatus* Belokobylskij, 1986, *A rossicus* Tobias et Belokobylskij, 1981, *A. rugosivertex* Belokobylskij, 1988, and *A. takadai* Watanabe, 1968.

According to the monograph about Korean Rhyssalinae and Doryctinae (Belokobylskij *et al.*, 2024), the genus *Spathiostenus* Belokobylskij, 1992 was not yet found in the fauna of this peninsula. However, additional recent collecting of the material in this territory allowed catching two females of *Spathiostenus formosanus* (Watanabe, 1934). Thus, this genus and species are presented in the fauna of South Korea and all peninsula. In addition, doryctine species *Spathius tsushimus* Belokobylskij, 2009 described originally from Japanese Tsushima Island was firstly found on the Asian mainland and the Korean peninsula.

ACKNOWLEDGEMENTS

The authors are grateful to Mrs. Kyoungim Kim for her help in the braconid specimens' preparation. This work was funded by the Russian State Research Project No 125012901042-9 for SAB, and was supported by a grant from the National Institute of Biological Resources (NIBR), funded by the Ministry of Climate, Energy and Environment (MCEE) of the Republic of Korea (NIBR202602202) to DSK.

REFERENCES

Ashmead, W.H. 1906. Descriptions of new Hymenoptera from Japan. *Proceedings of the United States National Museum*, 30: 169–201.

Belokobylskij, S.A. 1986. A new braconid species of the supertribe Exothecidii (Hymenoptera, Braconidae) from south of the USSR Far East. P. 58–69. *In:* Lehr, P.A. (Ed.). *Systematika i Ekologija Nasekomykh Dalinego Vostoka.* Vladivostok. [In Russian]

Belokobylskij, S.A. 1987. The Palaearctic species of the braconid wasps of subfamily Doryctinae (Hymenoptera, Braconidae), described by Ch. Watanabe from Japan. P. 79–87. *In:* Storozheva, N.A. & Kusakin, O.G. [Eds]. *Novye Dannye po Sistematike Nasekomych Dal'nego Vostoka*. Vladivostok. [In Russian]

Belokobylskij, S.A. 1988. The braconid wasps of the supertribe Exothecidii (Hymenoptera, Braconidae, Doryctinae) of Taiwan. *Proceedings of Zoological Institute of the USSR Academy of Sciences*, 175: 3–37. [In Russian]

Belokobylskij, S.A. 1990. To the fauna of braconid wasps of the supertribe Exothecidii (Hymenoptera, Braconidae, Doryctinae) of Vietnam. *Proceedings of Zoological Institute of the USSR Academy of Sciences*, 209: 115–140 [In Russian]

Belokobylskij, S.A. 1992a. On the classification and phylogeny of the braconid wasps of subfamilies Doryctinae and Exothecinae (Hymenoptera, Braconidae). Part I. On the classification, 1. *Entomologicheskoe Obozrenie*, 71(4): 900–928. [In Russian]

Belokobylskij, S.A. 1992b. To the fauna of Indo-Malayan braconid wasps of the tribes Exothecini, Pambolini and Pentatermini (Hymenoptera, Braconidae). *Proceedings of Zoological Institute of the USSR Academy of Sciences,* 245: 125–173. [In Russian]

Belokobylskij, S.A. 1993. On the classification and phylogeny of the braconid wasps of subfamilies Doryctinae and Exothecinae (Hymenoptera, Braconidae). Part I. On the classification, 2. *Entomologicheskoe obozrenie,* 72(1): 143–164. [In Russian]

Belokobylskij. S.A. 1994. A review of braconid wasps of subfamilies Doryctinae and Exothecinae (Hymenoptera, Braconidae) of the Far East, East Siberia and neighbouring territories. *Proceedings of Daurskiy Natural Reserve*, 3: 5–77. [In Russian]

Belokobylskij, S.A. 1996a. Nine new species of Braconidae (Hymenoptera) from the Russian Far East. *Journal of Natural History*, 30(11): 1661–1681.

Belokobylskij, S.A. 1996b. A contribution to the knowledge of the Doryctinae of Taiwan (Hymenoptera: Braconidae). *Zoosystematica Rossica*, 5(1): 153–191.

Belokobylskij, S.A. 1998. Subfam. Doryctinae. P. 50–109. *In*: Lehr, P.A. (Ed.). *Key to insects of the Russian Far East. Vol. 4. Neuropteroidea, Mecoptera, Hymenoptera*. *Pt 3*. Dalnauka, Vladivostok. [In Russian]

Belokobylskij, S.A. 2003. The species of the genus *Spathius* Nees, 1818 (Hymenoptera: Braconidae: Doryctinae) not included in the monograph by Nixon (1943). *Annales Zoologici*, 53(3): 347–488.

Belokobylskij, S.A. 2007. Revision of the genus *Spathiostenus* Belokobylskij 1993 (Hymenoptera, Braconidae: Doryctinae). *Insects Systematic and Evolution,* 38(4): 433–446.

Belokobylskij, S. A. 2009. New species of the braconid wasps of the genus *Spathius* Nees (Hymenoptera, Braconidae, Doryctinae) from Japan and neighbouring territories. *Entomologicheskoe Obozrenie*, 88(2): 438–465. [In Russian]

Belokobylskij, S.A., Iqbal, M. & Austin, A.D. 2004. Systematics, distribution and diversity of the Australasian doryctine wasps (Hymenoptera, Braconidae, Doryctinae). *Records of the South Australian Museum. Monograph Series,* 8: 1–150.

Belokobylskij, S.A. & Ku, D. 2023. Some new braconid parasitoids (Hymenoptera: Braconidae) in the fauna of Korean peninsula. *Far Eastern Entomologist*, 483: 1–18. DOI: 10.25221/fee.483.1

Belokobylskij, S.A. & Ku, D. 2025a. Genera *Colastes* Haliday, *Colastinus* Belokobylskij, and *Xenarcha* Foerster (Hymenoptera, Braconidae, Exothecinae) from the Korean Peninsula with a discussion on the Exothecinae genus and subgenus composition. *ZooKeys*, 1236: 141–183. DOI: 10.3897/zookeys.1236.148928

Belokobylskij, S.A. & Ku, D. 2025b. The genus *Taiwanhormius* Belokobylskij, 1998 (Hymenoptera: Braconidae: Hormiinae) in Korean Peninsula. *Zootaxa*, 5620(3): 451–460. DOI: 10.11646/zootaxa.5620.3.4

Belokobylskij, S.A., Ku, D.-S., Lee, H.-R. & Kwon, G.-M. (2024) Braconidae: Rhyssalinae and Doryctinae. Arthropoda: Insecta: Hymenoptera. *Insect Fauna of Korea*, 13(16): 1–513.

Belokobylskij, S.A. & Maeto, K. 2009. *Doryctinae (Hymenoptera, Braconidae) of Japan*. Fauna mundi. Vol. 1. Warszawska Drukarnia Naukowa, Warszawa. 806 pp.

Belokobylskij, S.A., Samartsev, K.G. & Il'inskaya, A.S. (Eds). 2019. *Annotated catalogue of the Hymenoptera of Russia. Volume II. Apocrita: Parasitica*. Proceedings of the Zoological Institute of the Russian Academy of Sciences. Supplement 8. Zoological Institute RAS, St Petersburg. 594 pp. DOI: 10.31610/trudyzin/2019.supl.8.5

Belokobylskij, S.A. & Tobias, V.I. 1986. Subfam. Doryctinae. P. 21–72. *In:* Medvedev, G.S. (Ed.) *Keys to insects of the USSR European part. Vol. 3. Hymenoptera*. *Pt. 4*. Nauka, Leningrad. [In Russian]

Belokobylskij, S.A. & Villemant, C. 2016. A new genus of the tribe Pambolini (Hymenoptera: Braconidae: Exothecinae) from the Papua New Guinea with a key to the World genera. *Zootaxa*, 4098(2): 383–391. DOI: 10.11646/zootaxa.4098.2.10

Chen, X.X. & He, J.H. 1996. Four new species of the genus *Aulosaphes* Muesebeck (Hymenoptera: Braconidae: Lysiterminae) from China. *Entomotaxonomia,* 18(3): 223–229. [In Chinese with English summary]

Chen, J. & Shi, Q. 2004 *Systematic studies on Doryctinae of China (Hymenoptera: Braconidae)*. Fujian Science and Technology Publishing House, Fujian. 274 pp.

Chen, J., Wu Z. & Yang J. 2000. A new species of *Acanthormius* Ashmead (Hymenoptera: Braconidae) from China. *Entomological Journal of East China*, 9(2): 9–12.

Foerster, A. 1863. Synopsis der Familien und Gattungen der Braconiden. *Verhandlungen des Naturhistorischen Vereins der Preussischen Rheinlande und Westfalens,* 19(1862): 225–288.

Foley, I.A., Ivie, M.A. & Spies, M. 2004. *Pachystigmus* Hellen, 1927, a substitute name for *Noserus* Foerster, 1863 (Hymenoptera: Braconidae), not *Noserus* LeConte, 1862 (Coleoptera: Zopheridae). *Insecta Mundi*, 17(1–2): 103–106.

García-Acosta, G.Y., Castañeda-Osorio, R., Belokobylskij, S.A., Shimbori, E.M., Jasso-Martínez, J.M., Penteado-Dias, A.M. & Zaldívar-Riverón, A. 2025. Systematics of the braconid wasp subfamily Rhysipolinae (Hymenoptera, Braconidae) based on UCE data, with the description of a new Neotropical genus. *ZooKeys*, 1234: 67–87. DOI: 10.3897/zookeys.1234.147859

Granger, C. 1949. Braconides de Madagascar. *Mémoires de l'Institut Scientifique de Madagascar*, (A) 2: 1–428.
He, J.H., Chen, X.X. & Ma, Y. 2000. *Hymenoptera, Braconidae.* Fauna Sinica. Insecta, Vol. 18. Science Press, Beijing. 757 pp.
Hedqvist, K.J. 1963. Notes on Hormiinae with description of new genera and species (Hym., Ichneumonoidea, Braconidae). *Entomologisk Tidskrift*, 84(1–2): 30–61.
Hellén, W. 1927. Zur Kenntnis der Braconiden (Hym.) Finnlands. I. Subfam. Braconinae (part.), Rhogadinae und Spathiinae. *Acta Societatis pro Fauna et Flora Fennica,* 56(12): 1–59.
Huang, J.-C., Yang, J.-Q. & Chen, J.-H. 2010. A new species of the genus *Acanthormius* Ashmead (Hymenoptera: Braconidae) from China. *Entomotaxonomia,* 32(3): 231–235.
Ku, D.S., Belokobylskij, S.A. & Cha, J.Y. 2001. Hymenoptera (Braconidae). Economic Insects of Korea 16. *Insecta Koreana.* Supplement 23: 1–283.
Muesebeck, C.F.W. 1935. On the genus *Oncophanes* Foerster, with descriptions of two new related genera (Hymenoptera: Braconidae). *Annals of the Entomological Society of America*, 28: 241–250.
Nees ab Esenbeck, C.G. 1819. Appendix ad J. L. C. Gravenhorst conspectum generum et familiarum Ichmeumonidum, genera et familias Ichneumonidum adscitorum exhibens. *Nova Acta Physicomedica Academiae Caesareae Leopoldino-Carolinae*, 9: 299–310.
Nixon, G.E.J. 1940. New genera and species of Hormiinae, with a note on *Hormiopterus* Giraud (Hymenoptera: Braconidae). *Annals and Magazine of Natural History*, (11)5: 473–493.
Nixon, G.E.J. 1943a. New braconid parasites of Australian wood-boring beetles with notes on the subfamily Hecabolinae (Hym., Braconidae). *Bulletin of Entomological Research,* 34(4): 257–267.
Nixon, G.E.J. 1943b. A revision of the Spathiinae of the Old World (Hymenoptera, Braconidae). *Transaction of the Royal Entomological Society of London*, 93(2): 173–495.
Papp, J. 1991. New braconid wasps (Hymenoptera, Braconidae) in the Hungarian Natural History Museum, 2. *Annales Historico-Naturales Musei Nationalis Hungarici*, 83: 145–167.
Papp, J. 1996. On the genus *Pambolus* (Hymenoptera, Braconidae: Pambolinae), with description of four new tropical species. *Acta Zoologica Academiae Scientiarum Hungaricae,* 42(1): 41-57.
Papp, J. 2018. Braconidae (Hymenoptera) from Korea, XXIV. Species of thirteen subfamilies. *Acta Zoologica Academiae Scientiarum Hungaricae,* 64(1): 21-50. DOI: 10.17109/AZH.64.1.21.2018
Shaw, M.R. & Sims, I. 2015 Notes on the biology, morphology, nomenclature and classification of *Pseudavga flavicoxa* Tobias, 1964 (Hymenoptera, Braconidae, Rhysipolinae), a genus and species new to Britain parasitizing *Bucculatrix thoracella* (Thunberg) (Lepidoptera, Bucculatricidae). *Journal of Hymenoptera Research*, 42: 21–32. DOI: 10.3897/JHR.42.8935
Shenefelt, R.D. 1975. Braconidae 8. Exothecinae, Rogadinae. P. 1115–1262. *In*: van der Vecht, J. & Shenefelt, R.D. (Eds). *Hymenopterorum Catalogus (N.S.)*. Pars 12. Dr W. Junk‘s-Gravenhage.
Shenefelt, R.D. & Marsh, P.M. 1976 Braconidae 9. Doryctinae. P. 1263–1424. *In*: van der Vecht, J. & Shenefelt, R.D. (Eds). *Hymenopterorum Catalogus (N.S.)*. Pars 13. Dr W. Junk‘s-Gravenhage.
Tang P., Belokobylskij S.A. & Chen X.-X. 2015. *Spathius* Nees, 1818 (Hymenoptera: Braconidae: Doryctinae) from China with a key to species. *Zootaxa*. *Monograph*. 3960(1): 1–132. DOI: 10.11646/zootaxa.3960.1.1

Tobias, V.I. 1964a. New species and genus of the braconid wasps (Hymenoptera, Braconidae) from Kazakhstan. *Proceedings of Zoological Institute of the USSR Academy of Sciences*, 34: 177–234. [In Russian]

Tobias, V.I. 1964b. New species and genus of the braconid wasps (Hymenoptera, Braconidae) from Tajikistan. *Izvestiya Akademii Nauk Tadzhikskoy SSR (Biologiya),* 2(16): 58–65.

Tobias, V.I. 1976. *Braconids of the Caucasus (Hymenoptera, Braconidae)*. Nauka, Leningrad. 286 pp. [In Russian]

Tobias, V.I. & Belokobylskij S.A. 1981. New for science and USSR fauna of the braconid genera (Hymenoptera, Braconidae) from Primorskiy Territory. *Entomologicheskoe Obozrenie*, 60(2): 354–363. [In Russian]

van Achterberg, C. 1991. Revision of the genera of the Afrotropical and W. Palaearctical Rogadinae Foerster (Hymenoptera: Braconidae). *Zoologische Verhandelingen*, 273: 1–102.

van Achterberg, C. 1993. Illustrated key to the subfamilies of the Braconidae (Hymenoptera: Ichneumonoidea). *Zoologische Verhandelingen*, 283: 1–189.

van Achterberg, C. 1995. Generic revision of the subfamily Betylobraconinae (Hymenoptera: Braconidae) and other groups with modified fore tarsus. *Zoologische Verhandelingen*, 298: 1– 242.

van Achterberg, C. & Chen, X. 2004. Six new genera of Braconidae (Hymenoptera) from China. *Zoologische Mededelingen*, 78(2): 77–100.

Watanabe, C. 1934. On some species of Braconidae from Formosa and the Philippines in the Deutsches entomologisches Museum. *Insecta Matsumurana*, 8(3): 119–123.

Watanabe, C. 1937. A contribution to the knowledge of the braconids fauna of the Empire of Japan. *Journal of the Faculty of Agriculture*, *Hokkaido Imperial University*, 42(1): 1–188.

Watanabe, C. 1968. A revision of the genus *Acanthormius* Ashmead, with descriptions of six new species (Hymenoptera, Braconidae). *Insecta Matsumurana,* 30: 57–68.

Wharton, R.A. 1993. Review of the Hormiini (Hymenoptera: Braconidae) with a description of new taxa. *Journal of Natural History*, 27: 107–171.

Yu, D.S., van Achterberg, C. & Horstmann, K. 2016. *Taxapad 2016. Ichneumonoidea 2015.* Nepean, Ottawa, Ontario. [Database on flash-drive]

Zaldívar-Riverón, A., Belokobylskij, S.A., Meza-Lázaro, R., Pedraza-Lara, C., García-París, M. & Meseguer, A.S. 2018. Species delimitation, global phylogeny and historical biogeography of the parasitoid wasp genus *Spathius* (Braconidae: Doryctinae) reveal multiple Oligocene-Miocene intercontinental dispersal events. *Insects Systematic and Evolution,* 38(4): 433–446.