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REVIEW OF THE GENUS *PARACRIAS* (HYMENOPTERA, EULOPHIDAE, ENTEDONINAE)

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Review of the Genus *Paracrias* (Hymenoptera, Eulophidae, Entedoninae). Gumovsky A. V. — The New World genus *Paracrias* is reviewed, its diagnostic characters are corrected and the introgeneric variations are discussed. 13 species are recognized for the genus, 6 of them are described as new: *P. huberi* sp. n., *P. laticar* sp. n. and *P. canadensis* sp. n. from Canada, *P. schauffi* sp. n. from Mexico, *P. woldai* sp. n. and *P. panamensis* sp. n. from Panama). Diagnostic characters of the new species, change the concept of the genus. *Entedon antander* Walker treated earlier under *Paracrias* (LaSalle & Schauff, 1991) removed to the genus *Horismenus*. New geographic records are given. Key to species of the genus is provided.

Key words: Hymenoptera, Eulophidae, Entedoninae, *Paracrias*, *Horismenus*, the New World, Canada, USA, Mexico, Panama, Peru.

Обзор рода *Paracrias* (Hymenoptera, Eulophidae, Entedoninae). Гумовский А. В. — Проведен обзор распространенного в Новом Свете рода *Paracrias*, его диагностические признаки откорректированы и обсужден расброс признаков внутри рода. 13 видов указаны для *Paracrias*, 6 из них описаны впервые: *P. huberi* sp. n., *P. laticar* sp. n. и *P. canadensis* sp. n. из Канады, *P. schauffi* sp. n. из Мексики, *P. woldai* sp. n. и *P. panamensis* sp. n. из Панамы). Диагностические признаки новоописанных видов изменили концепцию рода *Paracrias*. *Entedon antander* Walker, включавшийся ранее в род *Paracrias* (LaSalle & Schauff, 1991), перемещен в род *Horismenus*. Для видов рода *Paracrias* в статье приведены новые местонахождения и таблицы к определению.

Ключевые слова: Hymenoptera, Eulophidae, Entedoninae, *Paracrias*, *Horismenus*, Новый Свет, Канада, США, Мексика, Панама, Перу.

The genus *Paracrias* was established by Ashmead (1904) for the single species *P. laticeps* Ashmead, 1904. The taxonomic history of *Paracrias* has been discussed by Schauff (1985, 1991), new species were described by Woolley & Schauff (1987). Since that time several new species have been found in the collections studied by the author. These species possess some unusual characters, which change the concept of the genus and require a critical review of the rest described species.

Paracrias is widely distributed in the New World, especially in the Neotropics, so many new species are expected to be found in future, when more areas are studied.

Genus *Paracrias* Ashmead

Paracrias Ashmead, 1904: 510; Schauff, 1985: 98; Woolley & Schauff, 1987: 770; Schauff, 1991: 64; *Emersonopsis* Girault, 1917 a: 110; *Euplectredon* Girault, 1917 b: 3.

Type-species: *Paracrias laticeps* Ashmead, 1904, by original designation.

Diagnosis. Frontal sulcus V-shaped, mandible bidentate; prepectus at most overlapped by mesosternal protuberance, the latter just indicated, but not delimited; median strip (fig. 1, 7, m) of propodeum varies in shape and width, always bordered by clearly margined lateral channels (fig. 1, 7, lc), disappearing at neck-shaped projection of posterior edge of propodeum (fig. 1, 7, n); this projection varies in length, but always present.

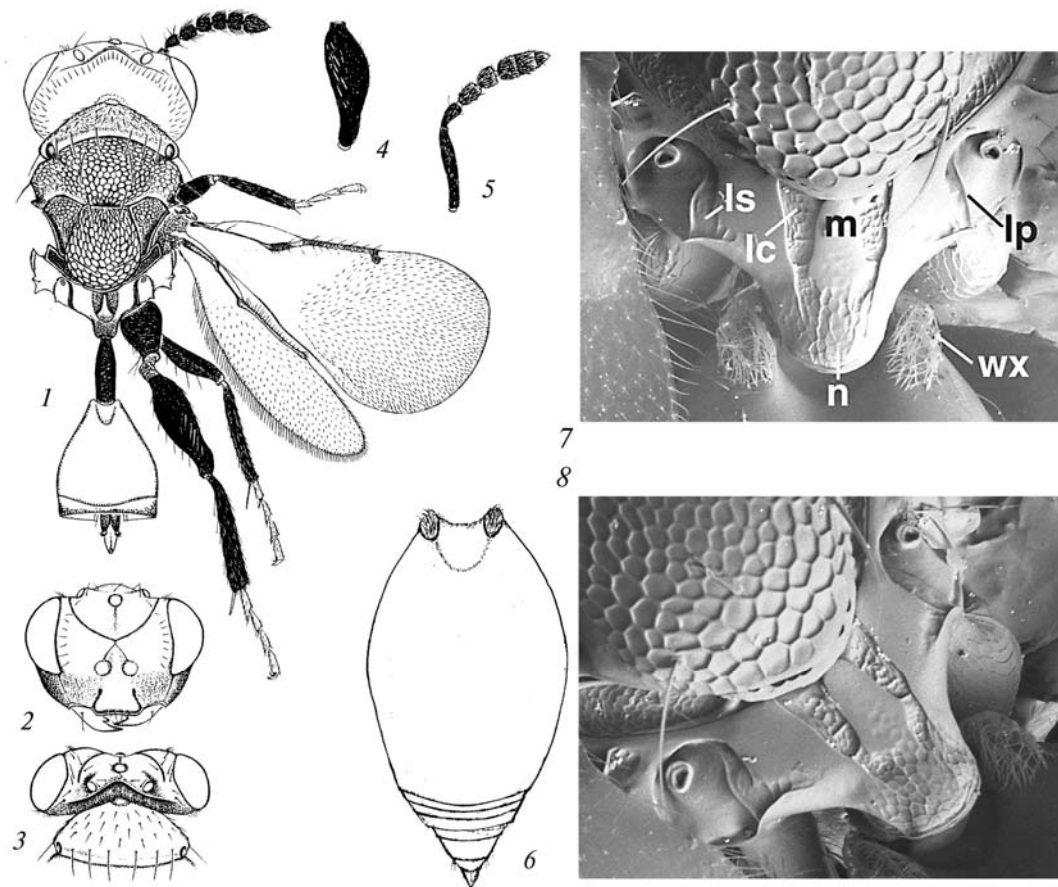


Fig. 1. *Paracrias arizonensis*: 1 — male habitus; 2 — head of male (in frontal view); 3 — head of male (in dorsal view); 4 — male scape; 5 — female scape and pedicel; 6 — female metasoma; 7, 8 — propodeum: lc — lateral channel, ls — lateral sulcus, lp — lateral plica, m — median strip, n — neck, wx — tufts of hairs (? waxy secretions) on OMA.

Рис. 1. *Paracrias arizonensis*: 1 — габитус самца; 2 — голова самца (вид спереди); 3 — голова самца (вид сверху); 4 — скапус самца; 5 — скапус и педицеллус самки; 6 — брюшко самки; 7, 8 — проподоум: lc — боковой каналчик, ls — боковой желоб, lp — боковая складка, m — срединная полоска, n — шейка, wx — скопления волосков (? восковые выделения) на первом тергите брюшка.

Supporting characters. Scutellum without median and lateral scutellar grooves, female petiole attached almost perpendicularly to both gaster and propodeum in virtual Z-type in lateral view (fig. 3, 4).

Variety. In most species median ocellus and foramen magnum connected by a furrow, being most distinctive between median ocellus and occipital margin, the latter somewhat emarginated at the cross-point; mandibular teeth subequal (*P. schauffi*, Fig. 4, 5, *P. huberi*, fig. 3, 3, *P. anthonomi*) or the outer tooth much longer than inner one (other species, fig. 1, 2); shape of dorsellum varies from wide, half-circular (*P. schauffi*, fig. 4, 4) to completely reduced (*P. woldai*); median strip of propodeum varies from narrow, connected with anterior propodeal margin, not bisecting dorsellum (*P. schauffi*, fig. 4, 4), to wide, of inverted U-shape, bisecting dorsellum medially (*P. guatemalensis*, *P. anthonomi*); propodeum bearing long neck-like posterior median projection, its length varies from comparatively short (shorter than rest of propodeum in most species) to comparatively long (longer than rest of propodeum, in *P. anthonomi* and *P. schauffi*); first gastral tergite covering more than 1/2 of gastral dorsum (most species) or at most 1/3 (*P. huberi*), pronotal collar of moderate size, but sometimes (*P. arizonensis*, *P. panamensis*) comparatively long; fore wing with subcosta

of submarginal vein weakly broken, or even without break (this break is typical for most Entedoninae) in place of contact with praestigma (e. g. it transiting smoothly to praestigma: *P. strii*, *P. beus*, *P. arizonensis*, fig. 1, 1, *P. woldai*) or such transition marked off by a weak slide of a wider praestigma (*P. anthonomi*); lateral sulcus of propodeum either complete in better part of its length, with outer margin transformed into lateral plica or pliciform ridge (*P. huberi*, fig. 3, 1) or obsolescent to trace being visible just by difference in sculpture between submedian areas and rest of propodeum (most species); male gaster mostly homogeneously darkened, but occasionally with light basal gastral spot (*P. woldai*); oval membranous areas on 1st gastral tergite (when present) bare (often), or with tufts of hairs (*P. beus*, *P. laticlear*, *P. arizonensis*, fig. 1, 7, wx).

Distribution. Throughout the New World, especially in the Neotropical region.

Abbreviations used in morphology: POL — post-ocellar distance; OOL — oculo-ocellar distance; MDO — main diameter of ocellus; OMA — oval membranous areas on 1st gastral tergite; F1–F5 — funicular segments; SC — subcosta of submarginal vein; PR — praestigma of submarginal vein.

Key to species of the genus *Paracrias*

Таблица для определения видов рода *Paracrias*

1. Fore coxa with ventral lamellate projection, propodeum densely reticulate, female antenna with 3-segmented funicle and 2-segmented clava *P. panamensis* sp. n.
- Fore coxa without ventral lamellate projection 2
2. Mandible with two subequal teeth 3
- Outer tooth of mandible much longer than inner one 5
3. Propodeum with elongate, neck-like posterior medial projection, covering about 1/2 of entire length of propodeum 6
- Propodeum with posterior medial projection shorter than 1/2 of entire length of propodeum 4
4. Hind coxa haired with about up to 30 setae, body brown. *P. canadensis* sp. n.
- Hind coxa bald or with just a few scattered setae 5
5. Breadth of oral fossa 1.25 times as long as malar space *P. woldai* sp. n.
- Malar space long, slightly shorter than oral fossa; dorsellum strongly reduced, lateral sulcus of propodeum with pliciform outer margin; gaster flattened, 4.5 times as long as broad, its first tergite extending slightly less than 1/3 of gastral dorsum *P. huberi* sp. n.
6. Propodeum with thin smooth median carina clearly separated from its lateral furrows, dorsellum wide, half-circular in shape, not bisected medially; fore and mid femora dark, hind tibial spur short, about 1/2 of length of 1st hind tarsomere; occipital margin blunt, rounded; basal vein with about 5 setae, frontal sulcus incomplete *P. schauffi* sp. n.
- Median carina of propodeum widened, reticulated, produced forwards, fused with surface of its lateral furrows, dorsellum reduced, bisected medially; fore and mid femora white, hind tibial spur long, about as long as two first hind tarsomeres; occipital margin ridged; median ocellus and site of pronotal attachment to head disconnected, basal vein with at most 1 seta, frontal sulcus complete ... *P. anthonomi* Wooley & Schauff
7. Occipital margin blunt, rounded, fore and mid femora light at least apically 8
- Occipital margin sharply margined, fore and mid femora black or dark metallic 10
8. Frontal sulcus complete, area between toruli flattened or only slightly raised; male funicular segments cylindrical, antennal scape white, rest of antenna dark 9
- Frontal sulcus reduced, area between toruli swollen; male funicular segments flattened; malar space very narrow; occipital margin somewhat incised medially; antennae light; tibiae and femora brownish dorsally, tibiae predominantly light; basal vein represented by 3–4 setae; hind tibial spur robust, slightly shorter than hind basitarsus; digital sclerites of aedeagus with blunt short teeth, hind spur as long as first hind tarsomere *P. strii* Schauff
9. Legs white or yellow, hind tibial spur about as long as first two tarsomeres; face predominantly smooth; prepectus smooth or weakly sculptured; basal vein (hair row) with 1 seta, costal cell bare.
- Legs light brown, hind tibial spur slightly shorter than hind basitarsus; areas directly above and below toruli reticulated; prepectus alveolate medially; basal vein with 4 setae; costal cell with a row of setae *P. guatemalensis* Schauff
10. Median area of propodeum densely reticulated, female funicle 3-segmented, lateral propodeal sulcus alveolate, margined on both sides, OMA in female without tufts of hairs *P. laticeps* Ashmead
- Median area of propodeum apically with smooth median strip, female funicle 2-segmented, lateral propodeal sulcus margined at most at outer margin 11
11. Hind tibia with prolonged suture along inner margin continued into large, rather flattened and somewhat curved spur *P. laticlear* sp. n.
- Hind tibia without any sutures, hind spur normal 12

12. Fore wing membrane asetose under proximal section of marginal vein; dorsal surface of scutellum medially, and most area of axillae, smooth, polished; hind coxa densely setose dorsally; female petiole twice as long as broad, laterally with small tufts of setae *P. beus* Schauff
 — Fore wing membrane uniformly setose under proximal section of marginal vein; dorsal surface of scutellum and entire axillae uniformly reticulated; hind coxa bare dorsally; female petiole subquadrate, barely as long as wide, laterally without setal tufts..... *P. arizonensis* (Ashmead)

Paracrias anthonomi Wooley & Schauff

Paracrias anthonomi Wooley & Schauff, 1987: 771.

Type material. Paratypes: ♂, ♀, MEXICO, Quintana Roo (S. Tulum to N. Coba) and Yucatan (Xalau & Yalcoba to Nueva X-Can), ex *Anthonomus hunteri* Burke & Cate on *Hampea trilobata* Standley, 28.10–01.11.1986, "T86084 T86085" (P. C. Krauter & J. R. Cate) (CNC); ♂, 2 ♀, *ibid.* (USNM).

Host. *Anthonomus hunteri* Burke & Cate and *Anthonomus hunteri* sp. (Curculionidae) in buds of *Hampea trilobata* Standley (Malvaceae) and in fruits of *Lycianthes synanthera* Bitt. (Solanaceae) (Wooley & Schauff, 1987).

Distribution. Mexico (Wooley & Schauff, 1987).

Paracrias arizonensis (Ashmead)

Entedon arizonensis Ashmead, 1888 a: 103; Schauff, 1985, 108; — *cupreicollis* Ashmead, 1888b: VIII.

Material. USA: Colorado: 3 ♂, Colorado Springs, 6000–7000 ft, 15–30.06.96 (H. F. Wickham) (CNC); Arizona: ♀, Cochise Co, 1 mi N Portal, 26.05.1973, *Larrea tridentata*, 11,00–11,29 (P. D. Hurd, E. G. & J. M. Linsley, A. E. & M. M. Michelbacher) (UCB); ♀, Chiricahua Mts., Rustler Park, 8000' (ft), 15.08.1982, (G. Gibson); ♀, Portal, Flies Park, 06.08.1977 (L. Masner); ♀, Pima Sta., Rita Co, Mts., Mt. Wrightstone, 8–9000' (ft) 25.08.1990, AZ-9014 (L. Masner) (CNC); California: ♂, Lassen Co, 10 mi SE Doyle, collected on *Chrysothamnus*, 11.09.1983 (G. Ulrich) (UCB); ♂, Lethbridge area, Alta, 1924–26, (H. L. Semans ?); ♀, Rosebud, Alta, 13.08.1941 (Wm. R. M. Mason); 3 ♀, Elkweter Lk, Alta, 19.07.1956 (O. Peck); 3 ♂, Scandia, Alta, 14.07.1956 (O. Peck); ♂, Medicine Hat, Alta, 14.06.1956, (O. Peck); 3 ♂, *ibid.*, 16.06.1956 (CNC). ♀ MEXICO: San Luis Potosi, 3 mi. W Cedral 6000'. 21.09.1976. (J. A. Chemsak, J. Powell, A. & M. Michelbacher) (UCB); ♀, Mexico, Texcoco, 7000' (ft), 12.08.1954 (J. G. Chillcott); 13 ♀, 5 ♂, Nuevo Leon, 2347 m, Galeana, Cerro Potosi, 04.06.1983 (M. Kaulbars) (CNC).

Remark. This species is widely distributed in North America, so I feel worth to redescribe it.

Male (fig. 1, 1). Length 2.2 mm. Body metallic green. Tarsi of all legs dark. Wings hyaline, their venation brown except for median hyaline break on PR. OMA dark, narrow and hardly visible.

Head with weak alutaceous sculpture, almost smooth, about 2.8 times as broad as long in dorsal view (fig. 1, 3). Ocelli small, POL 3.2–3.3 OOL. Occipital margin sharp medially. Lateral ocelli separated from eye by distance slightly longer than their MDO, and separated from occipital margin by about 1/4 of their MDO.

Head in frontal view (fig. 1, 2) 1.2–1.3 times as broad as high. Frontal sulcus V-shaped, incomplete: its arms strengthening between lateral ocellus and inner eye margin and interrupted at OOL-line (fig. 1, 3). Eye almost bare, weakly curved in frontal view; eye height slightly more than twice as long as malar space. Gena with traced malar sulcus. Antennal scrobes in shape of inverted Y, surface between them poorly raising. Breadth of oral fossa about 2.6 times as long as malar space, anterior margin of clypeus produced forwards, convex, clearly set off by deep sutures, which ending by tentorial pits. Mandible with long outer tooth, while inner one short, reduced.

Antennae inserted slightly above level of ventral eye margin. Scape (fig. 1, 4) drop-shaped, 3.4–3.5 times as long as broad, 0.8–0.9 times as long as eye height, its ventral margin flattened, with row of hairs; combined length of pedicel and flagellum 0.8 times as long as breadth of head; pedicel 1.66 times as long as broad, as long as F1. The latter 1.66 times as long as broad, F2 quadrate, F3 and F4 somewhat transverse, clava 2.25 times as long as broad, with short terminal spine.

Mesosoma about 1.3 times as long as broad. Pronotum long, 0.6 times as long as broad, with expanded lateral angles; pronotal collar not carinate, haired with one longer seta at either side, 6 setae along mesoscutum, and sparse short setae on dorsal

surface; mesoscutum 2.4 times as broad as long, notauli indicated by shallow impressions; scutellum slightly longer than broad, 1.5 times as long as mesoscutum, with two setae near its lower margin. Axilla with one seta. Dorsellum reduced, narrow, visible by narrow strip, not emarginate medially. Propodeum (fig. 1, 7, 8) wide, 2.64 times as long as broad. Median carina transformed to subtriangular smooth area, acute apically, separated from dorsellum, with wide reticulated lateral channels. Submedian areas smooth, trace of lateral sulcus of propodeum stretching up to short reticulated neck. Spiracular elevation of propodeum minute, with short projection below. Fore femur 4, mid femur 4.6, hind femur slightly more than 3 times as long as broad; fore tibia 7.66, mid tibia 13, hind tibia 6.3 times as long as broad; fore tarsi in ratio: 3/4/4/7, mid tarsi (length given in brackets means length of ventral margin of tarsus, if longer than dorsal) in ratio: 4(6)/6/5/7, hind tarsi in ratio: 5(7)/5(7)/5/10. Hind spur slightly longer than mid spur, 1.5 times longer than breadth of its tibia, slightly longer than ventral margin of hind basitarsus; mid spur 3 times as long as breadth of tibia, 3 times as long as ventral margin of hind basitarsus; spur of fore tibia short, slightly shorter than breadth of tibia.

Fore wing twice as long as broad, costal cell bare, 6.0–6.2 times as long as broad, SC with 2 setae on its dorsal surface before its smooth (without break) transition to PR; marginal vein almost twice as long as costal cell, postmarginal vein very short, but visible, stigmal vein short, sessile, with spherical stigma and short uncus (fig. 1, 1); speculum open below, wing membrane asetose under proximal section of marginal vein.

Metasomal petiole long, 3 times as long as broad. OMA narrow, hardly visible and bare. Gaster 1.18 times as long as broad, inserted to petiole in obtuse angle, first tergite covering most of gastral dorsum (fig. 1, 1).

Female. Differs from male as follows. Bigger: 2.9–3.6 mm. Head almost 2.7 times as broad as long in dorsal view. Antennal scape 6.3 (fig. 1, 5), pedicel 2.33, F1 1.8 times as long as broad, F2 quadrate to transverse, clava 3-segmented, 2.4 times as long as broad. Pronotum shorter — 0.24 times as long as broad. Mesoscutum almost twice as broad as long; scutellum 1.2 times as long as broad, 1.3 times as long as mesoscutum. Fore wing 2.2 times as long as broad; costal cell 7.4 times as long as broad, hyaline break on PR incomplete, partly closed below by dark coloration. Metasomal petiole short, subconical, broader than long, perpendicularly attached to both gaster and propodeum as virtual Z-type in lateral view. Gaster 1.86 times as long as broad, first tergite covering most of gaster (fig. 1, 6). OMA wide with tufts of setae (regarded as probable waxy secretions by Schauff, 1991).

Biology. Unknown. Probably associated with creosote bush *Larrea tridentata* and *Chrysothamnus* sp.

Distribution. USA: Alberta, Idaho, Utah, Oregon, Colorado, Arizona, New Mexico (Schauff, 1985), new for California and also for Canada and Mexico.

***Paracrias canadensis* Gumovsky sp. n.**

Type material. Holotype ♂, Canada, "Can. Man., Brandon, 7. VIII. 58". Paratypes: ♀, 12 ♂, the same locality and date (CNC).

Male (fig. 2, 1, 3–5). Length 1.4 mm. Body light brown, wings hyaline, first three tarsomeres and wing venation pale.

Head almost smooth, 2.44 times as broad as long in dorsal view. Occipital margin with complete sharp carina, elevating as subrectangular crest between hind ocelli, which very closely allied to occipital margin, and separated from eye by distance 1.3 times as long as their MDO. POL 4 OOL.

Head in frontal view 1.22 times as broad as high (fig. 2, 5). Frontal sulcus V-shaped, incomplete: its arms connected, not reaching inner eye margins, slightly longer than distance between antennal toruli. Median ocellus and cross point of arms of frontal sulcus usually connected by longitudinal impression.

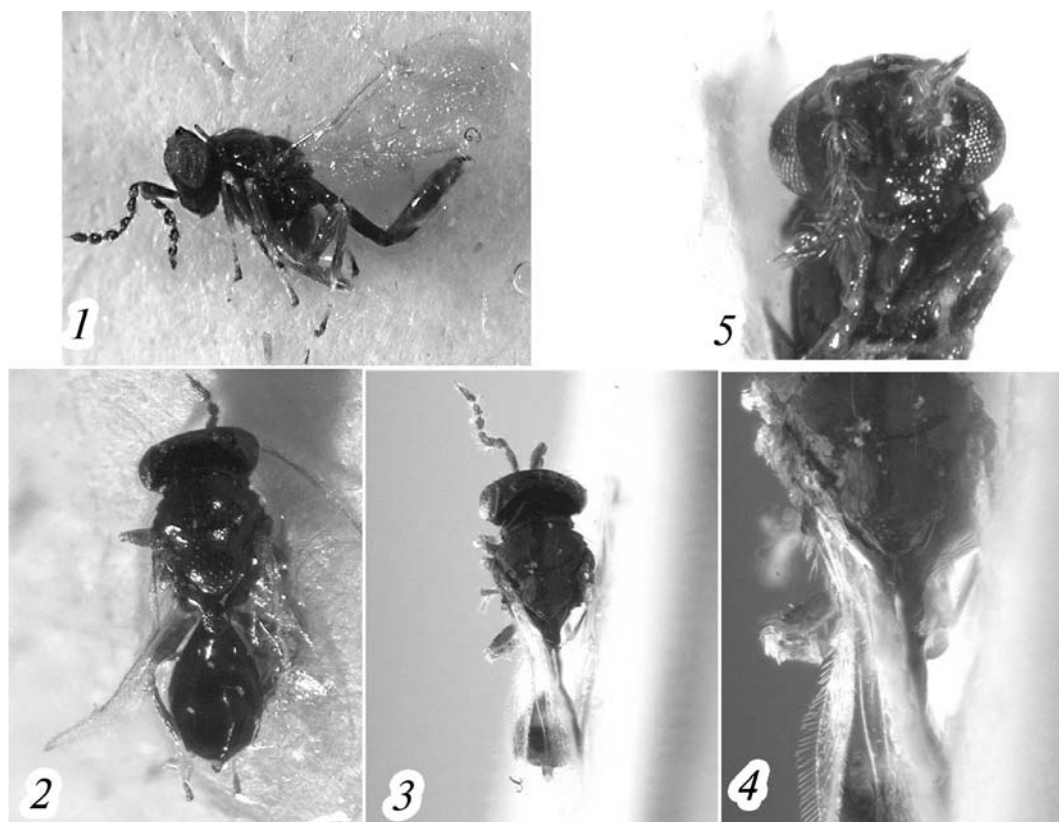


Fig. 2. *Paracrius canadensis*: 1 — σ , habitus, lateral view; 2 — φ , habitus, dorsal view; 3 — σ , habitus, dorsal view; 4 — φ , hind mesosoma; 5 — σ , head, frontal view.

Рис. 2. *Paracrius canadensis*: 1 — σ , габитус, вид сбоку; 2 — φ , габитус, вид сверху; 3 — σ , габитус, вид сверху; 4 — φ , задняя часть мезосома; 5 — σ , голова, вид спереди.

Eye poorly pubescent, almost bare; eye height 2.22 times as long as malar space. Antennal scrobes represented by narrow sutures, join below frontal sulcus. Space below antennal toruli convex. Breadth of oral fossa 1.6 times as long as malar space, clypeus truncate, set off by tentorial pits continuing downwards by short sutures, but its anterior margin with a somewhat raised reflexed border. Genae with short malar sulcus represented by thin suture. Mandible with two subequal teeth. Antennae inserted somewhat above lower eye level. Antennal scape 3.2 times as long as broad, $4/5$ of eye height; combined length of pedicel and flagellum almost equal (0.9) to breadth of head, F1-F4 of equal size, subquadrate, clava subtriangular, somewhat longer than broad.

Mesosoma (excluding petiole) 1.66 as long as broad. Pronotum wide, with no carina, continually rounding, homogeneously reticulated. Pronotum haired only with one longer setae at either side and 6 setae along its hind margin. Propleurae with no clear spine. Mesoscutum slightly more than twice as broad as long, notauli not marked off. Scutellum slightly longer than broad, 1.35 times as long as mesoscutum. Axilla with one seta. Dorsellum narrow, hardly visible. Propodeum similar to *P. arizonensis*, but median carina more sharp and "neck" longer (fig. 2, 2, 3, 4).

Propodeal spiracle on weak elevation with no clear short projection below. Metapleurae with sharp lateral tooth either.

Hind coxa haired with about up to 30 setae. Hind spur slightly shorter than breadth of its tibia, about half long as hind basitarsus.

Fore wing slightly more than twice as long as broad, costal cell bare, 8.75 times as long as broad, SC with 2 setae on its dorsal surface before its comparatively smooth (without break) transition to PR; marginal vein slightly more than 3/5 of costal cell, admarginal setae placed in row closely below marginal vein; stigmal vein short and robust; postmarginal vein reduced, hardly visible; speculum open below.

Metasomal petiole about 4 times as long as broad, with a collar on its underside. OMA absent. Gaster 1.3–1.4 times as long as broad, first tergite covering about half of its length.

Female (fig. 2, 2). Similar to male, except for: antennae with 2-segmented funicle and 3-segmented clava, propodeal nucha shorter and gaster ovate, 1.6 times as long as broad.

Discussion. This species is similar to *P. arizonensis*, but differs from the latter species mainly in coloration (mainly brown), truncate clypeus, shape of frontal sulcus and pubescence on the hind femur.

Biology. Unknown.

Etymology. The species epithet concerns its type locality (Canada).

Distribution. Canada.

Paracrias guatemalensis Schauff

Paracrias guatemalensis Schauff, 1985: 105.

Type material. Paratypes: 2 ♂, ♀, Guatemala, "Guatemala City, ex larva *Conotrachelus perseae* in avocado seed, FHB 23172, 04.04.1918", USNM Type 101169 (Popenoe) (USNM).

Host. *Conotrachelus perseae* Barber (Curculionidae) (Schauff, 1985).

Distribution. Guatemala (Schauff, 1985).

Paracrias huberi Gumovsky sp. n.

Type material. Holotype ♀, Canada, "parasite of alder Curculio. Grand Manan. July 8/10. Treherne & Sanders" (handwriting). Paratypes: 2 ♀, the same locality and data (CNC).

Female (fig. 3, 1). Length 4.3 mm. Body metallic dark green, legs dark metallic, except for knees, tarsi brownish, except for fore basitarsus and three proximal tarsi of mid and hind legs; antennae brown. Wings hyaline, their venation pale. OMA darkened, indicated just by rounded depression.

Head (somewhat collapsed medially) homogeneously reticulated, about 2.8 times as broad as long in dorsal view. Ocelli moderate in size; POL 3.2 OOL. Occipital margin blunt, rounded. Lateral ocelli separated from eye by distance almost equal to their MDO.

Head in frontal view (fig. 3, 3) 1.17 times as broad as high. Frontal sulcus V-shaped, incomplete: its arms not reaching inner eye margins. Eye poorly pubescent, slightly curved in frontal view; eye height 1.8 times as long as malar space. Antennal scrobes in shape of inverted Y, surface between them poorly raising. Breadth of oral fossa slightly longer than malar space (17.5/15), clypeus truncate, set off by narrow sutures laterally, somewhat convex. Mandible with two subequal teeth. Antennae inserted slightly below the level of ventral eye margin. Scape (fig. 3, 2) 5 times as long as broad, 0.74 times as long as eye height; combined length of pedicel and flagellum 0.9 times as long as breadth of head; pedicel twice as long as broad, as long as F1. F1, F2 and F3 about of the same length and width (somewhat flattened when dried), 1.3–1.4 times as long as broad, connected by distinct peduncles; F4 quadrate, tightly attached to clava (peduncle missing), but certain constriction visible, clava twice as long as broad, with distinct terminal spine.

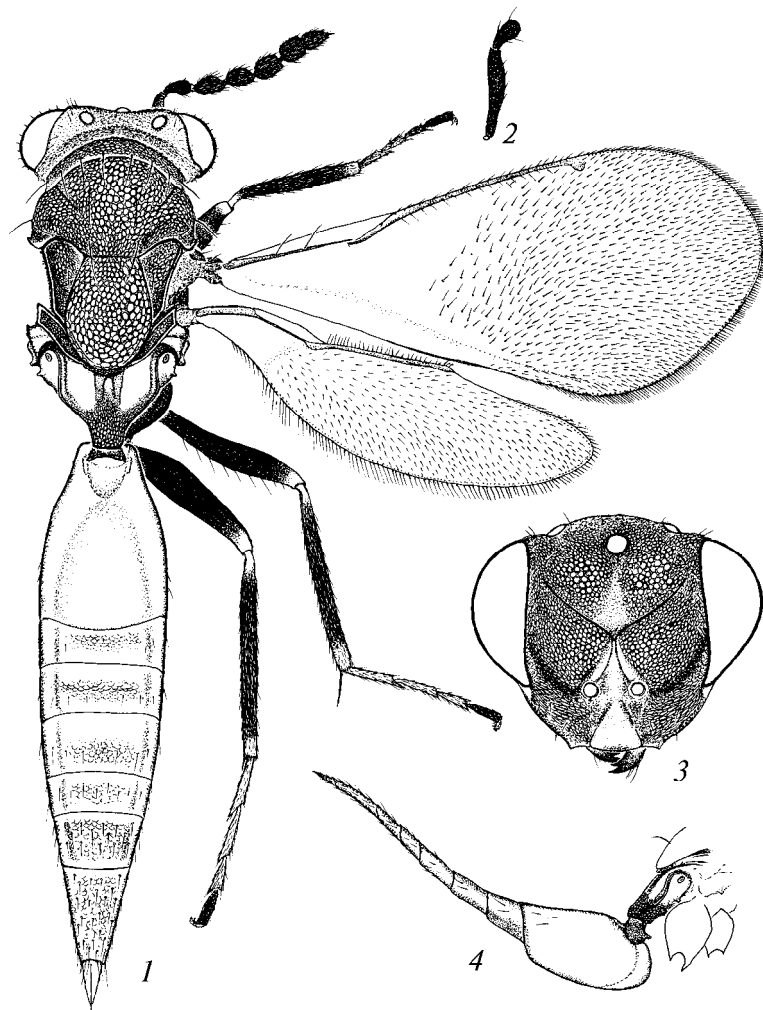


Fig. 3. *Paracrias huberi*, holotype, ♀: 1 — total view; 2 — scape and pedicel; 3 — head (in frontal view); 4 — propodeum, petiole and metasoma (lateral view).

Рис. 3. *Paracrias huberi*, голотип, ♀: 1 — общий вид; 2 — скапус и педицеллюс; 3 — голова (вид спереди); 4 — пропodeум, стебелек и брюшко (вид сбоку).

Mesosoma (without propodeum) 1.44 times as long as broad. Pronotal collar 5.2 times as long as broad, not carinate, haired with one longer seta at either side, 6 setae along anterior margin of mesoscutum, and sparse short setae on pronotal column; mesoscutum 1.66 times as broad as long, notauli indicated by very thin sutures and shallow impressions near scutellum; scutellum slightly longer than broad (32/27), slightly longer than mesoscutum (32/27), with two setae in proximal part. Axilla with one seta. Dorsellum reduced: not visible dorsally, very narrow, strip-like. Propodeum (fig. 3, 1) about twice as long as broad. Median propodeal strip mostly reduced, just its apex clear, smooth, rounded in shape, separated from dorsellum and apex of propodeum, with wide reticulated lateral channels. Submedian areas of propodeum smooth; lateral sulcus mostly complete, with outer margin transformed to lateral plica, transforming basally into reticulated row stretching up to reticulation of moderate propodeal neck. Spiracular elevation of propodeum, with short sharp lateral projection below. Fore femur 4.6, mid femur 6.2, hind femur 4.3 times as long as broad; fore tibia 9.5, mid tibia 13.25, hind tibia 12.3 times as long as broad; fore tarsi in ratio: 7/7/6/9, mid tarsi (length given in brackets means length of ventral margin of tarsus, if longer than

dorsal) in ratio: 12(16)/10(12)/8.5/10, hind tarsi in ratio: 14(16)/11(12)/9/10. Mid spur 1.8 times as long as hind spur, 2.25 times longer than breadth of its tibia, 0.56 times as long as ventral margin of mid basitarsus; hind spur slightly longer than breadth of tibia, 0.3 times as long as ventral margin of hind basitarsus; spur of fore tibia short, hardly visible.

Fore wing 2.23 times as long as broad, costal cell bare, 12.5 times as long as broad, SC with 2 setae on its dorsal surface before place where it transits into PR; this transition to PR marked off by difference in width of proximal part of submarginal vein (thinner) and PR (thicker). Marginal vein slightly shorter than costal cell (47/53), postmarginal vein missing, stigmal vein sessile, wide, both its stigma and uncus short; speculum partly open below; fringe of apical margin as long as width of marginal vein in its mid part.

Metasomal petiole short, subconical, inserted to both gaster and propodeum in subrectangular, Z-type mode. OMA bare. Gaster flattened, 4.5 times as long as broad, first gastral tergite covers slightly less than 1/3 of gastral dorsum: lengths of I-VII gastral terga in ratio: 47/9/12/15/12/16/25. Ovipositorial sheaths about 1/2 of epipygium (fig. 3, 1).

Male. Unknown.

Discussion. This species is quite distinguishable in the genus *Paracrias* as having strongly reduced dorsellum, pliciform outer margin of the propodeal lateral sulcus, narrow oral fossa, long malar space and long flattened gaster with first tergite extending slightly less than 1/3 of its dorsum. It is similar to *P. schauffi* in having subequal mandibular teeth, and being similar to *P. mirus* in structure of the propodeum. The new species differs from *P. schauffi* in shape of gaster and head, and differs from *P. mirus* in having more reduced median carina (transformed to strip), short hind spur (long in *P. mirus*), dark legs (entirely yellow in *P. mirus*) and also by the combination of all the mentioned above characters.

Biology. Unknown. Probably associated with a curculionid beetle (? *Cryptorhynchus lapathi* or *Rhynchaenus pallidor* Leng) on alder (*Alnus*).

Distribution. Type series is collected in Grand Manan Island, part of New Brunswick, located in the Bay of Fundy right offshore from the border with Maine (Canada).

Etymology. Species is named in honour of Dr. John T. Huber, the Curator of CNC, who kindly lent me the material, containing the type specimens.

Paracrias laticeps (Ashmead)

Paracrias laticeps Ashmead, 1904: 510; Schauff, 1985: 101.

Material. ♀, PERU, Manu, Madre de Dios, 400 m, 26–30.09.1962 (L. Pena) (CNC); ♀, Peru: Madre de Dios; 15 km E of Puerto Maldonado on Rio Madre de Dios, Albergue Lodge Cuzco Amazonico 200m, Malaize trap, 27.05.1983 (G. C. Hunter) (UCR).

Discussion. This species was known only from the types (female lectotype and paralectotype). It is easily recognizable by the median carina present as wide reticulated median strip and combination of sharp occipital margin, dark metallic legs and 3-segmented female funicle.

Distribution. Brasil (Ashmead, 1904; Schauff, 1985), new for Peru.

Paracrias mirus (Girault)

Euplectredon mirus Girault, 1917 b: 3; — (*Paracrias*) Peck, 1951, 1251; Schauff, 1985, 103.

Material. USA: ♀, Oregon, Ashland, May 1918, ex *Fraxinus oregona* Nutt; ♀, Minnesota, Lac Qui Parle Co., ex *Lignyodes bischoffi* on *Fraxinus pennsylvanicus*, 05.08.1983 (P. Hanson) (USNM). ♂, Canada, Montréal, 93–3–0058–01, ex *Curculio* on *Fraxinus* (samarre), 20.05.1992, B. R. C. ident. 92–242; ♀, *ibid.*, 30.04.1992; ♀, *ibid.*, 04.05.1992 (CNC).

Host. *Lignyodes bischoffi* (Blatchley) (Curculionidae) on *Fraxinus pennsylvanicus* Marsh, also from seeds of *Fraxinus oregona* Nutt (Schauff, 1985); *Curculio* sp. (? an undetermined weevil) in pod of *Fraxinus* sp.

Distribution. USA: New York, Iowa, Minnesota, and Oregon (Schauff, 1985), new for Canada.

***Paracrias beus* Schauff**

Paracrias beus Schauff, 1985: 107.

Discussion. This species is similar to *P. arizonensis* in having medially sharp occipital margin, 2-segmented female funicle, comparatively long hind tibial spur and tufts of setae near petiolar insertion, *P. arizonensis* differs from *P. beus* in having hind coxae bare dorsally (densely setose in *P. beus*), female petiole short reduced (twice as long as broad in *P. beus*), the scutellum uniformly reticulated (sculpture at the scutellum fades medially in *P. beus*).

I did not see specimens completely fitting the diagnosis of this species.

Distribution. Surinam (Schauff, 1985).

***Paracrias schauffi* Gumovsky sp. n.**

Type material. Holotype ♂, MEXICO, 28 mi. W. Durango, Dgo., 7500', 28.06.1964, (J. F. McAlpine); paratypes: ♀, the same locality and data as holotype; ♂, Mexico. "Chis., 7000 ft., S. Crist. Las Casas", 7.06.1969, (W. R. M. Mason) (CNC); ♂, Mexico, Chis. 7200ft, S. Crist. las Casas, 12.06.1969, Malaise Trap; ♂, Omilteme, Guerrero, 8000ft, H. H. Smith, Godman-Salvin, Coll. 08.1904, "Holcopetloideus ? (nr. Horismenus)"; ♀, ibid., but "Paracrias" (BMNH).

Male (fig. 4, 1). Length 2.5–2.9 mm. Body metallic dark green, except for brownish legs and anterior margin of antennal scape; last tarsus of mid and hind legs somewhat darker than rest tarsi. Wings hyaline, their venation brown. OMA hardly visible.

Head smooth, about 2.7 times as broad as long in dorsal view (fig. 4, 6). Ocelli moderate in size; POL twice OOL. Occipital margin blunt, rounded; median ocellus and foramen magnum connected by shallow furrow. Lateral ocelli separated from eye by distance 1.4 times as long as their MDO, and separated from occipital margin by about 2/5 of MDO.

Head in frontal view (fig. 4, 5) 1.4 times as broad as high. Frontal sulcus V-shaped, incomplete: its arms not reaching inner eye margins. Eye poorly pubescent, curved in frontal view; eye height slightly more than twice as long as malar space. Antennal scrobes in shape of inverted Y or U, surface between them slightly raising. Breadth of oral fossa 1.54 times as long as malar space, clypeus truncate, poorly set off by narrow shallow grooves ending by tentorial pits. Mandible with two subequal teeth. Antennae inserted at the distance equal to diameter of antennal toruli above level of ventral eye margin. Scape (fig. 4, 2) short, 3.4 times as long as broad, 0.85 times as long as eye height, widening apically, with ventral margin flattened; combined length of pedicel and flagellum 1.39 times as long as breadth of head; pedicel 1.4 times as long as broad, 0.35 times as long as F1, which slightly more than 4 times as long as broad. F2, F3 and F4 of the same shape and length, 2.75 times as long as broad, clava 6 times as long as broad, with distinct terminal spine.

Mesosoma about 2.2 times as long as broad. Pronotal collar not carinate, haired with one longer setae at either side, 6 setae along mesoscutum, and sparse short setae on dorsal surface; mesoscutum 1.4 times as broad as long, notauli missing; scutellum 1.22 times as long as broad, as long as mesoscutum, with two setae near its lower margin. Axilla with one seta either. Dorsellum of moderate size, half-circular in shape, not emarginate medially. Propodeum (fig. 4, 4) 1.34 times as long as broad. Propodeal median carina narrow, with wide reticulated lateral channels. Submedian areas of propodeum smooth; trace of lateral sulcus reticulated, stretching up to elongate neck and

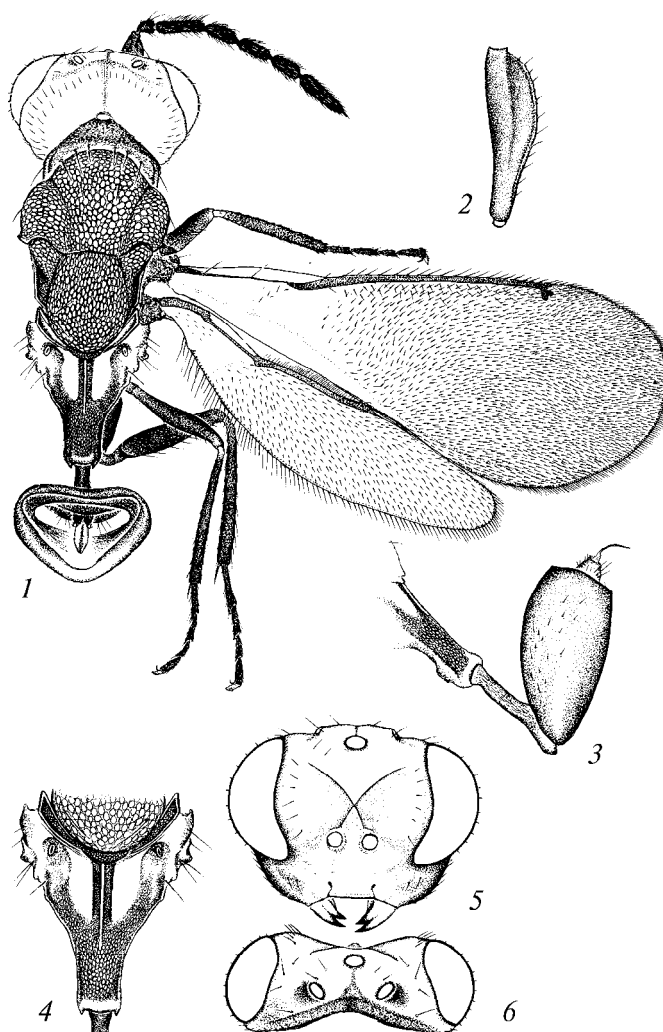


Fig. 4. *Paracrias schauffi*, holotype ♂: 1 — habitus; 2 — scape; 3 — posterior propodeum, petiole and metasoma (lateral view); 4 — propodeum (dorsal view); 5 — head (in frontal view); 6 — head (in dorsal view).

Рис. 4. *Paracrias schauffi*, голотип ♂: 1 — габитус; 2 — скапус; 3 — задняя часть проподоума, стебелек и брюшко (вид сбоку); 4 — проподоум (вид сверху); 5 — голова (вид спереди); 6 — голова (вид сверху).

disappearing among meshes of its coarse reticulation. Spiracular elevation of propodeum minute, with short lateral projection below. Fore femur 5.83, mid femur 9, hind femur 6.25 times as long as broad; fore tibia slightly more than 10, mid tibia 15, hind tibia 11.6 times as long as broad; fore tarsi in ratio: 10/10/6/10, mid tarsi in ratio: 14/9/6/10, hind tarsi in ratio: 19/12/9/12. Spurs of mid and hind tibiae equal in length, spur of hind tibia 1.4 times as long as breadth of tibia, 0.36 times as long as hind basitarsus; spur of mid tibia 2.3 times as long as breadth of tibia, 0.5 times as long as mid basitarsus; spur of fore tibia short.

Fore wing 2.4 times as long as broad, costal cell bare, 6 times as long as broad, SC with 2 setae on its dorsal surface before distinct break where it meets PR; marginal vein 1.4 times as long as costal cell, postmarginal vein missing, stigmal vein very short, its stigma and uncus of the same size and shape, forming bifurcation; speculum partly closed below by short basal and incomplete cubital veins; fringe of apical margin short.

Metasomal petiole long, 4.75 times as long as broad, widening basad. OMA bare. Gaster 1.4 times as long as broad, inserted to petiole in acute angle (fig. 4, 3), first tergite covering most of gastral dorsum.

F e m a l e . Similar to male, petiole shorter, about 3 times as long as broad, two apical funicular segments fused forming clava, which about 3 times as long as broad.

Discussion. This species is similar to *P. mirus* in having occipital margin blunt, head mainly smooth, and legs brown. However, the new species differs from *P. mirus* by the narrow median carina (wide and disconnected from the propodeal apical margin in *P. mirus*), the “neck” (posterior projection) of propodeum longer and more strongly alveolate, the dorsellum half-circular (bisected medially in *P. mirus*) and by short hind spur (long in *P. mirus*). *P. schauffi* is similar to *P. anthonomi* in having elongate propodeal neck, but *P. schauffi* differs from *P. anthonomi* in having smooth narrow propodeal median carina (median area of the propodeum wide and densely alveolate in *P. anthonomi*), smooth head (predominantly alveolate in *P. anthonomi*), the antennal scape and legs darker (antennal scape, trochanters, femora and tibiae are white in *P. anthonomi*), and also in having shorter metasomal petiole and short hindtibial spur. Also this species differs from all species of *Paracrias* (except for *P. huberi* and *P. anthonomi*) in having subequal mandibular teeth (outer tooth much longer than inner one in most species). *P. huberi* is rather distinct species differing from *P. schauffi* in having posterior propodeum with short neck, reduced metasomal petiole and long gaster.

Biology. Unknown.

Etymology. This species is named in honour of Dr. Michael E. Schauff, the first reviser of the genus *Paracrias*.

Distribution. Mexico.

***Paracrias strii* Schauff**

Paracrias strii Schauff, 1985: 103.

Type material. Paratypes ♂, ♀, Panama, Barro Colorado, Canal Zone, X-1937, ex *Ficus* fruit, No 4421, lot no 39–11659, USNM Type 101168 (J. A. S. Zetek) (USNM).

Discussion. This species is mostly characterized by the reduced frontal sulcus, wide and flattened male funicle, robust hind tibial spur and also by the other characters mentioned above in key.

Distribution. Panama.

***Paracrias woldai* Gumovsky sp. n.**

Type material. Holotype ♂, Panama, Canal Zone, Barro Colorado Is., light trap, 26–31.05.1983 (H. Wolda). Paratypes: 4 ♂, the same data as holotype (CNC); ♂, M. Panama, level 1, Barro Colorado Island, 9°9'30"N–79°51'W, 15–21.06.1977 (H. Wolda, at light); ♂, *ibid.*, 30.05–5.06.1978; ♂, *ibid.*, 27.06–03.08.1978 (RNMH).

Male (fig. 5, 1–2). Length 2.5–2.6 mm. Head and mesosoma metallic dark green; coxae metallic green; most part of hind femora, about basal 1/3 of hind tibia and last tarsi of all legs darkened, rest of legs light. Antennal scape wholly white, rest of antenna metallic green. Wings hyaline, their venation pale, almost hyaline. OMA light. Gaster with wide basal light spot covering about 3/5 of its surface.

Head coriaceous to smooth, slightly more than twice as broad as long in dorsal view. Ocelli moderate in size, closely adjoin to sharp occipital margin; POL about 4.6 OOL. Lateral ocelli separated from eye by 3/5 of their MDO.

Head in frontal view 1.4 times as broad as high. Frontal sulcus V-shaped, complete: its arms reaching inner eye margins. Eye poorly pubescent, curved in frontal view; eye height twice as long as malar space. Antennal scrobes and arms of frontal sulcus connected in X-shaped pattern, surface between them slightly raising. Breadth of oral fossa 1.25 times as long as malar space, clypeus set off by comparatively wide

grooves stretching up to antennal toruli, clypeal lower margin hardly produced forwards, but with reflexed border. Mandible with two subequal teeth. Antennae inserted at the distance equal to double diameter of antennal toruli above level of ventral eye margin. Scape 3.2 times as long as broad, $2/3$ times as long as eye height, somewhat widening apically, with ventral margin flattened; combined length of pedicel and flagellum 0.8–0.9 times as long as breadth of head; flagellar segments with scattered setae; pedicel 1.6 times as long as broad, $5/6$ times as long as F1. Funicular segments of the same length, twice longer than broad, clava 3.3 times as long as broad, with distinct terminal spine.

Mesosoma 1.5–1.6 times as long as broad. Pronotum wide, its collar hardly carinate, haired only with one long setae at either side and 4 setae along mesoscutum; mesoscutum 1.6 times as broad as long, notauli missing; scutellum slightly longer than broad, as long as mesoscutum, with two setae near its lower margin and one slightly above left one. Axillae with one seta either. Dorsellum very narrow, hardly visible. Propodeum slightly more than twice ($32/15$) as long as broad, with somewhat elongate neck. Median carina transformed to short narrow smooth strip, acute apically, separated from dorsellum, with wide reticulated lateral channels. Submedian areas smooth, distinct trace of lateral sulcus of propodeum stretching up to reticulated neck. Spiracular elevation of propodeum minute, with short projection below. Metapleurae with lateral tooth either.

Fore femur 3, mid femur 4.5, hind femur 3.8–3.9 times as long as broad; fore tibia 6.25, mid tibia 11, hind tibia 6 times as long as broad; fore tarsi in ratio: 3/5/5/8, mid tarsi in ratio: 6/5/5/10, hind tarsi in ratio: 7/6/5/10.

Hind spur slightly longer ($9/7$) than mid spur, 1.8 times longer than breadth of its tibia, slightly longer than hind basitarsus; mid spur 3 times as long as breadth of tibia, 1.5 times as long as hind basitarsus; spur of fore tibia short, $1/2$ as long as breadth of tibia.

Fore wing twice as long as broad, costal cell bare, 6.4 times as long as broad, SC with 2 setae on its dorsal surface before its comparatively smooth (without break) transition to PR; marginal vein 0.75 of costal cell, postmarginal vein very short, but visible, as long as stigmal vein, which short, with uncus somewhat longer than stigma; speculum open below.

Metasomal petiole long, slightly more than 3 ($19/6$) times as long as broad. OMA small, bare. Gaster 1.6 times as long as broad, first tergite covering slightly less than $1/3$ of its dorsum.

Female. Unknown.

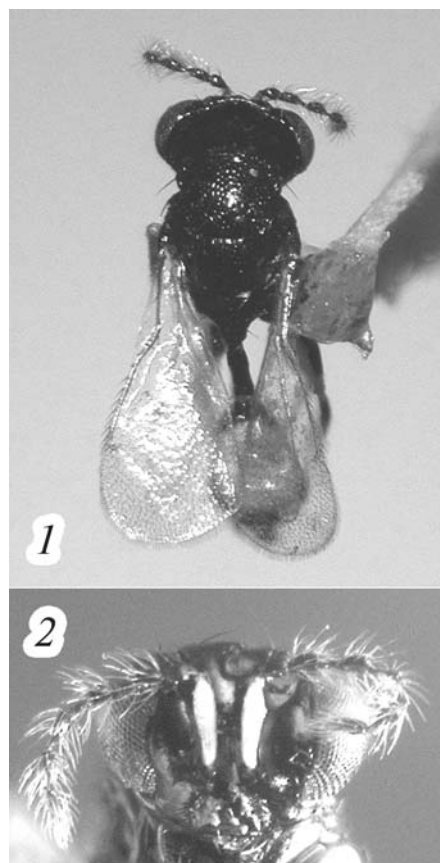


Fig. 5. *Paracrias woldai*, holotype σ : 1 — habitus; 2 — head (in frontal view).

Рис. 5. *Paracrias woldai*, голотип σ : 1 — габитус; 2 — голова (вид спереди).

Discussion. This species is similar to *P. arizonensis* in total habitus, but differs from it mostly in having sharp occipital margin, subequal mandibular teeth, lighter legs, narrower dorsellum and wide basal light spot on male gaster.

Biology. Unknown.

Etymology. The species is named in honour of its collector Dr. H. Wolda.

Distribution. All the specimens known only from the type locality in Panama.

***Paracrias panamensis* Gumovsky sp. n.**

Type material. Holotype ♂, Panama, Barro Colorado Is, light trap, 2–8.04.1983 (H. Wolda); para-types 2 ♂, *ibid.*; ♂, Panama, Las Cumbres, 30.01.1982 (H. Wolda); ♀, Brazil, Mato Grosso, Sinop, Malaise trap, 10.1974 (M. Alvarenga) (CNC).

Female. Length 2.1–2.3 mm. Body completely black, with poor metallic tint in places and first three tarsomeres light brown. Wings hyaline, their venation pale to light brown.

Head homogeneously reticulated, twice as broad as long in dorsal view; lateral breadth/median breadth in ratio 8/14. Ocelli small; POL 3 OOL. Occipital margin sharp, lateral ocelli separated from eye by distance of about $3/5-1/2$ of their MDO, and reaching occipital margin.

Head in frontal view 1.3 times as broad as high. Frontal sulcus short, V-shaped, incomplete: its arms not reaching inner eye margins. Eye poorly pubescent, its inner

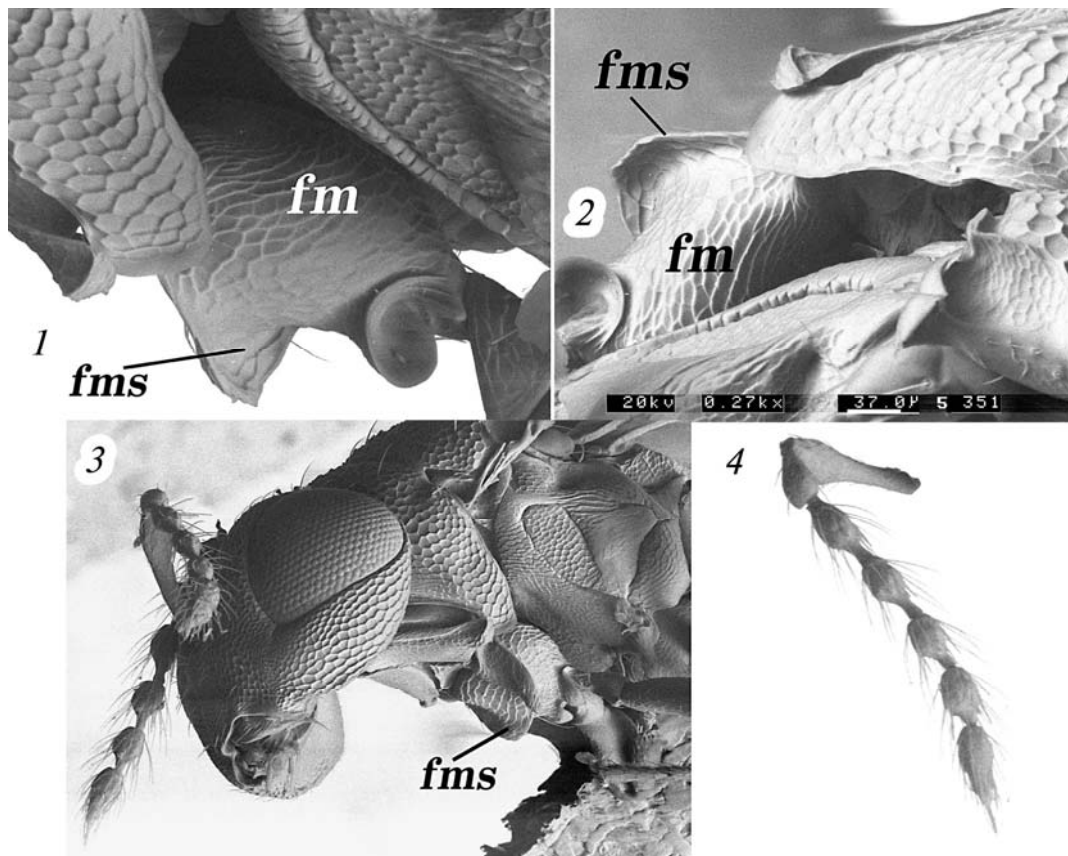


Fig. 6. *Paracrias panamensis*, ♂: 1, 2 — fore coxa; 3 — head and fore mesosoma; 4 — antenna; fms — femoral projection.

Рис. 6. *Paracrias panamensis*, ♂: 1, 2 — передний тазик; 3 — голова и передняя часть груди; 4 — усик; fms — вырост на тазике.

margin somewhat curved; eye height slightly more than twice as long as malar space. Malar sulcus shortly traced below lower eye margin. Antennal scrobes reduced, visible as short meeting channels anteriorly, surface between them flat, densely reticulated. Breadth of oral fossa 1.33 of malar space, clypeus truncate, not separated from the rest of face; somewhat convex. Mandible with two subequal teeth. Antennal torulus separated by its own diameter from level of ventral eye margin. Antennal scape (fig. 6, 4) 5 times as long as broad, almost 0.8 times as long as eye height; combined length of pedicel and flagellum 0.7 times as long as breadth of head; pedicel twice as long as broad, slightly longer than F1, the latter twice, F2 1.66, F3 subquadrate, clava (last two-segmented unit) 2.5 times as long as broad, with short but robust terminal spine; F1 and F2 connected by distinct peduncles, F3 closely attached to clava, however, certain constriction between them visible.

Mesosoma 1.66 as long as broad. Pronotum wide, 4 times as long as broad, its collar not carinate, haired with some setae along its dorsal surface; mesoscutum twice as broad as long, notauli largely reduced; scutellum 1.25 times as long as broad and as long as mesoscutum. Axilla with one seta. Dorsellum present as rectangular bar, somewhat concave medially. Propodeum 2.33 as long as broad, largely reticulated: its posterior part, median strip, lateral channels and spiracular elevations densely alveolate; just small submedian areas aside median strip, smooth. Lateral sulcus marked off by angulate inner lateral plica. Propodeal neck weakly expressed. Spiracular elevation of propodeum with notable projection below. Fore coxa with ventral lamellate projection (fig. 6, 1, 2).

Spurs short, mid one longest, slightly longer than breadth of its tibia. Fore wing 2.22 times as long as broad, costal cell bare, 11 times as long as broad, venation similar to *P. arizonensis*: SC with 2 setae on its dorsal surface before place where it smoothly transiting into PR; marginal vein twice narrower than costal cell, 0.7 times as long as the latter; postmarginal vein missing, stigmal vein sessile, wide; speculum open below; fringe of apical margin rather short.

Gaster about 1.5 times as long as broad, first tergite covering most (45/55) of its dorsum; metasomal petiole transverse, robust, bearing notable lateral ridges; OMA present as narrow fissures; ovipositorial sheaths rather short.

Male rather similar to female, but about 2.5 mm long, and differing in having 5-segmented flagellum (like in *P. woldai*) and metasomal petiole somewhat longer than broad (Fig. 6, 3, 4).

Discussion. *P. panamensis* is easily separable from all known *Paracrias* species in structure of fore femora. This species is also similar to *P. arizonensis* in general habitus, but it differs in the propodeal sculpture. Propodeal structure of this species is similar to *P. latipes*, but *P. panamensis* differs in having more expressed propodeal plicae and female antenna with F3 being separated by the peduncle.

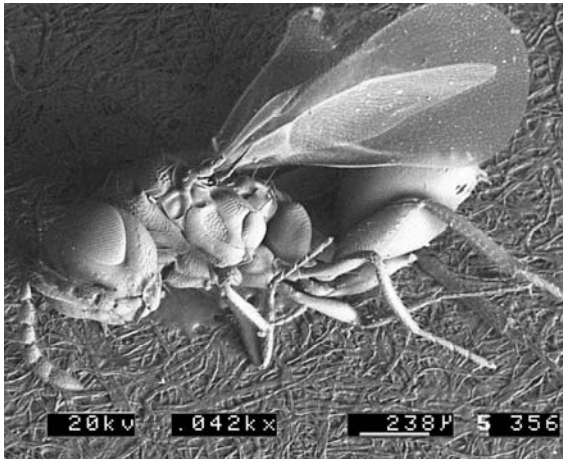
***Paracrias laticar* Gumovsky sp. n.**

Type material. Holotype ♂, Canada, Saskatchewan, Landing, 23.07.1956 (Peck) (CNC). Paratypes: 20 ♀, 12 ♂, Canada, Alta., Calgary, 07.1980 (R. B. Madge) (BMNH).

Male (fig. 7). Length 1.9-2.0 mm. Body color green blue. Wings hyaline, their venation brown. OMA brownish, traced just by rounded depression.

Head reticulated, about 2.6 times as broad as long in dorsal view. Ocelli small; POL 2.6 OOL. MDO: OOL: OCL in ratio 3: 5: 1. Lateral ocelli separated from eye by distance equal to their MDO, closely attached to occipital margin.

Head in frontal view 1.5 times as broad as high. Frontal sulcus V-shaped, incomplete: its arms not reaching inner eye margins. Eye almost bald, curved in frontal view; eye height 1.8 times as long as malar space. Antennal scrobes short, in shape of short channels, surface between them weakly elevated. Breadth of oral fossa 2.3 times as long as malar space, clypeus convex, set off by lateral diagonal sutures, its anterior margin

Fig. 7. Male of *P. laticar*.Рис. 7. Самец *P. laticar*.

lapped basally by mesosternal projection, with lateral transverse carina. Mesoscutum 2.2 times as broad as long, notauli largely reduced; scutellum slightly longer than broad and as long as mesoscutum. Axilla with one seta. Dorsellum narrow, half-circular, sickle-shaped. Propodeum 3 times as broad as long, with smooth submedian areas and reticulated posterior part; propodeal median strip delimited by reticulated

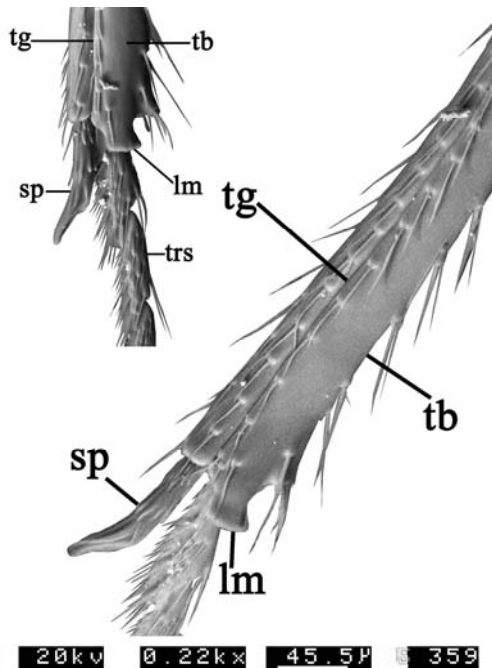
Fig. 8. Hind tibia views of *P. laticar*: tb — tibia, tg — tibial groove, sp — hind spur, lm — lamellate projection, trs — tarsal segments.

Рис. 8. Задняя голень *P. laticar*: tb — голень, tg — борозда на голени, sp — задняя шпора, lm — пластинкообразный вырост, trs — членики лапки.

produced, with reflexed border. Mandible bidentate, with longer outer tooth. Antennae inserted at level of ventral eye margin. Scape 3.75 times as long as broad, slightly shorter than eye height; combined length of pedicel and flagellum 0.7 times as long as breadth of head; pedicel twice longer than broad, as long as F1. F1–F3 1.5 times as long as broad, F4 as long as broad; funicular segments closely attached to each other, clava twice as long as broad, with short terminal spine.

Mesosoma 1.4–1.5 times as long as broad. Pronotum wide, 8 times as broad as long, its collar not carinate, haired with some setae along its dorsal surface. Prepectus broadly overlapped basally by mesosternal projection, with lateral transverse carina. Mesoscutum 2.2 times as broad as long, notauli largely reduced; scutellum slightly longer than broad and as long as mesoscutum. Axilla with one seta. Dorsellum narrow, half-circular, sickle-shaped. Propodeum 3 times as broad as long, with smooth submedian areas and reticulated posterior part; propodeal median strip delimited by reticulated grooves laterally. Lateral sulcus marked off by rectangular pliciform groove. Propodeal neck short, but expressed. Metapleural callus toothed.

Fore coxa without ventral projections, fore tibia with enlarged, sharp and curved inwards spine. Hind coxa moderately large. Hind tibia (fig. 8) with distinct groove (tg) stretching along its anterior margin and splitting off anterior, lesser part of tibia; the latter continued into large, flattened and somewhat curved outwards spur (sp). Lower margin of tibia bearing lamellate projection (lm).

Fore wing twice as long as broad, costal cell bare, 11 times as long as broad, SC with 2 setae, smoothly transitioning into PR; marginal vein shorter than costal cell, 0.6 times as long as the latter, postmarginal vein missing, stigmal vein sessile, wide; speculum open below; fringe of apical margin short, fragile often artificially missing.

Mesosoma petiolate, petiole about 3 times as long as broad. OMA poorly marked off; gaster 1.5 times as long as broad, first gastral tergite covering slightly more than 1/2 of gastral dorsum.

Female. Very similar to male, ex-

cept: length 2.1–2.2 mm; antennal flagellum with 2-segmented funicle and 3-segmented clava; petiole and gaster as in *P. arizonensis*.

Discussion. This species is very similar to *P. arizonensis* in general habitus and antennal structure but differs in somewhat wider head and (most important) in having peculiar hind tibial groove splitting off anterior, lesser part of the tibia. The latter is continuing into large, rather flattened and somewhat curved spur. This combination of characters is unique within the genus *Paracrias*.

Excluded species

Horismenus antander (Walker), 1839, **comb. n.**

Entedon antander Walker, 1839: 70–71; De Santis, 1980: 167; – (*Paracrias*) LaSalle & Schauff, 1992: 12.

Type material. ♂, 1st BMNH circular label “LECTOTYPE”, 2nd circular label “Bahia, 1363 a (?)”, 3rd rectangular “Bahia”, 4th rectangular label “*Entedon Antander* Walker” (handwriting), “Stood under this name in old B. M. Collection in C. Waterhouse” [printed on underside], 5th rectangular label “? A weakly developed *Horismenus* ?” (handwriting), 6th “*Entedon antander* Walker, 1839, LECTOTYPE ♂, des. LaSalle & Schauff 1992”, 7th rectangular label “B. M. Type Hym. 5.1339 antander”. LaSalle & Schauff (1992) mentioned that it was collected by C. Darwin.

Discussion. Although the type specimen of this species is in a poor condition (fig. 9) some peculiar characters allow to define its proper taxonomical placement. This species does not possess such a characteristic feature of the genus *Horismenus* as the median longitudinal groove on scutellum, but this character is variable within the genus as was mentioned by M. Schauff for his species *H. elineatus* (1989, 1991), and is evident from my own study of various species of *Horismenus*.

The most characteristic feature of *Horismenus* (distinguishing it from *Paracrias*, in particular) is an interruption of the posterior margin of the prepectus by the anterior edge of mesosternum (Schauff, 1991). I propose to re-define this character as “mesosternum with toothed anterior edge”. This definition re-directs the character’s meaning to the characteristic shape of the mesosternum (that is also often divided horizontally), while the prepectus shape has no association with mesosternum. For example, posterior

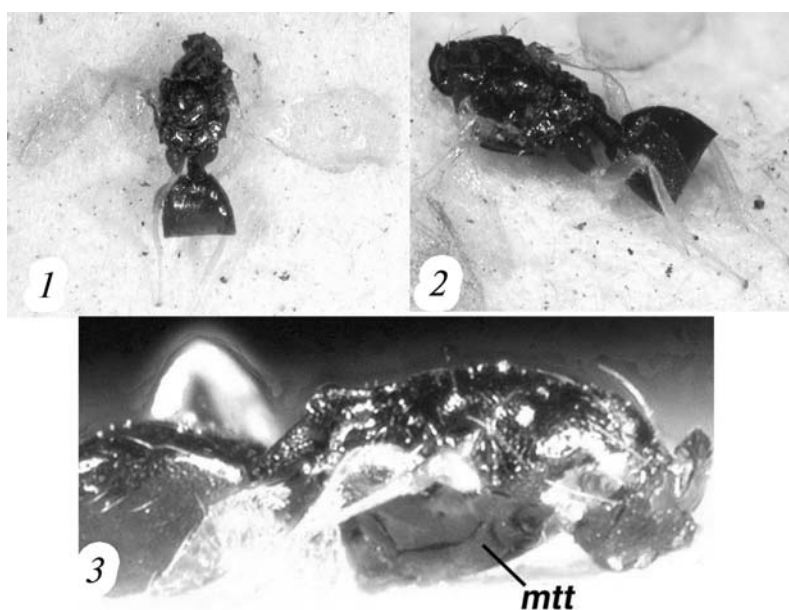


Fig. 9. Lectotype of *Entedon antander*: 1, 2 — general view; 3 — lateral view with the mesosternal tooth (mtt) shown.

Рис. 9. Лектотип *Entedon antander*: 1, 2 — общий вид; 3 — вид сбоку с обозначенным мезостеральным «зубом» (mtt).

margin of the the prepectus is virtually interrupted in some African species of *Entedon*, overlapped in *Paracrias arizonensis*, *P. laticar*, etc. In some *Horismenus* species the mesosternal tooth does not interrupt the prepectus, although the tooth is directed upwards. The latter situation is peculiar for *Entedon antander* Walker, so I suggest it would be rather placed in *Horismenus*, than in *Paracrias*.

Another character supporting placement of *antander* in *Horismenus* is the presence of the anterior foveae aside from the channels of the median carina. The latter character is peculiar for the genera *Horismenus* and *Pediobius*, but not for the genus *Paracrias*.

The light tibiae, weakly infusate femora and long hind tibial spur might represent a clue to the species recognition for *H. antander*.

Distribution. Brasil (Walker, 1839).

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