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Dayhiracia gen. nov., a new planthopper genus of the tribe Parahiraciini from Thailand (Hemiptera: Fulgoromorpha: Issidae)

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Abstract. A new genus of Issidae (Hemiptera: Fulgoromorpha) belonging to the tribe Parahiraciini Cheng & Yang, 1991, *Dayhiracia* gen. nov., is erected to accommodate a new species *Dayhiracia circularis* gen. et sp. nov. from Nakhon Si Thamarat Province in Thailand. Illustrations of habitus and terminalia of the new species are given as well as a distribution map and a photograph of a live specimen. The Thai fauna of the family Issidae now counts ten species in five genera.

Keywords. Biodiversity, Fulgoroidea, citizen science, Indochinese bioregion.

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Introduction

Within the planthoppers (Hemiptera, Fulgoromorpha), the family Issidae Spinola, 1839 is distributed worldwide and counts about 1160 species in about 238 genera (Bourgoin 2026). The fauna of Thailand currently counts only nine species of Issidae: three species of the tribe Parahiraciini Cheng & Yang, 1991: *Flavina quadrispina* Ran & Liang, 2006, *Flavina dayi* Contant, 2026 and *Fortunia viridis* (Lallemand, 1942), and six species of Hemisphaeriini Melichar, 1906: *Gergithus dayi* Constant, 2021, *G. niger* (Walker, 1857), *Hemisphaerius binduseni* Constant & Jiaranaisakul, 2020, *H. cassidoides* Walker, 1862, *H. interclusus* Noualhier, 1896 and *H. rufovarius* Walker, 1858 (Walker 1862; Butler 1875; Gnezdilov *et al.* 2004; Ran & Liang 2006; Constant & Jiaranaisakul 2020; Constant 2021, 2026; Bourgoin 2026). My study of Issidae in the collections of the Royal Belgian Institute of Natural Sciences revealed a new species of Parahiraciini from southern Thailand, that could not be placed in any of the existing genera. The present paper aims to describe a new genus *Dayhiracia* gen. nov., to accommodate this new species, as a new contribution to the Thai issid fauna. It is dedicated to the memory of the late Les Day (Nov. 1957–Dec. 2022), who contributed the specimens in this study.

Material and methods

The specimens were captured by hand using small transparent vials with which they were slowly covered. The collection specimens were photographed with a Leica EZ4W stereo microscope with integrated

camera, and the images were stacked with CombineZ software and optimized with Adobe Photoshop CS3; all photographs were taken by the author unless otherwise noted in caption. The distribution map was produced with SimpleMappr (Shorthouse 2010).

The genitalia were extracted after soaking the abdomen in a 10% solution of potassium hydroxide (KOH) at room temperature for about 12 hours. The pygofer was separated from the abdomen and the aedeagus dissected with a needle blade for examination. Resulting pieces were thoroughly rinsed in 70% ethanol, then placed in glycerine for preservation in a tube attached to the pin of the corresponding specimen. The hind wings were glued with white glue on a small white cardboard rectangle attached to the pin of the corresponding specimen.

The external morphological terminology follows O'Brien & Wilson (1985) and for the terminalia, Bourgoin & Huang (1990), Gnezdilov (2003) and Gnezdilov *et al.* (2014). The metatibiotarsal formula gives the number of spines on (side of metatibia) apex of metatibia / apex of first metatarsus / apex of second metatarsus. The terminology and abbreviations of the wing venation follows Bourgoin *et al.* (2015). The higher classification of the family Issidae follows the most recent one as published by Gnezdilov *et al.* (2022).

Abbreviations for measurements

The measurements were taken as in Constant (2004).

BB = maximum breadth of the body
BF = maximum breadth of the frons
BTg = maximum breadth of the tegmen
BV = maximum breadth of the vertex
BW = maximum breadth of the hind wing
LF = length of the frons at median line
LT = total length (apex of head to apex of tegmina)
LTg = length of the tegmen
LV = length of the vertex at median line
LW = maximum length of the hind wing

Institutional abbreviations

RBINS = Royal Belgian Institute of Natural Sciences, Brussels, Belgium

Abbreviations for morphological terms

Female terminalia

St VII = sternum VII

Male terminalia

ae = aedeagus
alp = apical laminate process of the dorsal lobe of the periandrium
An = anal tube
ca = capitulum of the gonostylus
co = connective of the aedeagus
dl = dorsal lobe of the periandrium
G = gonostylus
lvp = lateroventral process of the aedeagus
plp = paired laminate processes of the dorsal lobe of the periandrium
Py = pygofer

te = tectiductus of the aedeagus
vl = ventral lobe of the periandrium

Results

Taxonomy

Class Insecta Linnaeus, 1758
Order Hemiptera Linnaeus, 1758
Suborder Auchenorrhyncha Duméril, 1806
Infraorder Fulgoromorpha Evans, 1946
Superfamily Fulgoroidea Latreille, 1807
Family Issidae Spinola, 1839
Subfamily Issinae Spinola, 1839
Tribe Parahiraciini Cheng & Yang, 1991

Subtribe **Parahiraciina** Cheng & Yang, 1991

Type genus

Parahiracia Ôuchi, 1940 (junior synonym of *Fortunia* Distant, 1909).

Diagnosis

All Thai Parahiraciini belong to the subtribe Parahiraciina (Bourgoin & Wang 2020; Bourgoin 2026), which was defined by Bourgoin & Wang (2020) based on a combination of characters of the hind wings:

(1) Hindwings bilobate, strongly notched at CuP with CuP-Pcu-A1 lobe generally wider than Sc-R-MP-CuA lobe; the two lobes almost the same length.
(2) Posterior margin of hindwings not or indistinctly notched at $A1_2$.
(3) A2 lobe of hindwings with anal area posterior to A1 strongly reduced, much shorter and much thinner than the anterior lobes.
(4) Hindwings with Sc-R-MP-CuA and CuP-Pcu-A1 lobes covered with a set of numerous transverse veins.
(5) Hindwings with CuA and CuP not merging before the anterior notch.
(6) Hindwings with Pcu and $A1_1$ not merging in basal half of wing.
(7) Hindwings with A2 present, not branched or absent. In some species, a transverse a2-a1 connecting A2 with A1 at the level of its basal branching (e.g., in *Tetricodes tamdaoensis* Vanslembrouck & Constant, 2018 – see Vanslembrouck & Constant 2018).

Checklist of the Parahiraciini Cheng & Yang, 1991 of Thailand

Dayhiracia circularis gen. et sp. nov. (present work)

Flavina dayi Constant, 2026 (described from Thailand, Kamphoeng Phet Province by Constant 2026: 7)

Flavina quadrispina Ran & Liang, 2006 (described from Thailand, Chanthaburi and Chiang Mai provinces by Ran & Liang 2006: 391)

Fortunia viridis (Lallemand, 1942) (recorded from Thailand, Phetchaburi Province by Gnezdilov *et al.* 2004: 221)

Genus ***Dayhiracia*** gen. nov.
urn:lsid:zoobank.org:act:C1CBE4B8-C5A8-4D0B-98C6-9D62F5B0A624

Type species

Dayhiracia circularis gen. et sp. nov., by present designation.

Diagnosis

The new genus *Dayhiracia* gen. nov. can be separated from all other genera of the tribe Parahiraciini by the following combination of characters:

(1) Head with vertex distinctly wider than long in midline, not projecting anteriorly.
(2) Frons weakly convex in lateral view, with subdorsal transverse carina, median carina from frontoclypeal suture to transverse carina (not reaching dorsal margin of frons), without peridiscal (= sublateral) carinae and oculiform marking.
(3) Genae without strong carina under the antennae.
(4) Body oval in dorsal aspect, less than twice a long as maximum width.
(5) Pro- and mesofemora rather elongate and slender, dorsoventrally weakly flattened, without lamina along posteroventral margin.
(6) Metatibiae with two lateral and seven apical spines.
(7) Tegmina with vein ScP+RA, RP, CuA and CuP curved, unbranched and reaching the hind margin of tegmen, MP branched rather basally, MP1 branched and MP2 unbranched.
(8) Pygofer massive, subrectangular in lateral aspect.
(9) Anal tube of male large, dorsoventrally flattened, subrhomboid / subspatulate in dorsal view, with apical margin truncate, and with anal opening around basal third.
(10) Gonostyli massive with massive capitulum projecting dorsocephalad (in lateral aspect), with wide, short neck and apical hook.
(11) Aedeagus subcircular in lateral view; dorsal lobe of periandrium with apical laminate process and pair of laminate processes behind latter (all processes curved cephalad); ventral lobe narrow and concealed between ventral laminae of dorsal lobe; lateroventral processes of aedeagus s. str. attached at about midlength of aedeagus.

Differential diagnosis

The most similar genera are *Thabena* Stål, 1866, *Gelastyrella* Yang, 1994 and *Pusulissus* Bourgoin & Wang, 2020, which also show an oval body, the vertex wider than long, two lateral spines on the metatibiae, and the frons bearing a median carina but no black marking. However, *Dayhiracia* gen. nov. can be separated

(1) from *Pusulissus* (see the illustrations in Constant & Pham 2024: figs 32–35) by the subdorsal transverse carina of the frons (absent in *Pusulissus*) and the median carina of the frons not reaching the dorsal margin (reaching the dorsal margin in *Pusulissus*), the capitulum of the gonostyli without a distinct neck (neck distinct in *Pusulissus*), and the circular aedeagus, bearing apical laminate processes on the dorsal lobe of the periandrium (not circular and without processes on the dorsal lobe of the periandrium in *Pusulissus*);

(2) from *Gelastyrella* (see the illustrations in Constant & Pham 2024: figs 19–22; Constant et al. 2025: figs 1–5) by the vein MP of the tegmina forked before the basal third of the tegmen (forked around halflength of the tegmen in *Gelastyrella*), the large, subrhomboid anal tube (in dorsal aspect) with the anal opening around the basal third (anal tube very elongate, narrow in basal half, then spatulate and with the anal opening after halflength in *Gelastyrella*), and the circular aedeagus, bearing

apical laminate processes on the dorsal lobe of the periandrium, and without a large suspensorium (not circular and without such processes on the dorsal lobe of the periandrium, but with a large suspensorium in *Gelastyrella*);

(3) from *Thabena* (based on the type species of *Thabena*, *T. retracta* (Walker, 1857) described from Borneo – see the illustrations in Gnezdilov 2009: figs 1–4, 16–24) by the large, subrhomboid anal tube (in dorsal aspect) with the anal opening around the basal third (anal tube with the basal half elongate and narrow then abruptly widening, and with the anal opening around halflength in *Thabena*), the capitulum of the gonostyli without a distinct neck (neck distinct in *Thabena*) and the circular aedeagus, bearing apical laminate processes on the dorsal lobe of the periandrium (not circular and without such processes on the dorsal lobe of the periandrium in *Thabena*).

Etymology

The new genus name is formed by the combination of 'Day', referring to the late Les Day (Nov. 1957–Dec. 2022), who provided the specimens of this new genus and species, and '*hiracia*', used as an ending, reminiscent of the genus name *Parahiracia* (now a junior synonym of *Fortunia*), the type genus of the tribe Parahiraciini. The gender is feminine.

Description

Head. Head slightly narrower than thorax. Vertex distinctly wider than long, weakly excavate, with sides subparallel (slightly converging anteriad); anterior and posterior margins curved, subparallel; all margins slightly carinate. Frons narrowly visible from above, weakly convex in lateral view, with subdorsal, slightly curved, transverse carina; median carina from frontoclypeal suture to transverse carina (not reaching dorsal margin of frons); without peridiscal (= sublateral) carinae; about as long in midline, as wide (but looking slightly elongate), widest in ventral third; dorsal margin nearly horizontal, lateral margins sinuate, lateroventral angles weakly projecting ventrad. Genae smooth. Frontoclypeal suture curved and grooved. Clypeus subtriangular, convex, moderately elongate; anteclypeus with median blunt carina. Labium elongate and narrow, reaching metacoxae, with apical segment elongate, shorter than penultimate. Eyes reniform (not emarginate); ocelli absent. Antennae rather short with scape ring-shaped and pedicel subcylindrical, slightly longer than broad.

Thorax. Pronotum shorter than mesonotum in midline; anterior margin carinate with carina interrupted in middle portion, moderately bisinuate and roundly protruding anteriorly between eyes; posterior margin weakly curved, slightly carinate in middle portion; without distinct median carina, impressed point on each side of median line; paranotal fields very narrow behind eyes; paranotal lobes (anterolateral view) broad with posteroventral angle rounded. Mesonotum subtriangular with weak carina along anterior margin; median and peridiscal (sublateral) carinae indistinct. Tegulae well developed.

Tegmina. Subcoriaceous, about twice as long as broad, with longitudinal veins distinctly elevated and dense network of cross-veinlets; convex, with narrow epipleuron; costal margin broadly rounded. Apex moderately narrowly rounded. Postclaval margin weakly rounded on distal half and notched at apex of clavus. Clavus closed, reaching slightly beyond $^{3}/_{5}$ of tegmen. *Venation*: ScP+R rather short, forking into subparallel ScP+RA and RP, both unforked; MP forked rather basally; CuA and CuP curved, unbranched, MP branched rather basally, MP1 branched and MP2 unbranched; Pcu fused with A1 at $^{4}/_{5}$ of clavus length; Pcu+A1 fused with CuP at apex of clavus.

Hind wings. Broader than tegmina and deeply bilobed, strongly notched at CuP; costal margin strongly sinuate; CuP-Pcu-A1 lobe distinctly wider than Sc+R-MP-CuA lobe; both lobes angularly rounded apically; postclaval margin broadly rounded; anal lobe reduced but distinct, with A2 vein. *Venation*: main veins present; ScP+R, MP and CuA running more or less parallel in basal portion, with several

cross-veins; Pcu weakly curved, then merging distally with distal part of A1; CuP-Pcu-A1 lobe with several cross-veins delimiting subrectangular cells.

Legs. Elongate. Pro- and mesofemora rather elongate and slender, dorsoventrally weakly flattened, without lamina along posteroventral margin. Pro- and mesotibiae slender, slightly longer than corresponding femora. Metafemora slender but wider and shorter than metatibiae; latter with two lateral teeth in distal half and seven apical teeth. Tarsi distinctly elongate; first metatarsomere elongate and slender, with a strong spine at each side and a row of six teeth arranged in weakly curved arc in between ventrally along posterior margin; second metatarsomere short with one strong tooth at each side. Metatibiotarsal formula: (2) 7 / 8 / 2.

Male terminalia. Pygofer massive, subrectangular in lateral aspect. Gonostyli massive (subtriangular) with massive capitulum projecting dorsocephalad (in lateral aspect), with wide, short neck and apical hook and with inner margin forming rounded right angle in posterior view. Anal tube large, dorsoventrally flattened, subrhomboid / subspatulate in dorsal view, with apical margin truncate, and with anal opening around basal third. Aedeagus subcircular in lateral view; dorsal lobe of periandrium with apical laminate process and pair of laminate processes behind latter (all processes curved cephalad); ventral lobe of periandrium narrow and concealed between ventral reflexed laminae of dorsal lobe; lateroventral processes of aedeagus s. str. attached at about midlength of aedeagus. Connective elongate with well developed tectiductus.

Distribution

Thailand: Nakhon Si Thammarat Province.

Dayhiracia circularis gen. et sp. nov.
urn:lsid:zoobank.org:act:E8E6424E-4D56-4451-9456-E0B84494EA36
Figs 1–6

Diagnosis

Dayhiracia circularis gen. et sp. nov. is the only species in the genus *Dayhiracia* gen. nov. The black markings of the frons and paranotal lobes, the colouration of the tegmina, but most importantly the characters of the male terminalia, are probably relevant diagnostic features to recognize the species, e.g., the shape of the anal tube in dorsal view, the shape and processes of the periandrium, and the size and shape (curvature) of the lateroventral processes of the aedeagus.

Differential diagnosis

The most similar species belong to the genera *Thabena* Stål, 1866, *Gelastyrella* Yang, 1994 and *Pusulissus* Bourgoin & Wang, 2020 which can be separated by the characters given above for the genus *Dayhiracia* gen. nov.

Furthermore, the new species can be separated from the species currently included in *Thabena* Stål, 1866 and occuring in the same geographical area, as follows:

(1) from *T. decipiens* (Melichar, 1906) described from Perak, Malaysia (Melichar 1906: 264), by its larger size (at least 6.8 mm; 5.5 mm for *T. decipiens*), and the vertex about 2.5 × as wide as long in midline (slightly wider than long in *T. decipiens*).
(2) from *T. diversa* (Melichar, 1906) described from Tenasserim, Myanmar (Melichar 1906: 263), by its vertex about 2.5 × as wide as long in midline (as wide as long in *T. diversa*), with anterior margin rounded (projecting in an obtuse angle in *T. diversa*).

(3) from *T. latifrons* (Melichar, 1906) described from Sumatra, Myanmar and Sipora Island (Melichar 1906: 264), by its vertex about 2.5 × as wide as long in midline (twice as wide as long in *T. latifrons*), with anterior margin rounded (straight in *T. latifrons*).
(4) from *T. testudinaria* (Stål, 1854) described from Penang Island (Stål 1854: 246), by the sternum VII of the females bearing a lamina projecting caudad and moderately tapering towards the posterior, apically truncate with lateral angles rounded and shallow rounded notch in middle, while in *T. testudinaria*, the process is large, rectangular, with apex convex (according to Gnezdilov 2009).

Etymology

The species epithet '*circularis*' is a Latin adjective meaning 'circular, round'. It refers to the peculiar shape of the male aedeagus.

Type material

Holotype

THAILAND • ♂; Nakhon Si Thammarat Province, Khao Ram Rome; 8°22′08.5″ N, 99°44′05.1″ E; 13 May 2019; 985 m a.s.l.; L. Day leg.; I.G.: 35103; RBINS.

Paratype

THAILAND • 1 ♀; same data as for holotype; 3 May 2016; RBINS.

Description

Measurements and ratios. LT: ♂ (n = 1): 6.8 mm, ♀ (n = 1): 7.2 mm; LT/BB = 1.60; LTg/BTg = 2.15; LW/BW = 1.35; BV/LV = 2.46; LF/BF = 0.98.

Body (Figs 1A–C, 5A–E). Oval; general colouration olivaceous green variegated with dark brown.

Head (Figs 1A–C, 2A–D, 5A–E). Head slightly narrower than thorax. Vertex more or less uniformly rather pale yellowish brown to olivaceous green, about 2.5 × as wide as long, weakly excavate with pair of dark points on disc, with sides subparallel (slightly converging anteriad); anterior and posterior margins curved, subparallel; all margins slightly carinate. Frons darker than vertex; portion above subdorsal transverse carina (narrowly visible from above), blackish with some paler spots; disc brown densely covered in small yellowish/olivaceous spots and with paler marking more or less in middle; weakly convex in lateral view; distinct median carina from frontoclypeal suture to transverse carina (not reaching dorsal margin of frons); about as long in midline, as wide (but looking slightly elongate); widest in ventral third; dorsal margin nearly horizontal, lateral margins sinuate, lateroventral angles weakly projecting ventrad. Genae smooth, same colour as vertex (slightly paler). Frontoclypeal suture curved and grooved. Clypeus subtriangular, convex, moderately elongate, coloured as frons, turning blackish laterally in distal portion; anteclypeus black with median blunt carina. Labium yellowish to olivaceous brown, elongate and narrow, reaching metacoxae, with apical segment elongate, shorter than penultimate, black apically. Eyes reniform (not emarginate); ocelli absent. Antennae rather short with scape yellowish, ring-shaped and pedicel black with distal portion yellowish, subcylindrical, slightly longer than broad.

Thorax (Figs 1A, C, 2A–D, 5A, C–E). Pro- and mesonotum yellowish brown to olivaceous green. Pronotum about 0.63 × as long as mesonotum in midline; anterior margin carinate with carina interrupted in middle portion (carina less curved in female), moderately bisinuate and roundly protruding anteriorly between eyes; posterior margin weakly curved, slightly carinate in middle portion; longitudinal carinae absent, impressed point on each side of median line, dark brown; paranotal fields very narrow behind eyes; paranotal lobes (anterolateral view) coloured as pronotum, with posterior margin lined with blackish brown, broad with posteroventral angle rounded (projecting posteroventrad). Mesonotum coloured as pronotum, with pair of dark brown points on disc, subtriangular with weak carina along

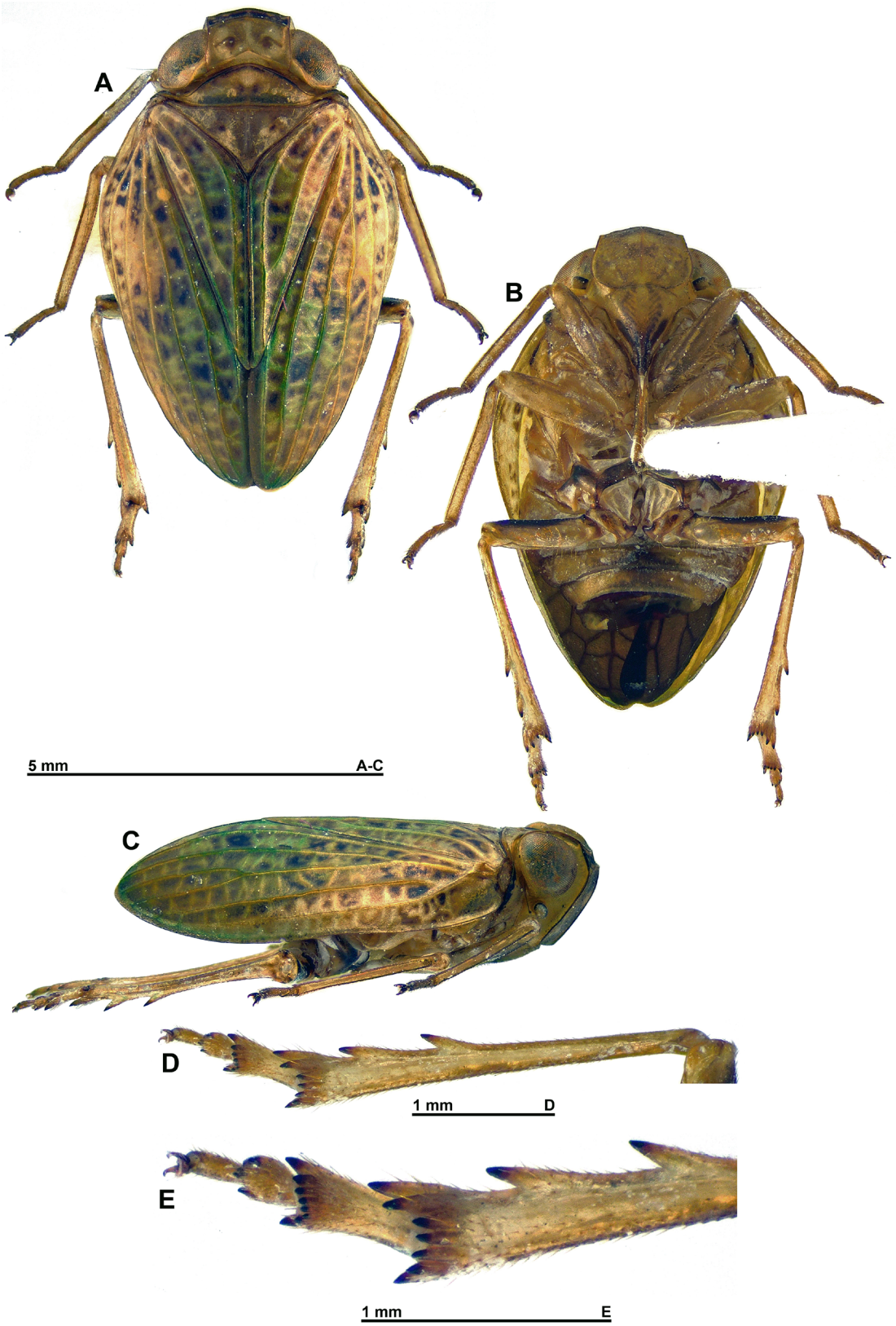

Fig. 1. *Dayhiracia circularis* gen. et sp. nov., holotype, ♂ (RBINS). **A**. Habitus, dorsal view. **B**. Habitus, ventral view. **C**. Habitus, lateral view. **D**. Metatibia and metatarsus, ventral view. **E**. Metatarsus and apex of metatibia, ventral view.

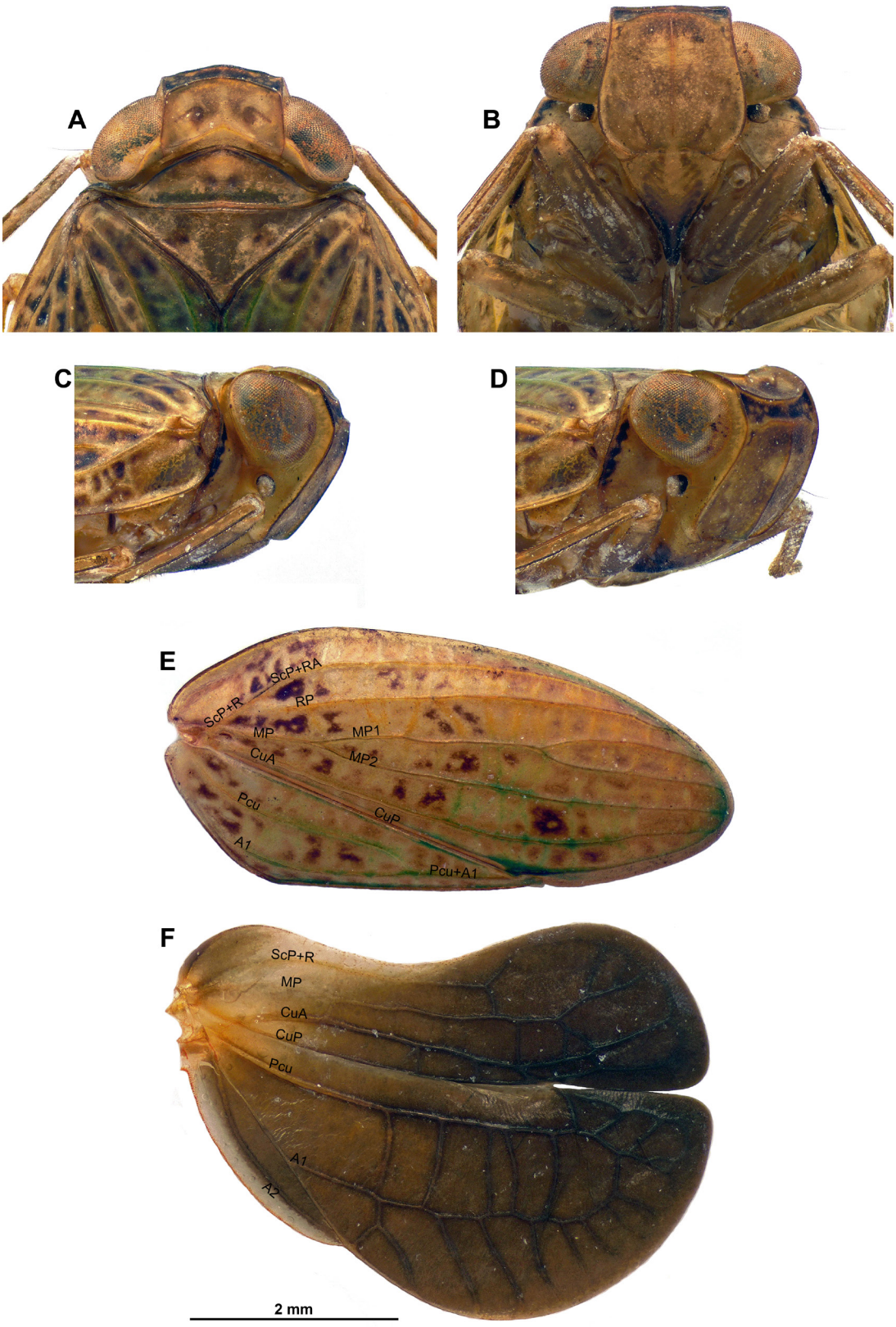

Fig. 2. *Dayhiracia circularis* gen. et sp. nov., holotype, ♂ (RBINS). **A**. Head and thorax, dorsal view. **B**. Frons, perpendicular view. **C**. Head and thorax, lateral view. **D**. Head and thorax, anterolateral view. **E**. Right tegmen. **F**. Right hind wing. Abbreviations: see Bourgoin *et al.* 2015.

anterior margin; median and peridiscal (sublateral) carinae indistinct. Tegulae well developed, yellowish brown to olivaceous green.

Tegmina (Figs 1A–C, 2E, 5A–E). Yellowish brown to olivaceous green, variegated with more or less dark brown inside cells; subcoriaceous, slightly more than twice as long as broad, with longitudinal veins distinctly elevated and dense network of cross-veinlets, veins and cross-veinlets paler than background; weakly defined paler areas around basal third and in distal portion; convex, with narrow epipleuron; costal margin broadly rounded forming weakly obtuse angle in basal fourth. Apex moderately narrowly rounded. Postclaval margin weakly rounded on distal half and notched at apex of clavus. Clavus closed, reaching slightly beyond $^{3}/_{5}$ of tegmen. *Venation*: as in genus description.

Hind wings (Figs 2F, 5F). Dark brown with paler, yellowish area basally between costal margin and Pcu vein; veins slightly darker than background. Distinctly broader than tegmina and deeply bilobed, strongly notched at CuP; costal margin strongly sinuate; CuP-Pcu-A1 lobe about 1.4 × as wide as Sc+R-MP-CuA lobe; both lobes angularly rounded apically; postclaval margin broadly rounded; anal lobe reduced but distinct, with complete, curved A2 vein. *Venation*: as in genus description.

Legs (Figs 1A–E, 5A–E). Elongate, mostly pale yellowish brown to olivaceous green. Pro- and mesofemora rather elongate and slender, dorsoventrally weakly flattened. Pro- and mesotibiae slender, slightly longer than corresponding femora. Metafemora with external (lateral) side largely blackish brown; slender but wider and shorter than metatibiae. Metatibiae with two lateral spines in distal half and seven apical spines, all spines black distally. Tarsi distinctly elongate, metatarsi with all teeth black distally; first metatarsomere elongate and slender; strong tooth at each side and row of six teeth arranged in weakly curved arc in between ventrally along posterior margin; second metatarsomere short with one strong tooth at each side. Metatibiotarsal formula: (2) 7 / 8 / 2.

Male terminalia (Figs 3–4). Pygofer (*Py* – Fig. 3A–D) massive, subrectangular about 2.1 × as high as long at midheight in lateral view, with anterior margin sinuate, posterior margin sinuate and dorsal margin subhorizontal forming broadly rounded angle posteriorly; subcircular in caudal view (slightly wider than high – 1.1 ×); posterior margin deeply emarginate (V-shaped emargination) in dorsal view. Gonostyli (*G* – Fig. 3A–D) massive, subtriangular, convex with ventral margin broadly rounded, anterodorsal margin oblique and posterior margin oblique to rounded distal angle; capitulum (*ca* – Fig. 3A, C–D) massive projecting dorsocephalad (in lateral aspect), with wide, short neck and apical hook curved lateroventrad, with inner margin antero-posteriorly laminate, subquadrate, forming rounded right angle in posterior view, lateral laminate projection rather basal, slightly oblique in lateral view, in posterior view looking like a hook directed lateroventrally. Anal tube (*An* – Fig. 3A–D) large, dorsoventrally flattened (weakly downcurved in lateral view), 1.6 × as long in midline, as wide; subrhomboid / subspatulate in dorsal view, more or less evenly widening from base to halflength (lateral margins weakly incurved), then tapering in distal half (margins weakly rounded), apical margin truncate; anal opening around basal third; in caudal view, posterior margin bisinuate. Aedeagus (Fig. 4) symmetrical subcircular in lateral view (more or less regularly curved – processes included); periandrium wide in basal portion; dorsal lobe of periandrium (*dl* – Fig. 4A–F, H–J) with apical laminate process (*alp* – Fig. 4A–I) elongate with lateral margins parallel, apical margin rounded, as wide as dorsal lobe and recurved dorsocephalad in lateral view; pair of laminate processes (*plp* – Fig. 4A–J) behind latter, dorsal portion more or less ribbon-shaped, longer than apical process (reaching base of periandrium) with apical margin rounded, recurved dorsocephalad, ventral portion prolongated ventrally with foliaceous process produced lateroventrad, then twisted and tapering to distal portion curved dorsocephalad; ventral lobe (*vl* – Fig. 4A–D, F–J) of periandrium laminate, elongate and narrow, concealed between ventral reflexed laminae of dorsal lobe on complete length; aedeagus s. str. (*ae*– Fig. 4A–E, H, J) shortly surpassing ventral lobe, membranous; lateroventral processes of aedeagus s. str. (*lvp* – Fig. 4A–D, H–J) attached at about midlength of

aedeagus, elongate and narrow, tapering to acute apex, with basal portion curved cephalad, following curvature of periandrium and distal portion recurved mesolaterad to mesocaudad. Connective (*co* – Fig. 4A) elongate, slender and curved; tectiductus (*te* – Fig. 4A) well developed, moderately elongate with basilateral apodemes and wide ventral foramen (nearly laminate).

Female terminalia. Hind margin of sternum VII (*St VII* – Fig. 5G) with median, wide lamina projecting caudad and moderately tapering towards the posterior; apically truncate with lateral angles rounded and shallow rounded notch in middle.

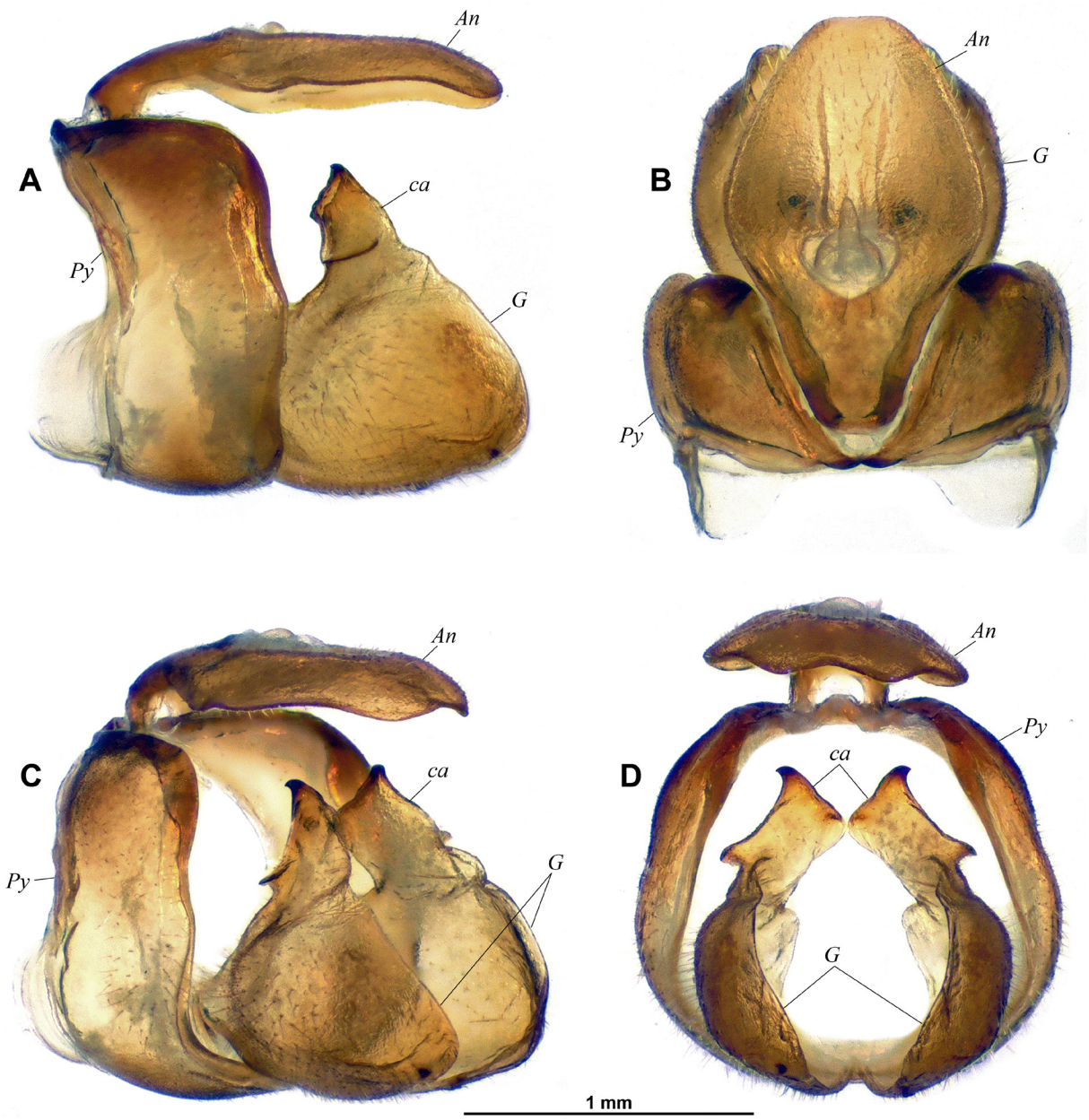

Fig. 3. *Dayhiracia circularis* gen. et sp. nov., holotype, ♂ (RBINS), pygofer, anal tube and gonostyli. **A**. Left lateral view. **B**. Dorsal view. **C**. Posterolateral view. **D**. Caudal view. Abbreviations: see Material and methods.

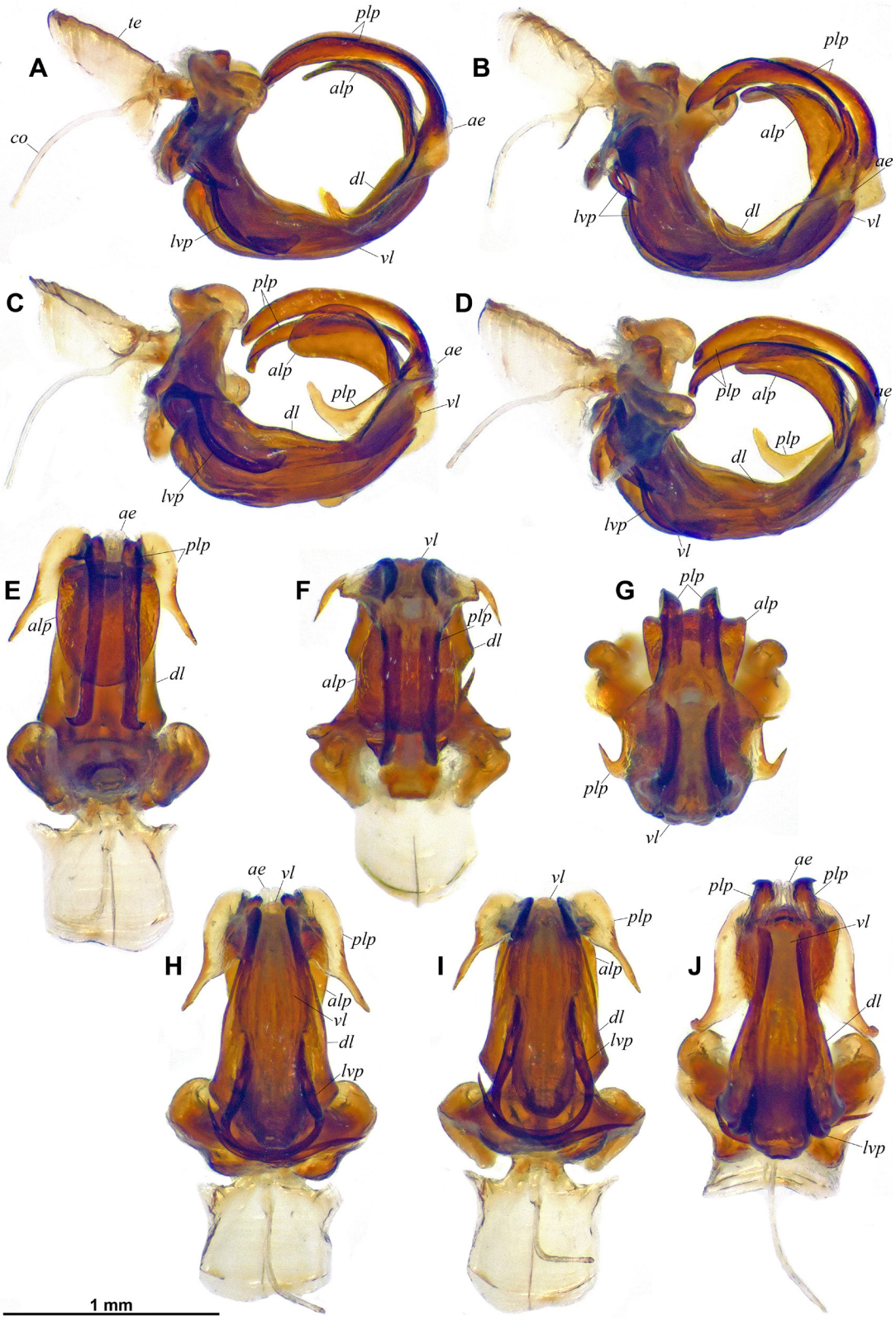

Fig. 4. *Dayhiracia circularis* gen. et sp. nov., holotype ♂ (RBINS), aedeagus. **A**. Left lateral view. **B**. Posterolateral view. **C**. Lateroventral view. **D**. Laterodorsal view. **E**. Dorsal view. **F**. Posterodorsal view. **G**. Caudal view. **H**. Ventral view. **I**. Anteroventral view. **J**. Posteroventral view. Abbreviations: see Material and methods.

Fig. 5. *Dayhiracia circularis* gen. et sp. nov., paratype, ♀ (RBINS). **A**. Habitus, dorsal view. **B**. Habitus, ventral view. **C**. Habitus, lateral view. **D**. Habitus, perpendicular view of frons. **E**. Habitus, anterolateral view. **F**. Right hind wing. **G**. Terminalia, ventral view. Abbreviation: see Material and methods.

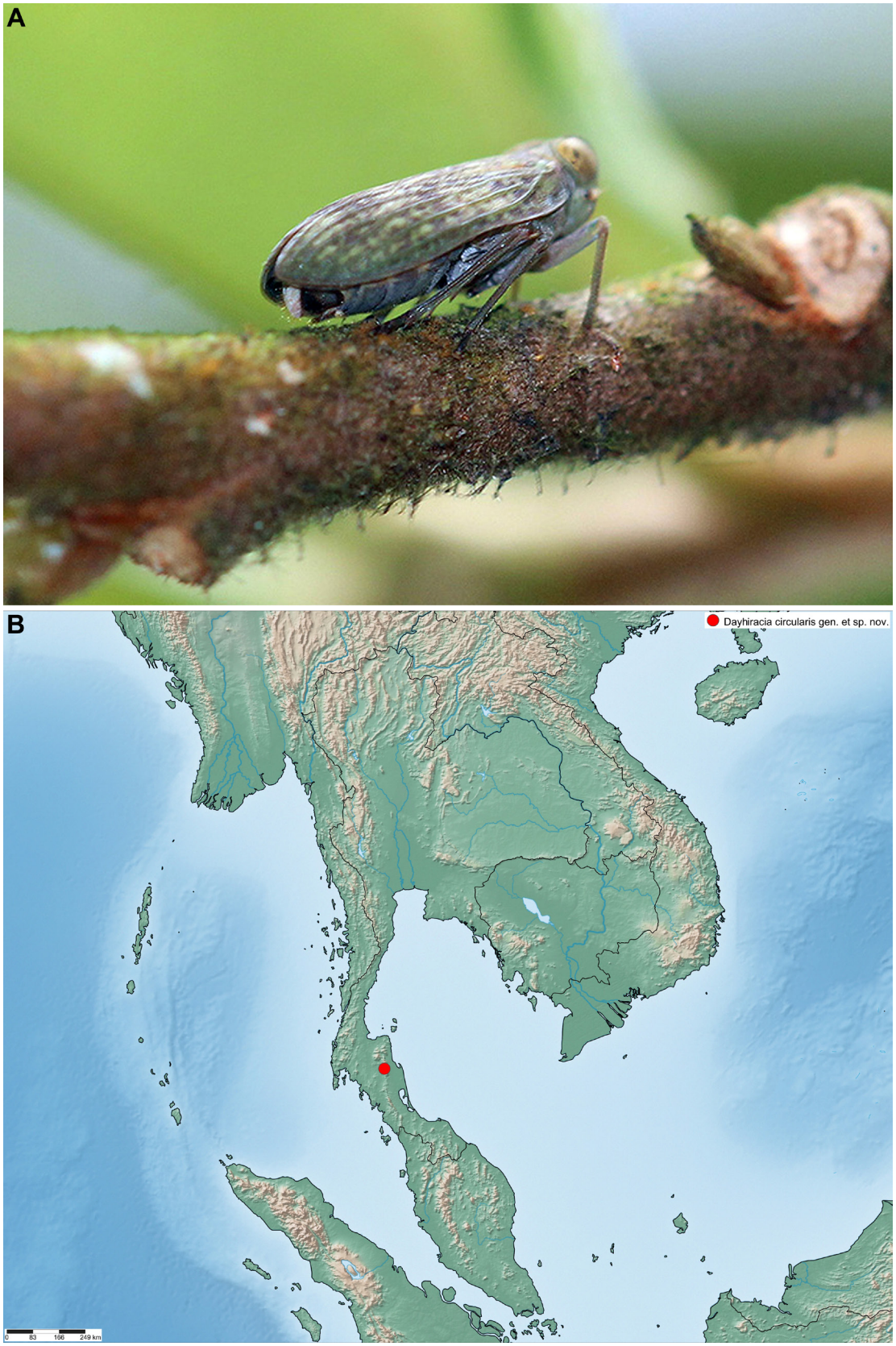

Fig. 6. *Dayhiracia circularis* gen. et sp. nov. **A**. Paratype ♀ (RBINS), live in Thailand, Nakhon Si Thammarat Province, Khao Ramrome, 3 May 2016 (photograph by L. Day). **B**. Distribution map.

Biology

Unknown. Both known specimens were collected in May, at an elevation around 1000 m a.s.l.

Distribution

Thailand: Nakhon Si Thammarat Province (Fig. 6B).

Discussion

The discovery of a genus and species new to science in Thailand confirms that the Issidae fauna of this country is far from being properly documented. Only ten species in five genera are currently recorded, a very low number compared to, for example, the fauna of Vietnam which counts more than 80 species (Constant & Pham 2025). Large portions of the country remain formally undocumented in terms of Issidae, while citizen-science platform iNaturalist (2026) provides numerous occurence (nearly 700) and diversity records from all over the country.

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I wish to thank Mr Les Day (Thailand) for providing the material and photograph of the new species. It is the second species of Issidae described based on specimens that he collected, after *Gergithus dayi* Constant, 2021, and it is my pleasure to remember Les's generous contributions to the entomology of Thailand, this way.

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