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Faunistic and taxonomic novelties of the Neotropic genus *Pseudophanerotoma* ZETTEL (Hymenoptera: Braconidae: Cheloninae)

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Abstract

J. PAPP: Faunistic and taxonomic novelties of the Neotropic genus *Pseudophanerotoma* ZETTEL (Hymenoptera: Braconidae: Cheloninae). Four known and two new *Pseudophanerotoma* species are reported from Central America (Neotropical Region). The four species *Ps. alvarengai* ZETTEL, *Ps. longicornis* ZETTEL, *Ps. pulchra* ZETTEL, and *Ps. zeteki* CUSHMAN are new for Costa Rica and Jamaica. The two new species are described under the names *Ps. acutula* nov.sp. (Panama) and *Ps. zetteli* nov.sp. (Honduras, Jamaica). The new species are differentiated from their nearest allies, i.e. their taxonomic positions are presented. The *Pseudophanerotoma* material, herewith discussed, is deposited in the Hungarian Natural History Museum, Budapest. With 38 original line-drawn figures.

Key words: *Pseudophanerotoma*, faunistic novelties, localities, new species, material examined, description, taxonomic position.

Zusammenfassung

J. PAPP: Faunistische und taxonomische Neuheiten zur neotropischen Gattung *Pseudophanerotoma* ZETTEL (Hymenoptera: Braconidae: Cheloninae). Über vier bekannte und zwei neue *Pseudophanerotoma*-Arten aus Zentral Amerika (Neotropische Region) wird berichtet. Die vier Arten: *Ps. alvarengai* ZETTEL, *Ps. longicornis* ZETTEL,

Ps. pulchra ZETTEL, *Ps. zeteki* (CUSHMAN) sind neu für Costa Rica und Jamaika. Die zwei neuen Arten werden unter den Namen *Ps. acutula* nov.sp. (Panama) und *Ps. zetteli* nov.sp. (Honduras, Jamaika) beschrieben. Differenzialdiagnostische Angaben zur Abgrenzung verwandter Arten werden in einem kurzem Bestimmungsschlüssel vorgestellt. Das angeführte Material ist im Ungarischen Nationalmuseum (Zoologische Abteilung), Budapest, aufbewahrt.

Introduction

M a t e r i a l . The *Pseudophanerotoma* material, elaborated here, was available to me by W. J. HANSON's (Logan) and L. REZBANYAI-RESER's (Luzern) kindness. The chelonine braconids by HANSON were taken in five localities of Costa Rica and two localities in Honduras, those by REZBANYAI-RESER in one locality of NW Jamaica. The Jamaican chelonines were collected with the help of two light-traps operating in an orchard garden (one trap) and in a field with fairly natural vegetation (one trap) (REZBANYAI-RESER 1998: 136-137). This braconid material is deposited in the Hungarian Natural History Museum, Budapest.

P s e u d o p h a n e r o t o m a . The chelonine genus *Pseudophanerotoma* was described by ZETTEL on the basis of ten neotropical species: three known and seven new to science (ZETTEL 1990: 164-178). It is nearest to *Phanerotoma* WESMAEL, 1838 and the two genera were differentiated by ZETTEL (1990: 150-151) on the basis of one single feature (within his key to the Cheloninae tribes and genera, see key couplets 2 and 6): the issuing point of the fore wing vein "cu1" = 1st Cubitusabschnitt (or 1-SR-M) and "b" = Basalnerv (or 1-M). An examination of the type-species of the two genera (*Phanerotoma dentata* PANZER and *Pseudophanerotoma thapsina* WALLEY, respectively) revealed further venation differences between them:

Phanerotoma: Fore wing vein 1-SR-M issuing clearly separately from about the middle of the parapterostigma (Fig. 1, see upper pair of oblique arrows) (distinction by ZETTEL). First discal cell relatively wide and first subdiscal cell relatively less wide (Fig. 1, see arrows).

Pseudophanerotoma: Fore wing vein 1-SR-M issuing either 1-M (Figs 15, 33) or very near to each other from the proximal base of parapterostigma (Figs 2, 14, 23, see upper pair of oblique arrows) (distinction by ZETTEL). First discal cell relatively less wide and first subdiscal cell relatively wide (Figs 2, 14, 23, 33, see arrows in the two cells).

In the descriptions the following abbreviations are applied (after VAN ACHTERBERG 1993: 5, Figs H-K):

F o r e w i n g v e i n s . cu-a = nervulus or transverse cubito-anal vein, m-cu = transverse medio-cubital vein or nervus recurrens, r-m = second transverse cubital vein, r = transverse or first section of the radial vein, 1-M = basal vein, 1-SR-M = first section of the cubital vein, 1-2CU1 = first and second sections of the discoidal vein, 2-SR = first transverse cubital vein, 3-SR = second section of the radial vein, SR1 = third section of the radial vein.

E y e - O O L = shortest distance between hind ocellus and compound eye, POL = shortest distance between hind two ocelli.

S u r f a c e s c u l p t u r e terminologies after EADY (1968) and HARRIS (1979).

S t r u c t u r e terminologies after GAULD & BOLTON (1988: 58-74).

Faunistic novelties

Pseudophanerotoma (*Pseudophanerotoma*) *alvarengai* ZETTEL 1990 (Figs 3-6)

M a t e r i a l : 1♀: Costa Rica, San José, Escazu, 25-30 April 1988, F.D. Parker. 2♀♀: Costa Rica, Guan, 14 km S of Cañas, 1♂: 1-3 October 1989 and 1♂: 1-15 September 1990, F.D. Parker.

Described from Brazil by two female types (ZETTEL 1990: 108). New to Costa Rica. First flagellomere 1.2 times as long as second flagellomere (Fig. 3). Eye in lateral view 1.5 times as wide as temple, temple beyond eye evenly wide (Fig. 4, see arrows). Clypeus medially with a pair of fairly large denticules (Fig. 5). Fore wing: pterostigma 2.8-3 times as long as wide, 3-SR 1.35-1.4 times as long as r (Fig. 6). Black(ish) pattern of tergites of variable extent.

Pseudophanerotoma (*Pseudophanerotoma*) *longicornis* ZETTEL 1990

M a t e r i a l : 2♀♀: Costa Rica, Guan, S. Cañas, 21-25 January 1989, F.D. Parker. 1♀: Costa Rica, Guan, 14 km S Cañas, 1-15 September 1990, F.D. Parker. 2♀♀: Costa Rica, Guan, 3 km SE River Naranjo, 1 female: December 1991 and 1♀: 24-31 December 1992, F.D. Parker.

Described by two female and one male types from Ecuador and Paraguay (ZETTEL 1990: 168). New to Costa Rica. Antenna with 35-36 antennomeres (2 females; Fig. 51 with 33 antennomeres: cf. ZETTEL 1990: 169). Fore wing: 3-SR slightly longer than r. Third tergite 1.5-1.6 times as long as second tergite. Median black pattern of metasoma highly veriable in its extent. Body 3.5-4.2 mm long.

Pseudophanerotoma (*Furcidentia*) *pulchra* ZETTEL 1990, female new (Figs 7-9)

M a t e r i a l : 1♀: Costa Rica, Cart., near Tuis, 3000', 16-20 July 1993, W.J. Hanson.

The species was described on the basis of the male holotype from Costa Rica: "Punt. Sn. Vito, Las Cruces" (ZETTEL 1990: 175). Antenna with 46 antennomeres. Head in dorsal view 1.75 times as broad as long, eye somewhat (18:16) as long as temple (Fig. 7). Temple in lateral view as wide as eye (Fig. 8, see arrows). Fore wing: 2-SR 1.4 times as long as 3-SR, m-cu clearly postfurcal, 1-M and 1-SR-M equal in length, 1-2CU1 less bent (Fig. 9). Body 6 mm long.

Pseudophanerotoma (*Pseudophanerotoma*) *zeteki* (CUSHMAN 1922) (Figs 10-15)

M a t e r i a l : 3♀♀, 1♂: Costa Rica, San José, Escazu, 1♀: 8 February 1987 G.E. Bohart, 2♀♀: 1-10 April 1988 and 1♂: 17 June 1989, F.D. Parker. - 2♀♀, 1♂: Costa Rica, Guan, 14 km S Cañas, 1♀: 26-30 September 1989, 1♀: 1-15 September 1990, 1♂: 16-22 February 1990, F. D. Parker. - 2♂♂: Costa Rica, Guan, S. Cañas, 9-24 February 1989, F.D. Parker. - 3♂♂: Costa Rica, Ala., 20 km S of Upala, 21-30 April 1991, F.D. Parker. - 4 females: Costa Rica, Guan, 3 km S River Naranjo, 1♀: 14 November 1991, 2♀♀: December 1991, 1♀: April 1992, F.D. Parker. - 2♀♀: NW Jamaica, Spring Garden / Saint James, westlich Montego Bay, LF 100 m, 1-10 April 1996, L. Rezbanyai-Reser.

The species was described from Panama (Canal Zone) by CUSHMAN on the basis of 4 females and 1 male type specimens (CUSHMAN 1922: 27). New to Costa Rica and Jamaica. Antenna with 24-35 (females) and 30-36 (males) antennomeres. First flagellomere just longer than second flagellomere (20:19) and flagellomeres thick (Fig. 10), compare to those of *Ps. acutula* nov.sp. (Fig. 16). Fore wing: pterostigma wide: 2.5 times to less wide: 3.3 times as long as wide; 1-SR-M issued from 1-M (see arrow), 2CU1 less bent (Figs 14-15). Eye in lateral view 1.4 times (Fig. 11), 1.5 times (Fig. 12) and 1.6 times (Fig. 13) as wide as temple, temple beyond eye evenly broad, frons somewhat steep (Figs 11-13). Ground colour of body brownish yellow, second tergite laterally and third tergite medially with black(ish) pattern; or ground colour of body lemon yellow (albanic form).

Description of the new species

***Pseudophanerotoma* (*Furcidentia*) *acutula* nov. sp. (Figs 16-25)**

Material examined: holotype ♀: Panama, Canal Zone, Pipeline Road, 21 March 1982, leg. W. J. Hanson. Holotype is in good condition: (1) glued direct to the pin by right side of its mesosoma, (2) right antenna deficient: flagellum with eight flagellomeres, (3) left fore and middle legs (except coxae) missing.

Depository: Holotype is deposited in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ. No. 12112.

Etymology: The species name "acutula" refers to the acutuliform third tergite (Fig. 25).

Description of the female holotype: Body 4.2 mm long. Antenna nearly as long as body and with 41 antennomeres. First flagellomere just longer than second flagellomere (Fig. 16), further flagellomeres similar to those of *Ps. clypeata* (cf. Fig. 69 in ZETTEL 1990: 175). - Head in dorsal view transverse (Fig. 17), 1.85 times as broad as long, eye 2.2 times as long as temple, temple receded, eye protruding. Ocelli elliptic, middle-sized and close to each other, POL shorter (3:5) than longest diameter of hind ocellus. Occiput excavated. Eye in lateral view almost round, 1.2 times as high as wide, clearly twice (22:10) as wide as temple (Fig. 18, see arrows). Clypeus medially with a pair of small denticules (Fig. 19). Cheek 0.4 times as long as height of eye. Face + clypeus as wide as high, inner margin of eyes somewhat diverging ventrally (Fig. 20). Mandible equally thick, its two apical tips subequal (Fig. 21). Maxillar palp somewhat shorter than height of head. Clypeus polished, face finely hairpunctured, head above very finely hairpunctured.

Mesosoma in lateral view elongate, 1.8 times as long as high. Notaulix weakly distinct on anterior declivous part of mesoscutum. Precoxal suture distinct by somewhat crowded punctation. Propodeum rugulose, medio-transversely with a carina. Mesoscutum, scutellum and mesopleuron densely and rather finely punctate. - Hind femur 3.8 times as long as broad medially (Fig. 22). Inner spur of hind tibia half as long as basitarsus. Middle tibia not hollowed proximally.

Fore wing about one-fourth shorter than body. Pterostigma long (Fig. 23), 3.3 times as long as wide, issuing r distally from its middle. Second submarginal cell long, 3-SR and r

equal in length, r-m 0.6 times as long as 3-SR and weakly sclerotized; SR1 faintly S-form, 4.3 times as long as 3-SR and approaching tip of wing. First discal cell elongate, 1-SR-M 1.3 times longer than 1-M; first subdiscal cell wide: 1-CU1 very short, 2-CU1 bent and 2.3 times as long as cu-a (Fig. 23).

Metasoma (or carapace) about 1.3 times as long as mesosoma. First tergite (Fig. 24) a bit broader behind than long (45:40), broadening posteriorly, pair of keels reaching middle of tergite. Tergites striated, interstriations uneven. Third tergite acutuliform: moderately narrowing posteriorly and one-third longer than second tergite (Fig. 25). Ovipositor sheath short, concealed.

Scape and pedicel yellow, flagelum lemon yellow. Head and prothorax lemon yellow, pair of narrow streak on face (below pair of toruli) brown. Meso- and metasoma yellow with dark brown pattern on: pair of spots of pronotum, tergites 1-2, middle small spot on mesoscutum, propodeum almost entirely, mesopleuron ventrally and third tergite anteriorly. Legs lemon yellow, hind femur distally brownish. Wings hyaline, pterostigma and veins light brownish.

Male and host unknown.

D i s t r i b u t i o n : Panama.

T a x o n o m i c p o s i t i o n : The new species, *Pseudophanerotoma* (*Furcidentia*) *acutula*, stands nearest to *Ps.* (*F.*) *clypeata* ZETTEL considering their common features: third tergite acutuliform (Fig. 25; Fig. 68 in ZETTEL 1990: 175), 1-SR-M of fore wing issuing from parapterostigma close to 1-M (Fig. 23, see arrow) (subgeneric mark); pair of mandibular tips subequal (Fig. 21, Fig. 67 in ZETTEL 1990: 175). The distinction between the two species is as follows:

1 (2) Third tergite one-third longer than second tergite and moderately narrowing posteriorly (Fig. 25). Temple receded (Fig. 17). Cheek short, 0.4 times as long as height of eye (Fig. 20). Fore wing: 3-SR and r equal in length (Fig. 23). Second flagellomere just shorter than first flagellomere (Fig. 16). Hind femur 3.8 times as long as broad medially (Fig. 22). Meso- and metasoma with much black(ish) pattern. ♀: 4.2 mm. - Panama .....*Pseudophanerotoma* (*Furcidentia*) *acutula* nov.sp.

2 (1) Third tergite as long as second tergite and fairly strongly narrowing posteriorly (Fig. 68 in ZETTEL 1990: 175). Temple in dorsal view moderately rounded (Fig. 66 l.c.). Cheek long, 0.8 times as long as height of eye (Fig. 65 l.c.). Fore wing: 3-SR 1.6 times as long as r (Fig. 70 l.c.). Second flagellomere 1.25 times longer than third flagellomere (Fig. 69 l.c.). Hind femur 3.6 times as long as broad medially. Meso- and metasoma without black(ish) pattern. ♂: 5.7-6.2 mm. - Ecuador..... .....*Pseudophanerotoma* (*Furcidentia*) *clypeata* ZETTEL 1990

Pseudophanerotoma (*Pseudophanerotoma*) *zetteli* nov.sp. (Figs 26-30, 33-37)

M a t e r i a l e x a m i n e d : holotype ♀: NW Jamaica, Spring Garden / Saint James, W from Montego Bay, LF 100 m, 11-20 February 1996, leg. L. Rezbanyai-Reser. - paratype ♀: Honduras, Cortes Parque Nacional Cusuco, 15˚29'N / 88˚13'W, 15 January 1995, leg. R. Cave. - One ♀ and one ♂ paratypes: Honduras, Olancho Parque Nacional La Muralla, 15 km N La Union, 15˚07'N / 86˚45'W, 21 March 1995, leg. R. Cave.

T y p e s c o n d i t i o n : Holotype is in good condition: (1) pinned "horizontally" through mesopleura, (2) left antenna apically deficient, i.e. with 34 antennomeres. Two

female and one male paratypes also in good condition: (1) glued on card point by right mesosomal side (2♀♀) and right corporal side (1♂), (2) left antenna apically deficient, i.e. with 47 antennomeres (and not 51).

D e p o s i t o r y : Holotype and three paratypes are deposited in the Hungarian Natural History Museum (Department of Zoology), Budapest, Hym. Typ. Nos 12113 (holotype) and 12114-12116 (paratypes).

E t y m o l o g y : The new species is dedicated to Dr Herbert ZETTEL (Wien), earlier braconid specialist, reviser of the world Cheloninae taxa and describer of the genus *Pseudophanerotoma*.

D e s c r i p t i o n o f t h e f e m a l e h o l o t y p e : Body 5 mm long. Antenna long, about one-fourth longer than body and with 49 antennomeres. First flagellomere five times as long as broad apically and one-sixth longer than second flagellomere (30:25, cf. Fig. 16), further flagellomeres shortening so that penultimate flagellomere 1.3 times as long as broad. - Head in dorsal view transverse (Fig. 26), 1.8 times as broad as long, eye protruding and 1.5 times as long as temple, temple rounded, occiput deeply excavated and together with gena margined. Ocelli small, elliptic, near to each other: POL as long as longest diameter of hind ocellus. Eye in lateral view nearly round: 1.2 times as high as wide and 1.5 times as wide as temple, temple evenly wide beyond eye (Fig. 27, see arrows). Clypeus medially with a pair of small denticules (cf. Fig. 19). Cheek 0.45 times as long as height of eye. Face + clypeus slightly wider (close below toruli) than high (34:30), inner margin of eyes diverging ventrally (cf. Fig. 20). Mandible equally thick, its two apical tips subequal (Fig. 28). Maxillar palp shorter than height of head. Clypeus polished. Face and head above hairpunctured, latter (vertex + frons) slightly rougher and denser punctate.

Mesosoma in lateral view 1.6 times as long as high. Notaulix distinct (also by its dark colour). Precoxal suture distinct by crowded punctation. Propodeum rugulose. Mesoscutum densely (similar to head above), scutellum and mesopleuron less densely punctate. - Hind femur thin, 4.5 times as long as broad medially (Fig. 29). Inner spur of hind tibia 0.35 times as long as basitarsus. Middle tibia faintly swollen proximally (Fig. 30).

Fore wing somewhat shorter than body. Pterostigma wide (Fig. 33), 3.4 times as long as wide, issuing r distally from its middle. Second submarginal cell long: 3-SR 1.45 times as long as r, 2-SR somewhat longer (20:16-17) than 3-SR, r-m 0.4 times as long as 3-SR and weakly sclerotized; SR1 faintly S-form and approching tip of wing, m-cu postfurcal. First discal cell long, 1-SR-M faintly S-form and 1.3 times as long as 1-M; first subdiscal cell wide, 2-CU1 faintly bent and 3.2 times as long as cu-a, cu-a curved (Fig. 33, see arrows in cells).

Metasoma (or carapace) as long as mesosoma. First tergite (Fig. 34) broadening posteriorly, 1.3 times as broad behind as long, pair of basal carina converging and meeting somewhat beyond middle of tergite. Tergites 1-3 longitudinally and fairly densely striated, interstriations uneven. Third tergite 1.5 times as long as second tergite and both tergites somewhat less broad than those of male (Fig. 35, see also Fig. 37).

Antenna yellow, flagellum darkening brownish to brown on its distal half. Head and mesosoma yellow, carapace testaceous; mesosoma with light brown to brown pattern on: crenulate furrow of pronotum, run of notaulix, tegula, mesopleuron anteriorly and

posteriorly, propodeum posteriorly. Legs lemon yellow, fifth tarsomeres feebly darkening. Wings subhyaline, pterostigma brown, veins proximo-distally yellow to brown.

Description of the two female paratypes: Similar to the female holotype. Body 6 mm long. Antenna with 50-51 antennomeres. Head in dorsal view 1.8 (1♀) and 1.85 times (1♀) as broad as long. Pair of basal carinae not meeting. Fore wing: 3-SR 1.25 times as long as r, 2-SR almost 1.6 times as long as 3-SR. Mesosomal dark pattern somewhat more extended and brown to blackish.

Description of the male paratype: Similar to the female types. Body 6 mm long. Antenna nearly one-third longer than body and with 47 antennomeres. Fore wing: pterostigma wide, 2.2 times as long as wide, issuing r somewhat less distally from its middle, 3-SR 1.45 as long as r, 2-SR 1.5 times as long as 3-SR (Fig. 36). Tergites 2-3 somewhat broader than those of female (Fig. 37).

Host unknown.

Distribution: Honduras, Jamaica.

Taxonomic position: The new species, *Pseudophanerotoma* (*Pseudophanerotoma*) *zetteli*, is nearest and runs to *Ps.* (*Ps.*) *thapsina* (WALLEY) with the help of ZETTEL's key to chelonine genera (ZETTEL 1990: 164-166), their distinctive features are keyed:

1 (2) Head in dorsal view (Fig. 31) slightly less transverse, 1.7 times as broad as long, eye less protruding and 2.2 times as long as temple, temple somewhat less rounded, occiput less deeply excavated. Hind femur thick, 3.3 times as long as broad proximally (Fig. 32). Antenna with 28-32 antennomeres. Fore wing: 3-SR and r qual in length, 2-SR 1.7 times as long as 3-SR, 1-SR-M 1.6 times as long as 1-M; first subdiscal cell wide, 2-CU1 straight, cu-a oblique (Fig. 2, see arrows). First tergite (Fig. 38) more broadening posteriorly, 1.6 times as broad behind as long. Body fully yellow. ♀: 4.5 mm. - U.S.A..... ..... *Pseudophanerotoma* (*Pseudophanerotoma*) *thapsina* (WALLEY 1951)

2 (1) Head in dorsal view (Fig. 26) slightly more transverse, 1.8 times as broad as long, eye protruding and 1.6 times as long as temple, temple somewhat more rounded, occiput deeply excavated. Hind femur thin, five times as long as medially (Fig. 29). Antenna with 47-51 antennomeres. Fore wing: 3-SR 1.45 times as long as r, 2-SR somewhat longer (20:16-17) than 3-SR, 1-SR-M 1.3 times as long as 1-M; first subdiscal cell less wide, 2-CU1 bent, cu-a curved (Fig. 33, see arrows). First tergite (Fig. 34) less broadening posteriorly, 1.3 times as broad behind as long. Head and mesosoma yellow, mesosoma with a few dark brown pattern, metasoma testaceous. ♀♂: 5-6 mm. - Honduras, Jamaica..... ..... *Pseudophanerotoma* (*Pseudophanerotoma*) *zetteli* nov. sp.

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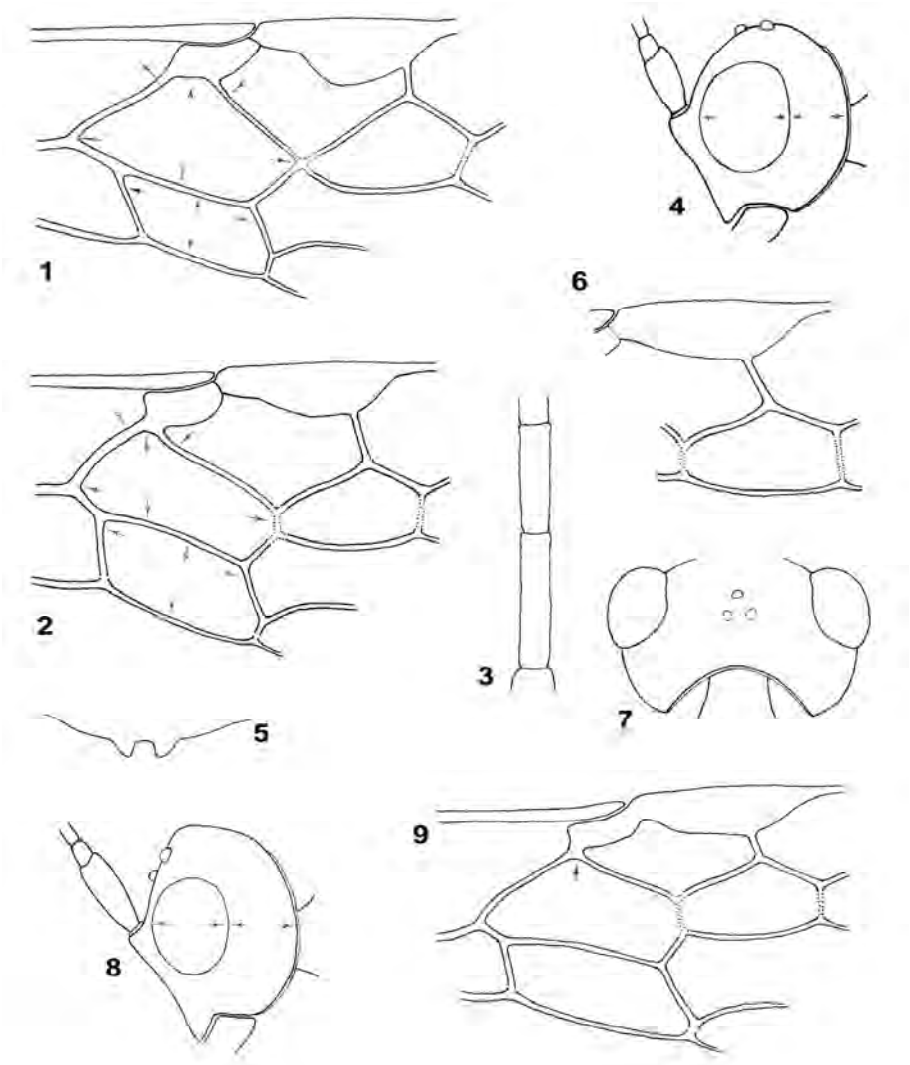
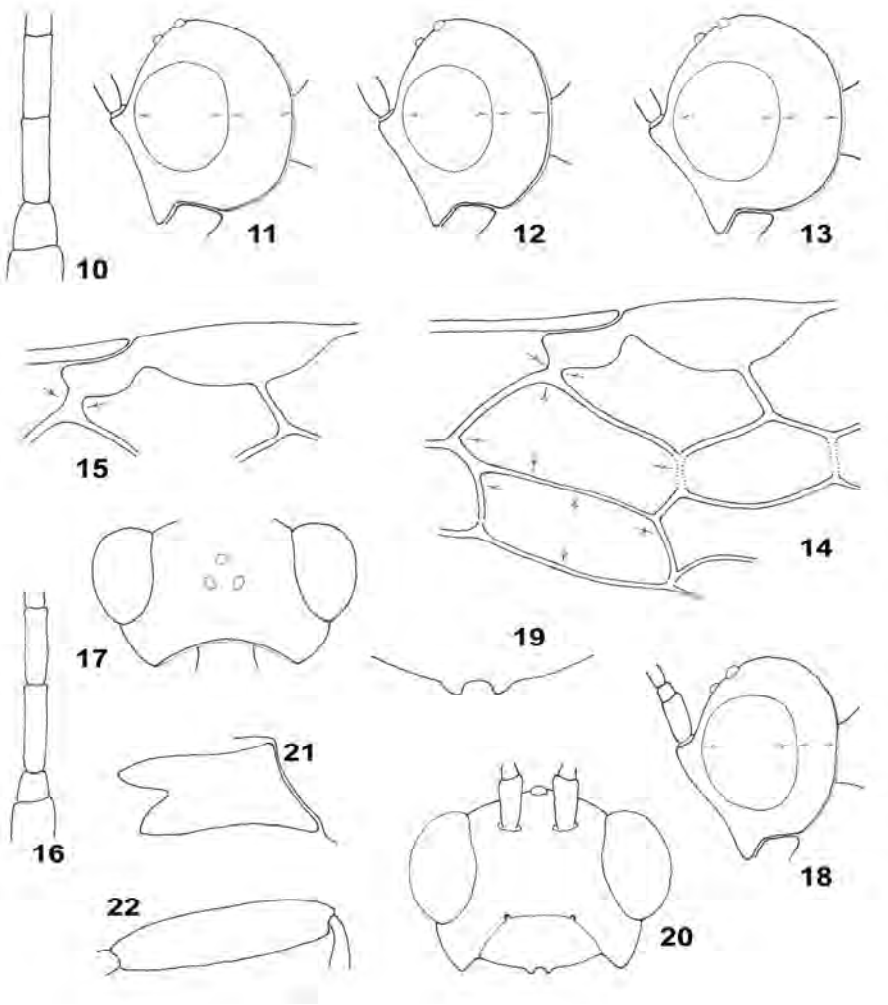
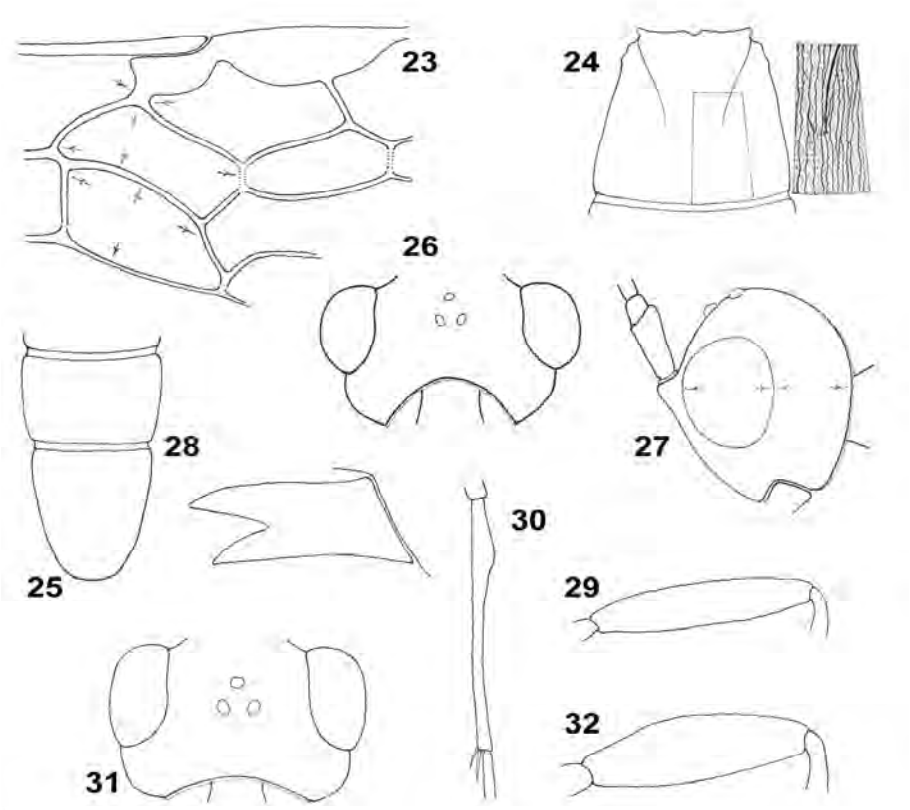


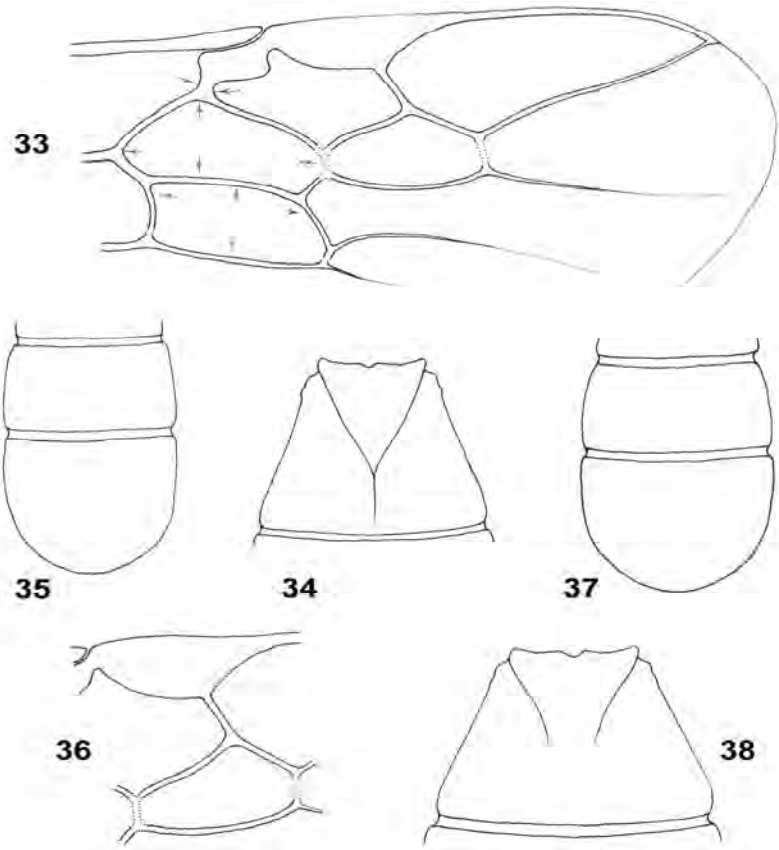
Fig. 1: *Phanerotoma dentata* (PANZER): median part of right fore wing. **Fig. 2**: *Pseudophanerotoma* (*Ps.*) *thapsina* (WALLEY): middle part of right fore wing. **Figs 3-6**: *Pseudophanerotoma alvarengai* ZETTEL: (**3**) flagellomeres 1-2, (**4**) head in dorsal view, (**5**) pair of denticules of clypeus, (**6**) pterostigma and second submarginal cell. **Figs 7-9**: *Pseudophanerotoma* (*Furcidentia*) *pulchra* ZETTEL: (**7**) head in dorsal view, (**8**) head in lateral view, (**9**) middle part of right fore wing.



Figs 10-15: *Pseudophanerotoma* (*Ps.*) *zeteki* (CUSHMAN): (**10**) flagellomeres 1-2, (**11-13**) head in lateral view, (**14**) middle part of right fore wing, (**15**) pterostigma and basal section of *1-M* and *1-SR-M*. **Figs 16-22**: *Pseudophanerotoma* (*Furcidentia*) *acutula* nov. sp. (female holotype): (**16**) flagellomeres 1-2, (**17**) head in dorsal view, (**18**) head in lateral view, (**19**) pair of denticules of clypeus, (**20**) head in frontal view, (**21**) mandible, (**22**) hind femur.



Figs 23-25: *Pseudophanerotoma* (*Furcidentia*) *acutula* nov.sp. (female holotype): (**23**) middle part of right fore wing, (**24**) first tergite with indication of its striation, (**25**) tergites 2-3. **Figs 26-30**: *Pseudophanerotoma* (*Ps.*) *zetteli* nov. sp. (female holotype): (**26**) head in dorsal view, (**27**) head in lateral view, (**28**) mandible, (**29**) hind femur, (**30**) middle tibia. **Figs 31-32**: *Pseudophanerotoma* (*Ps.*) *thapsina* (WALLEY) (female paratype): (**31**) head in dorsal view, (**32**) hind femur.



Figs 33-37: *Pseudophanerotoma* (*Ps.*) *zetteli* nov. sp. (female holotype: 33-35, male paratype: 36-37): (**33**) distal part of right fore wing, (**34**) first tergite, (**35**) tergites 2-3, (**36**) pterostigma and submarginal cell of right fore wing, (**37**) tergites 2-3. **Fig. 38**: *Pseudophanerotoma* (*Ps.*) *thapsina* (WALLEY) (female paratype): first tergite.

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