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Revision of the Oriental subgenus *Patrisaspilota* Fischer, 1995 (Hymenoptera: Braconidae: Alysiinae: *Orthostigma* Ratzeburg, 1844) with description of a new species from Papua New Guinea

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Abstract

A revision of all Oriental species of subgenus *Patrisaspilota* Fischer, 1995 of the genus *Orthostigma* Ratzeburg, 1844 is provided and a new species from Papua New Guinea, *Orthostigma (Patrisaspilota) enduwaense* **sp. nov.**, is described and illustrated. The species name *Patrisaspilota memorandum* Fischer, 1995 is synonymized with *Orthostigma multicarinatum* Tobias, 1990. A comprehensive key to the World *Patrisaspilota* species is presented and all known species are re-described and illustrated.

Key words: Braconidae, parasitoid of Diptera, *Orthostigma*, *Patrisaspilota*, Australasia, notauli, new species, key

Introduction

Biological expeditions in poorly studied tropical areas usually lead to the discovery of many new taxa in different groups of animals and plants. The expedition "Our Planet Reviewed—Papua New Guinea" carried out by the Muséum National d'Histoire Naturelle (Paris, France) in 2012 has allowed the discovery and description of at least 150 new species and six new genera to science in several groups of insects to date (Robillard *et al*. 2016; Peris-Felipo and Belokobylskij, 2019). Study of the braconid material collected during this project has revealed numerous species belonging to rare taxonomic groups including *Orthostigma* (*Patrisaspilota*) (Fischer, 1995), which is the subject of the present work.

The subgenus *Patrisaspilota* of the genus *Orthostigma* Ratzeburg, 1844 includes four species distributed exclusively in the Oriental zoogeographic region (Yu *et al*. 2016). The main diagnostic characters of this subgenus which belongs to the *Aspilota* generic group are: mandibles with complete transverse and curved submedian carina, and notauli almost completely developed and mainly reaching the mesoscutal pit (Fischer, 1995).

All known species of *Patrisaspilota* are revised and a key for their identification is provided. A new species from Papua New Guinea is described and illustrated, and *Patrisaspilota memorandum* Fischer, 1995 is synonymized.

Materials and methods

Specimens were collected with Malaise traps during the expedition "Our Planet Reviewed—Papua New Guinea" between 25 October and 10 November 2012, at eight sites located every 500 m along an altitudinal transect set up on the north-eastern face of Mt Wilhelm and at Wanang (Swire) Research Station (175 m asl) a lowland forest 63 km north of Mt Wilhelm. At each sampling site, four Malaise traps were set up every 100 m following the same contour line. The captures were preserved with 90% ethyl alcohol (Robillard *et al*. 2016).

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For the terminology of morphological features, sculpture and measurements (including for mandibles) see Peris-Felipo *et al*. (2014); for wing venation nomenclature see van Achterberg (1993); for measurements of the marginal cell see Peris-Felipo and Belokobylskij (2017). Material was imaged using a Digital Microscope Keyence® VHX-2000 and Adobe Photoshop® imaging system. The types of described species are deposited in the collection of the Natural History Museum (London, U.K.; BMNH); the Muséum national d'Histoire naturelle (Paris, France; MNHN), the Naturhistorisches Museum (Vienna, Austria; NHMW), and the Zoological Institute of the Russian Academy of Sciences (St Petersburg, Russia; ZISP).

Taxonomy

Class Hexapoda Blainville, 1816

Order Hymenoptera Linnaeus, 1758

Family Braconidae Nees, 1811

Subfamily Alysiinae Leach, 1815

Tribe Alysiini Leach, 1815

Genus *Orthostigma* Foerster, 1863

Subgenus *Patrisaspilota* Fischer, 1995

Patrisaspilota Fischer 1995: 721; 2002: 102; 2004: 78; 2010: 636; Wharton 2002: 981 (as synonym of *Orthostigma*); Yu *et al.* 2016.
Type species. *Patrisaspilota memoranda* Fischer 1995 (= *Orthostigma multicarinatum* Tobias 1990).

Diagnosis of subgenus. Mandibles small, simple, tridentate, weakly curved outwards, with complete transverse curved carina on anterior third or submedially; upper (first) tooth smallest, narrow and pointed, middle (second) rather long and acuminate, lower (third) tooth widest, evenly rounded. Paraclypeal fovea short, far removed from edge of eyes. Mesoscutum always with midpit; notauli rather well developed usually almost complete and joined posteriorly with mesoscutal pit or sometimes at least reaching half of mesoscutum; precoxal sulcus present, usually wide; propodeum with different types of sculpture, usually without areas. Fore wing: marginal cell not shortened; vein 2-SR present and distinctly sclerotized; veins m-cu and cu-a always postfurcal; first subdiscal cell closed postero-apically by vein CU1a. Metasoma more or less distinctly compressed laterally. Ovipositor sheath not longer than metasoma, often up-curved.

Remarks. Members of this subgenus are characterised by their completely or almost completely developed notauli (plesiomorphic state of the character) similar to genera *Alitha* Cameron, 1906 and *Carinthilota* Fischer 1975. This type of notauli consists of lines of closely spaced pits reaching or nearly reaching the mesoscutal pit. The presence of almost complete notauli in different alysiine taxa (*Orthostigma, Dinotrema* Foerster 1863, *Phaenocarpa* Foerster 1863) is considered as a subgeneric character.

Hosts. Unknown (Yu *et al.* 2016).

Orthostigma (*Patrisaspilota*) *enduwaense* Peris-Felipo, sp. nov.
(Figs 1, 2)

Type material. Holotype: female, Papua New Guinea, Mt Wilhelm, UTM (-5.815272, 145.1565), 2700 m, 16–17.x.2012, Plot 4, understorey, Coll. by Kua, Yalang, Novotny & Leponce; MAL-MW2700B-13/16-d13 (MNHM).

Paratype: 1 female, same data as holotype but, UTM (-5.814968, 145.1580), 28–29.x.2012, Plot 2, MAL-MW2700B-13/16-d13 (MNHM).

Etymology. The name is from geographical area "Mt Wilhelm", the type locality of species, which in the local language (Kuman) is called Enduwa Kombuglu.

Description. Female (holotype).

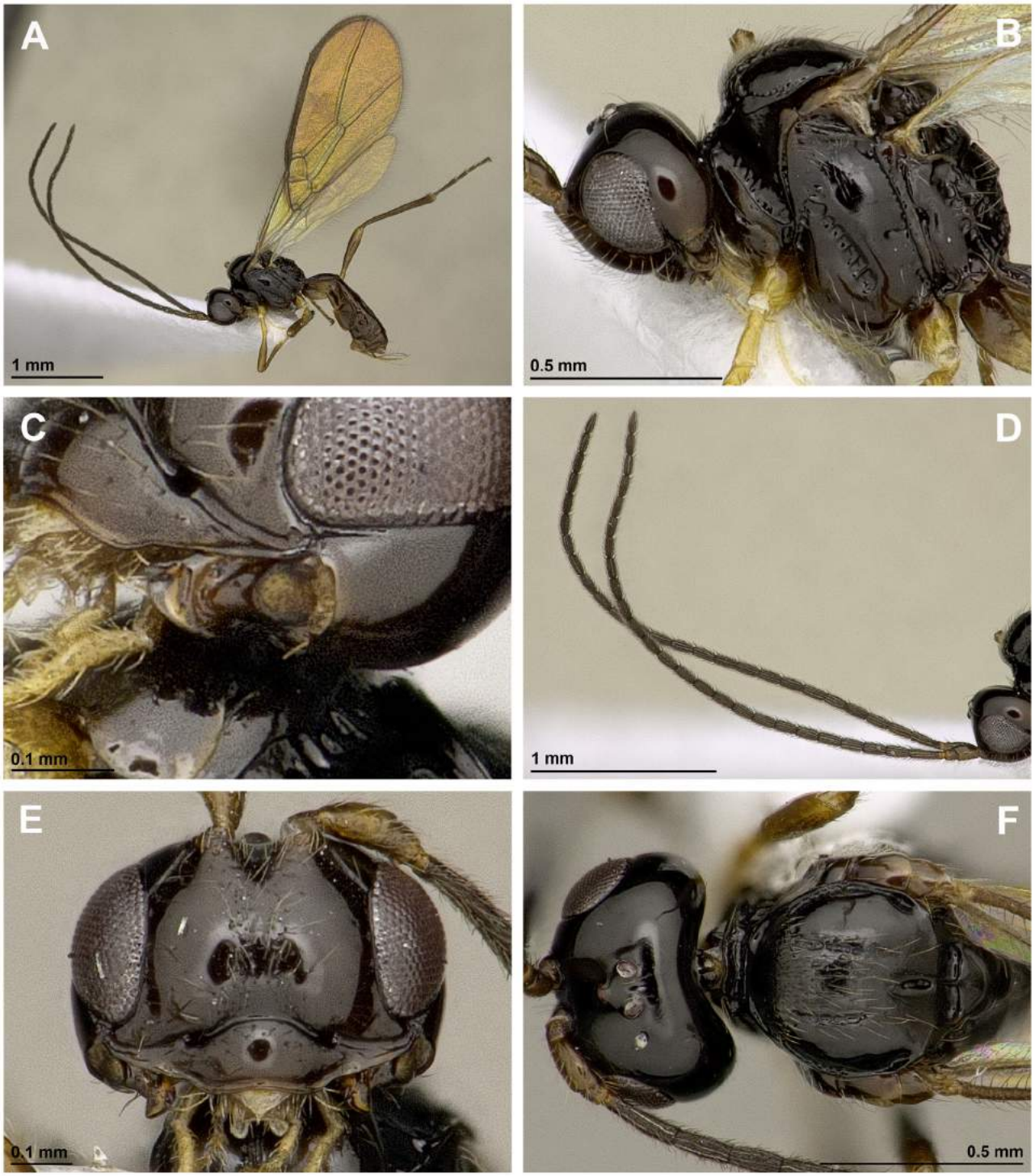

FIGURE 1. *Orthostigma (Patrisaspilota) enduwaense* Peris-Felipo, **sp. nov.** (holotype, female). **A**. Habitus, lateral view. **B**. Head and mesosoma, lateral view. **C**. Mandible. **D**. Antenna. **E**. Head, front view. **F**. Head and mesonotum, dorsal view.

Head. In dorsal view, 1.9× as wide as long, 1.3× as wide as mesoscutum, smooth, with temple rounded behind eyes. Eye in lateral view 1.7× as high as wide and 1.1× as wide as temple medially. POL 1.1× OD; OOL 2.7× OD. Face 1.4× as wide as high, with spared setae, almost entirely smooth; inner margins of eyes subparallel. Clypeus

2.1× as wide as high, slightly concave ventrally. Paraclypeal fovea small, not reaching half distance between clypeus and inner border of eye. Mandible almost parallel-sided, 1.2× as long as its maximum width; its middle tooth narrow and rather short, directed forwards, lower tooth evenly curved on outside margin. Antenna 27-segmented. Scape 2.0× as long as pedicel. First flagellomere 3.1× as long as its maximum width, 1.3× as long as second flagellomere. Second to 25th (apical) flagellomeres 2.2–2.5× as long as their maximum width.

Mesosoma. In lateral view 1.1× as long as high. Mesoscutum (dorsal view) about as long as its maximum width, smooth, sparsely setose in medial lobe. Notaulus rather narrow, present on horizontal surface of mesoscutum reaching the half of mesoscutum, not connected with mesoscutal pit. Mesoscutal pit present, elongate, narrow, 3.7× as long as its maximum width. Prescutellar depression (scutellar sulcus) smooth, with high median carinae, 1.7× as long as its maximum width. Precoxal sulcus wide, oblique, coarsely crenulate, not reaching anterior and posterior margins of mesopleuron. Posterior mesopleural furrow almost smooth. Propodeum coarsely rugose, with pentagonal areola and with rugose basolateral areas delineated by carinae. Propodeal spiracles very small, diameter 0.2× distance from spiracle to anterior margin of propodeum.

Wings. Length of fore wing 2.5× its maximum width. Marginal cell ending on apex of wing, 4.5× as long as its maximum width. Vein 3-SR 2.1× as long as vein 2-SR. Vein SR1 2.3× as long as vein 3-SR. Vein r longer than pterostigma width. First subdiscal cell 3.8× as long as its maximum width. Hind wing 5.6× as long as its maximum width.

FIGURE 2. *Orthostigma (Patrisaspilota) enduwaense* Peris-Felipo, **sp. nov.** (holotype, female). **A**. Propodeum. **B**. First metasomal tergite. **C**. Legs, metasoma and ovipositor, lateral view. **D**. Fore and hind wings.

Legs. Hind femur 4.8× as long as its maximum width. Hind tibia weakly widened to apex, 9.3× as long as its maximum subapical width, 1.1× as long as hind tarsus. First tarsomere of hind tarsus 2.0× as long as second tarsomere.

Metasoma. First tergite almost parallel-sided, 2.3× as long as its apical width, rugose-striate. Ovipositor 1.1× as long as first tergite, 0.4× as long as metasoma, 0.8× as long as hind femur.

Colour. Body, mandible, flagellar segments of antenna, pterostigma, and legs dark brown to black. First metasomal tergite similar colour to second and third tergites. Wings almost hyaline.

Length. Body 2.2 mm, fore wing 3.0 mm, hind wing 1.9 mm.

Variation. Antenna 27–28-segmented. Otherwise similar to holotype.

Male. Unknown.

Comparative diagnosis. The new species is similar to *O.* (*P.*) *ketambeense* (Fischer 2004) (Indonesia) and *O.* (*P.*) *multicarinatum* Tobias 1990 (Sri Lanka and Vietnam), but differs from them in having the eye in lateral view 1.1× as wide as temple medially (2.4× in *O.* (*P.*) *ketambeense* and 1.5× in *O.* (*P.*) *multicarinatum*), mandible 0.8× as long as its maximum width (1.5× in *O.* (*P.*) *ketambeense* and 1.0–1.2× in *O.* (*P.*) *multicarinatum*), hind femur 4.8× as long as its maximum width (3.5× in *O.* (*P.*) *ketambeense* and 4.1× in *O.* (*P.*) *multicarinatum*), and first metasomal tergite 2.3× as long as its apical width (1.4× in *O.* (*P.*) *ketambeense* and 1.5–1.6× in *O.* (*P.*) *multicarinatum*); additionally the head in dorsal view 1.9× as long as wide (2.2× in *O.* (*P.*) *ketambeense*) and face smooth (distinctly densely punctate in *O.* (*P.*) *ketambeense*).

Distribution. Papua New Guinea.

***Orthostigma* (*Patrisaspilota*) *glabrifaciale* (Fischer 2010)**

(Figs 3, 4)

Patrisaspilota glabrifacialis Fischer 2010: 636.
Orthostigma (*Patrisaspilota*) *glabrifaciale*: Yu *et al*. 2016.

Type material. Holotype: female, Cambodia, SW, 20 km SE Koh Kong, 11°34'N, 103°07'E, V.2005, 50–300 m, Jendek and Saussa leg. (NHMW).

Re-description. Female (holotype).

Head. In dorsal view, 1.8× as wide as long, 1.4× as wide as mesoscutum, smooth, with temple rounded behind eyes. Eye in lateral view 1.7× as high as wide and 1.8× as wide as temple medially. POL 0.7× OD; OOL 3.1× OD. Face 1.3× as wide as high, with very sparse setae laterally, almost entirely smooth; inner margins of eyes subparallel. Clypeus 2.3× as wide as high, slightly concave ventrally. Paraclypeal fovea small, not reaching half distance between clypeus and inner border of eye. Mandible almost parallel-sided, about as long as its maximum width; its middle tooth wide and rather short, partly directed below, lower tooth evenly curved on outside margin. Antenna more than 22-segmented (apical flagellomeres missing). Scape 2.5× as long as pedicel. First flagellomere 2.7× as long as its maximum width, 1.1× as long as second flagellomere. Second flagellomere 2.3×, third segment 2.2×, fourth to 19th flagellomeres 2.0–2.1×, and 20th segment 1.9× as long as their maximum width.

Mesosoma. In lateral view 1.1× as long as high. Mesoscutum (dorsal view) 0.7× as long as its maximum width, smooth, sparsely setose. Notaulus wide, complete, reaching mesoscutal pit. Mesoscutal pit present, wide, short, oval, smooth, 1.4× as long as its maximum width. Prescutellar depression (scutellar sulcus) smooth, only with median carina, about as long as its maximum width. Precoxal sulcus narrow, oblique, curved below, smooth, reaching anterior and posterior margins of mesopleuron. Posterior mesopleural furrow crenulate below. Propodeum almost completely rugose, smooth basally, without delineated areas. Propodeal spiracles very small, its diameter 0.2× as large as distance from spiracle to anterior margin of propodeum.

Wings. Length of fore wing 3.0× its maximum width. Marginal cell ending on apex of wing, 4.0× as long as its maximum width. Vein 3-SR 1.7× as long as vein 2-SR. Vein SR1 2.3× as long as vein 3-SR. Vein r longer than pterostigma width. First subdiscal cell 3.0× as long as its maximum width. Hind wing 4.5× as long as its maximum width.

Legs. Hind femur 3.5× as long as its maximum width. Hind tibia distinctly widened to apex, 6.1× as long as its maximum subapical width, about as long as hind tarsus. First tarsomere of hind tarsus 1.9× as long as second tarsomere.

Metasoma. First tergite weakly evenly widened towards apex, 1.4× as long as its apical width, striate with rugosity between striae. Ovipositor 0.9× as long as first tergite, 0.3× as long as metasoma, 0.7× as long as hind femur.

Colour. Body, head, mandible and pterostigma brown to dark brown. Antennal segments and legs light brown to yellow. First metasomal tergite similar colour to second and third tergites. Wings almost hyaline.

Length. Body 3.0 mm, fore wing 2.2 mm, hind wing 1.6 mm.

Male. Unknown.

Comparative diagnosis. This species is similar to *O.* (*P.*) *multicarinatum* Tobias 1990 (Sri Lanka and Vietnam), but differs from it in having the eye in lateral view 1.8× as wide as temple medially (1.5× O. (*P.*) *multicarinatum*), precoxal sulcus narrow, smooth, reaching posterior margin of mesopleuron (wide, crenulate and not reaching posterior margin of mesopleuron in *O.* (*P.*) *multicarinatum*), propodeum without delineated areola (with delineated pentagonal areola in *O.* (*P.*) *multicarinatum*), and hind femur 3.5× as long as its apical width (4.1× in *O.* (*P.*) *multicarinatum*).

Distribution. Cambodia.

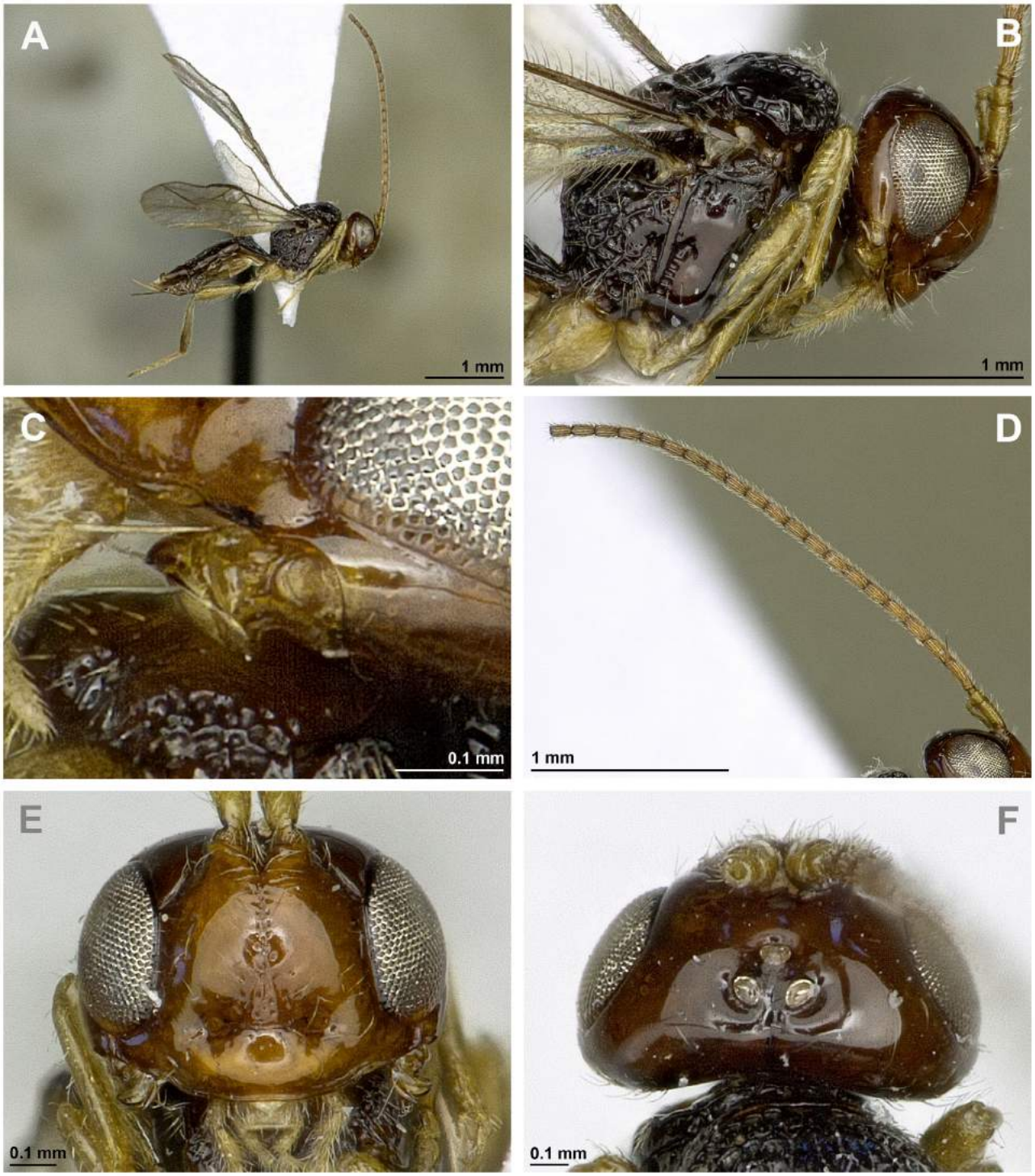

FIGURE 3. *Orthostigma (Patrisaspilota) glabrifaciale* (Fischer, 2010) (holotype, female). **A**. Habitus, lateral view. **B**. Head and mesosoma, lateral view. **C**. Mandible. **D**. Antenna. **E**. Head, front view. **F**. Head, dorsal view.

FIGURE 4. *Orthostigma (Patrisaspilota) glabrifaciale* (Fischer, 2010) (holotype, female). **A.** Mesonotum, dorsal view. **B.** Propodeum. **C.** First metasomal tergite. **D.** Legs, metasoma and ovipositor, lateral view. **E.** Fore wing.

Orthostigma (*Patrisaspilota*) *ketambeense* (Fischer 2004)
(Figs 5, 6)

Patrisaspilota ketambeensis Fischer 2004: 78.
Orthostigma (*Patrisaspilota*) *ketambeense*: Yu *et al*. 2016.

Type material. Holotype: male, Indonesia, Sumatra, Aceh Gunung Leuser Nat. Pk. Ketambe Res. Sta., 1–30. Nov.

1989, per DC Darling. IIS 890011, 1° rainforest, Mature forest, 4 Light gap, 400 m, 3°41'N, 97°39'E, Malaise trap wl pas (NHMW).

Re-description. Male (holotype).

FIGURE 5. *Orthostigma (Patrisaspilota) ketambeense* (Fischer, 2004) (holotype, male). **A**. Habitus, lateral view. **B**. Head and mesosoma, lateral view. **C**. Mandible. **D**. Antenna. **E**. Head, front view. **F**. Head, dorsal view.

Head. In dorsal view, 2.2× as wide as long, 1.4× as wide as mesoscutum, smooth, with temple rounded behind eyes. Eye in lateral view 1.6× as high as wide and 2.4× as wide as temple medially. POL 1.0× OD; OOL 3.0× OD. Face 1.6× as wide as high, entirely densely setose with dense and distinct punctation; inner margins of eyes subparallel. Clypeus 2.7× as wide as high, slightly concave ventrally. Paraclypeal fovea small, not reaching half distance between clypeus and inner border of eye. Mandible almost parallel-sided, 1.5× as long as its maximum

width; its middle tooth wide, rather long, directed forwards, lower tooth not evenly curved, lobe-shaped. Antenna 24-segmented. Scape 2.1× as long as pedicel. First flagellomere 3.9× as long as its maximum width, 1.4× as long as second flagellomere. Second to sixth flagellomeres 2.2–2.5×, seventh to 19th flagellomeres 2.0×, and 20th (apical) flagellomere 2.7× as long as their maximum width.

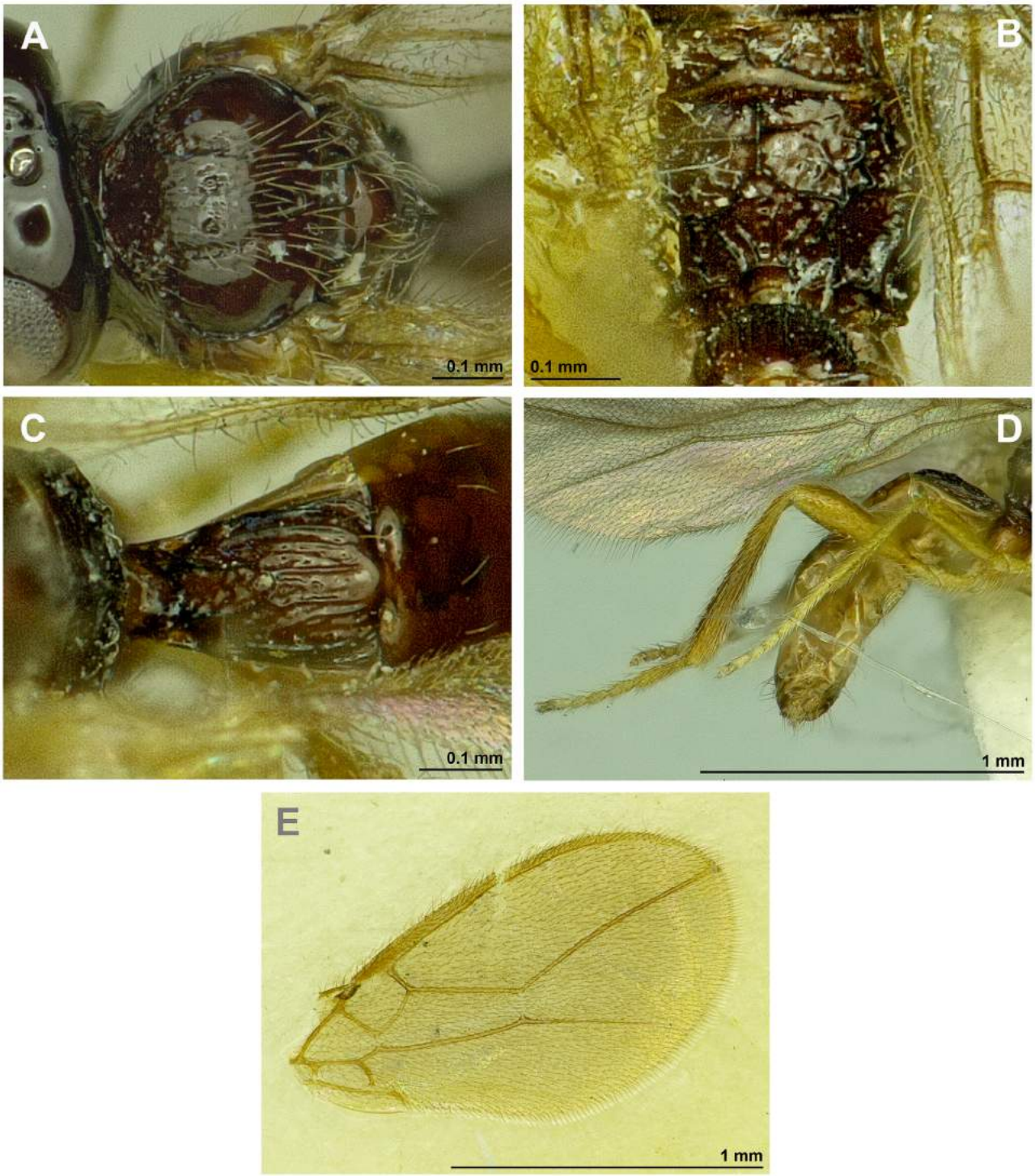

FIGURE 6. *Orthostigma (Patrisaspilota) ketambeense* (Fischer, 2004) (holotype, male). **A.** Mesonotum, dorsal view. **B.** Propodeum. **C.** First metasomal tergite. **D.** Legs and metasoma, lateral view. **E.** Fore wing, distal part.

Mesosoma. In lateral view about as long as high. Mesoscutum (dorsal view) 0.8× as long as its maximum width, smooth, densely setose on median lobe. Notaulus rather narrow, present on horizontal surface of mesoscutum reaching the half part of mesoscutum, reaching mesoscutal pit. Mesoscutal pit present, wide, short, oval, smooth, 1.2× as long as its maximum width. Prescutellar depression (scutellar sulcus) smooth, with median carinae, 1.4× as long

as its maximum width. Precoxal sulcus wide, oblique, hardly crenulated, not reaching anterior and posterior margins of mesopleuron. Posterior mesopleural furrow crenulate below. Propodeum rugulose, almost smooth anteriorly, with pentagonal areola distinctly delineated by carinae. Propodeal spiracles very small, its diameter 0.2× as large as distance from spiracle to anterior margin of propodeum.

Wings. Length of fore wing 2.9× its maximum width. Marginal cell ending on apex of wing, 4.0× as long as its maximum width. Vein 3-SR 2.1× as long as vein 2-SR. Vein SR1 2.1× as long as vein 3-SR. Vein r longer than pterostigma width. First subdiscal cell 2.1× as long as its maximum width. Hind wing 4.3× as long as its maximum width.

Legs. Hind femur 3.5× as long as its maximum width. Hind tibia widened to apex, 7.3× as long as its maximum subapical width, 1.2× as long as hind tarsus. First tarsomere of hind tarsus 2.0× as long as second tarsomere.

Metasoma. First tergite evenly widened towards apex, 1.4× as long as its apical width, striate with rugulosity between carinae.

Colour. Body, flagellar segments of antenna and pterostigma dark brown to black. Mandible, and legs yellow. First metasomal tergite similar colour to second and third tergites. Wings almost hyaline.

Length. Body 2.0 mm, fore wing 1.8 mm, hind wing 1.4 mm.

Female. Unknown.

Comparative diagnosis. This species is similar to *O.* (*P.*) *multicarinatum* Tobias 1990 (Sri Lanka and Vietnam), but differs from it in having the eye in lateral view 2.4× as wide as temple medially (1.3× in *O.* (*P.*) *multicarinatum*), first flagellomere 3.9× as long as its maximum width (2.5–2.8× in *O.* (*P.*) *multicarinatum*), vein 3-SR 2.1× as long as vein 2-SR (1.6–1.7× in *O.* (*P.*) *multicarinatum*), vein SR1 2.1× as long as vein 3-SR (2.5–2.6× in *O.* (*P.*) *multicarinatum*), hind femur 3.5× as long as its maximum width (4.1× in *O.* (*P.*) *multicarinatum*), head in dorsal view 2.2× as wide as long (1.8× in *O.* (*P.*) *multicarinatum*), and face distinctly densely setose and punctate (mainly glabrous and smooth in *O.* (*P.*) *multicarinatum*).

Distribution. Indonesia (Sumatra).

Orthostigma (*Patrisaspilota*) *multicarinatum* Tobias 1990
(Figs 7, 8)

Orthostigma multicarinatum Tobias 1990: 102.
Orthostigma (*Patrisaspilota*) *multicarinatum*: Yu *et al.* 2016.
Patrisaspilota memoranda Fischer 1995: 721; 2010: 636 **(syn. nov.)**.
Orthostigma (*Patrisaspilota*) *memorandum*: Yu *et al.* 2016.

Type material. Holotype (*O. multicarinatum*): female, Vietnam, Bathuok, 125 km W Thanh Hoa, prov. Thanh Hoa, 26.I.1989 (B. Korotyaev leg.) (ZISP). Paratype (*O. multicarinatum*): female, Vietnam, Tram Lap, 20 km N Buon Luoi, prov. Gia-Lai-Con-Tum, 6.XII.1988 (Sharkov leg.) (ZISP). Holotype (*O. memorandum*): female, Sri Lanka, Ceylon, Colombo distr., Labugama, 18.II.1974 (A.E. Stubbs and J.B. Chandler leg.) [BMNH 1974–624] (BNHM).

Re-description. Female (holotype).

Head. In dorsal view, 1.8× as wide as long, 1.3× as wide as mesoscutum, smooth, with temple rounded behind eyes. Eye in lateral view 1.5× as high as wide and 1.5× as wide as temple medially. POL 0.8× OD; OOL 3.1× OD. Face 1.3× as wide as high, with spared setae laterally, almost entirely smooth; inner margins of eyes subparallel. Clypeus 2.3× as wide as high, almost straight ventrally. Paraclypeal fovea small, not reaching half distance between clypeus and inner border of eye. Mandible almost parallel-sided, about as long as its maximum width; its middle tooth rather wide and rather long, directed forwards, lower tooth evenly curved on outside margin. Antenna 31-segmented. Scape 2.0× as long as pedicel. First flagellomere 2.8× as long as its maximum width, 1.3× as long as second flagellomere. Second to 24th flagellomeres 1.7–1.9×, 25th to 28th segments 2.2×, and 29th (apical) flagellomere 3.3× as long as their maximum width.

Mesosoma. In lateral view 1.1× as long as high. Mesoscutum (dorsal view) 0.7× as long as its maximum width, smooth, sparsely setose along notaulus and laterally. Notaulus wide, crenulated, present on all horizontal surface of mesoscutum reaching mesoscutal pit. Mesoscutal pit present, wide, short, oval, smooth, about as long as its maximum width. Prescutellar depression (scutellar sulcus) smooth, with median carinae, about as long as its maximum width. Precoxal sulcus present, hardly crenulate, almost reaching anterior margin of mesopleuron. Posterior mesopleural furrow crenulate below. Propodeum rugose with pentagonal areola delineated by distinct carinae, with

almost smooth basolateral areas. Propodeal spiracles very small, its diameter 0.2× as large as distance from spiracle to anterior margin of propodeum.

Wings. Length of fore wing 2.7× its maximum width. Marginal cell ending on apex of wing, 4.2× as long as its maximum width. Vein 3-SR 1.6× as long as vein 2-SR. Vein SR1 2.6× as long as vein 3-SR. Vein r longer than pterostigma width. First subdiscal cell 3.3× as long as its maximum width. Hind wing 5.6× as long as its maximum width.

Legs. Hind femur 4.1× as long as its maximum width. Hind tibia weakly widened to apex, 7.3× as long as its maximum subapical width, 1.1× as long as hind tarsus. First tarsomere of hind tarsus 1.8× as long as second tarsomere.

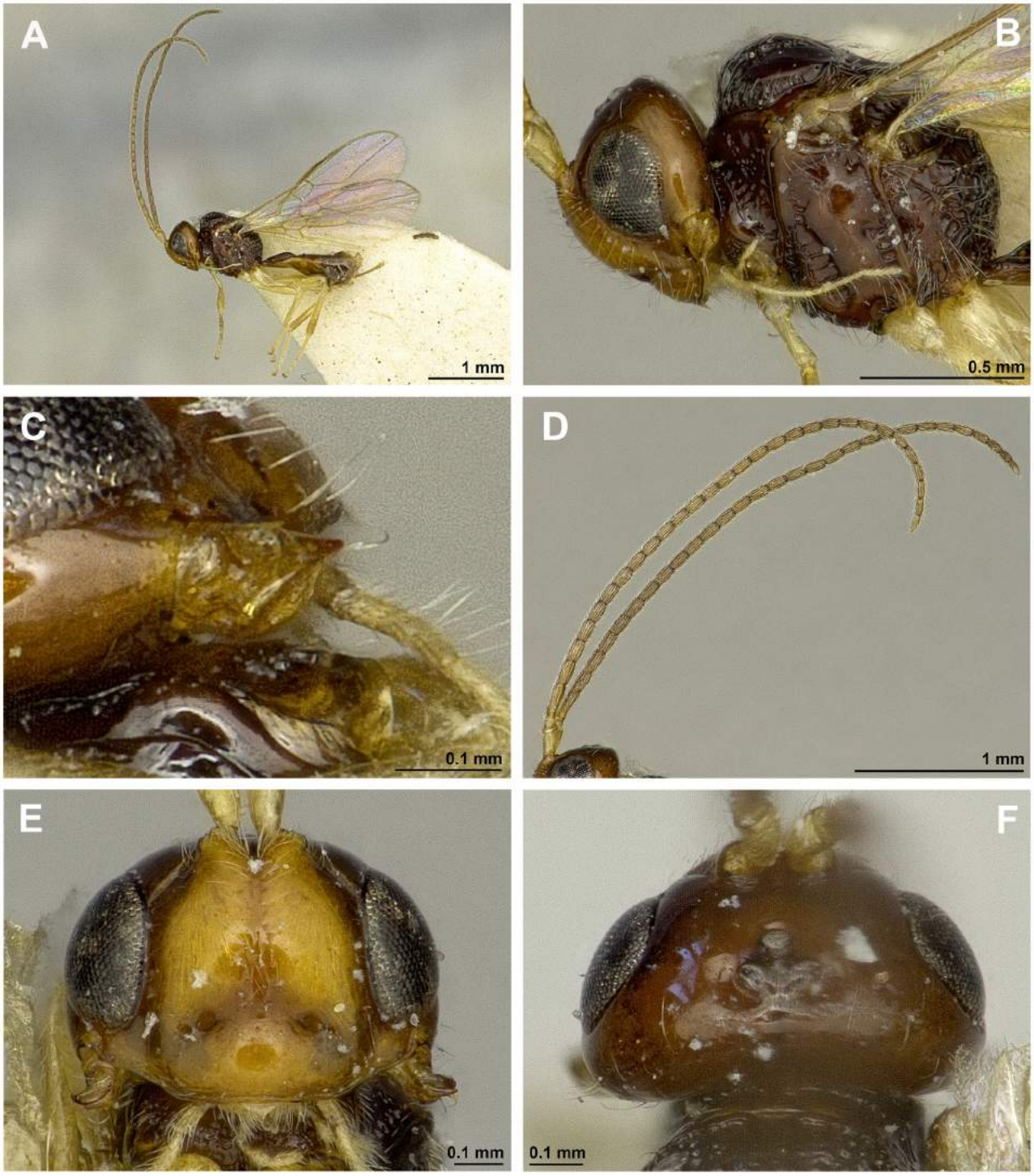

FIGURE 7. *Orthostigma (Patrisaspilota) multicarinatum* Tobias, 1990 (holotype, female). **A**. Habitus, lateral view. **B**. Head and mesosoma, lateral view. **C**. Mandible. **D**. Antenna. **E**. Head, front view. **F**. Head, dorsal view.

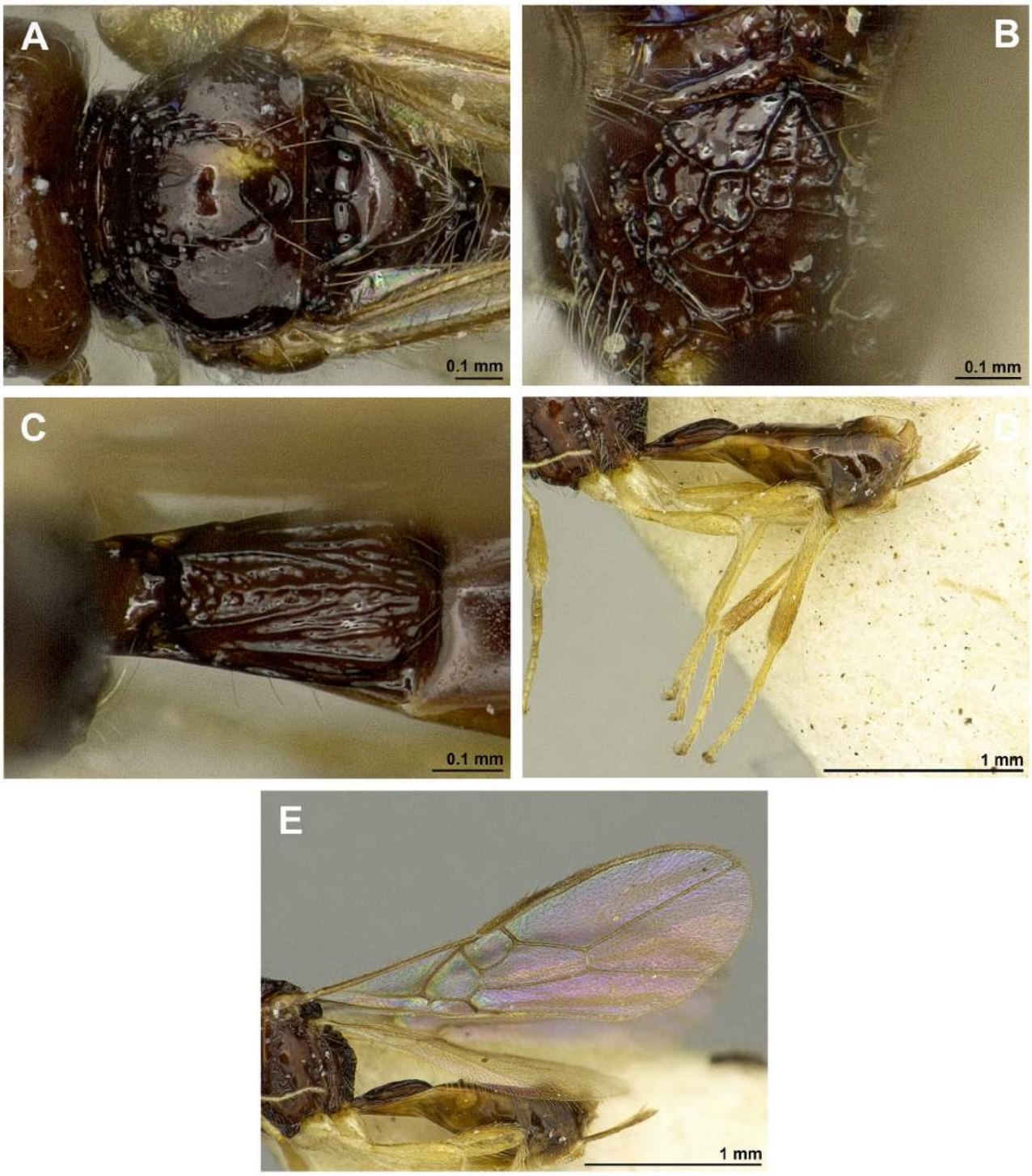

FIGURE 8. *Orthostigma (Patrisaspilota) multicarinatum* Tobias, 1990 (holotype, female). **A.** Mesonotum, dorsal view. **B.** Propodeum. **C.** First metasomal tergite. **D.** Legs, metasoma and ovipositor, lateral view. **E.** Fore and hind wings.

Metasoma. First tergite weakly evenly widened towards apex, 1.6× as long as its apical width, entirely striate with rugulosity between striae. Ovipositor 0.9× as long as first tergite, 0.3× as long as metasoma, 0.7× as long as hind femur.

Colour. Body, mandible, flagellar segments of antenna and pterostigma brown to dark brown. Legs yellow. First metasomal tergite similar colour to second and third tergites. Wings almost hyaline.

Length. Body 2.6 mm, fore wing 2.6 mm, hind wing 1.8 mm.

Variation. Body length 2.3–2.6 mm, fore wing length 2.3–2.6 mm, hind wing length 1.7–1.8 mm. Antenna 30–31-segmented. First flagellomere 2.6–2.8× as long as its maximum width. Second flagellomere 2.0–2.3× as

long as its maximum width. Clypeus 2.3–2.5× as wide as high. Vein 3-SR 1.6–1.7× as long as vein 2-SR. Vein SR1 2.5–2.6× as long as vein 3-SR. First metasomal tergite 1.5–1.6× as long as its apical width.

Male. Unknown.

Comparative diagnosis. This species is similar to *O.* (*P.*) *glabrifaciale* Fischer 2004 (Cambodia); differences between these species are described under the latter species.

Distribution. Sri Lanka, Vietnam.

Key to species of *Orthostigma* (*Patrisaspilota*)

1. Face entirely densely setose, with dense and distinct punctation. Lower tooth of mandible not evenly curved, lobe-shaped. Body length 2.0 mm. Indonesia . . . . . ***O.* (*P.*) *ketambeense*** (Fischer) (♂)
- Face mainly glabrous, sparsely setose only laterally, almost entirely smooth. Lower tooth of mandible evenly curved on outside margin, not lobe-shaped **2**
2(1). Eye in lateral view 1.1× as wide as temple medially. Mesoscutal pit narrow, 3.7× as long as maximum width. Hind femur 4.8× as long as its maximum width. First metasomal tergite 2.3× as long as its apical width. Mesoscutum (dorsal view) about as long as its maximum width. Body length 2.2 mm. Papua New Guinea. . . . . ***O.* (*P.*) *enduwaense*** Peris-Felipo, **sp. nov.** (♀)
- Eye in lateral view 1.5–1.8× as wide as temple medially. Mesoscutal pit wide, about as long as or a little longer than its maximum width. Hind femur 3.5–4.1× as long as its maximum width. First metasomal tergite 1.4–1.6× as long as its apical width. Mesoscutum (dorsal view) 0.7–0.8× as long as its maximum width 3
3(2). Eye in lateral view 1.8× as wide as temple medially. Precoxal sulcus narrow, smooth, reaching posterior margin of mesopleuron. Propodeum without delineated areola. Hind femur 3.5× as long as its apical width. Body length 2.2 mm. Cambodia. . . . . ***O.* (*P.*) *glabrifaciale*** (Fischer) (♀)
- Eye in lateral view 1.5× as wide as temple medially. Precoxal sulcus wide, crenulate, not reaching posterior margin of mesopleuron. Propodeum with pentagonal areola delineated by distinct carinae. Hind femur 4.1× as long as its apical width. Body length 2.3–2.6 mm. Sri Lanka, Vietnam . . . . . ***O.* (*P.*) *multicarinatum*** Tobias (♀)

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