NEW GENERA OF PORIZONTINE ICHNEUMONIDAE FROM FLORIDA (HYMENOPTERA)

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ABSTRACT

Two new genera of Ichneumonidae belonging to the subfamily Porizontinae are described from Florida. They are Apsidon (type species: Apsidon niger, new species) and Charmops (type species: Charmops granulosa, new species).

RESUMEN

Se describen de la Florida dos géneros nuevos de Ichneumonidos pertenecientes a la subfamilia Porizontina. Ellos son Apsidon (especie tipo: Apsidon niger, nueva especie) y Charmops (especie tipo: Charmops granulosa, nueva especie).

For the past several years the parasitic Hymenoptera belonging to the family Ichneumonidae have been collected from different parts of Florida using Malaise traps. This material is yielding valuable data on the distribution and abundance of Ichneumonidae in Florida. Several new genera belonging to different subfamilies also have been discovered. The two new genera belonging to the subfamily Porizontinae, namely Apsidon and Charmops are described in this paper and their affinities are discussed.

The collections of the Florida State Collection of Arthropods, Gainesville (FSCA), the American Entomological Institute, Gainesville (AEI), and of Dr. David Wahl (WAHL) also have been examined and their specimens incorporated in this study. The locations of the specimens are indicated in the text by the above mentioned abbreviations.

Genus Apsidon Gupta, new genus, Porizontinae

Type species: Apsidon niger Gupta, new species.

Diagnosis: Apsidon is a rather distinctive genus with clypeus slightly convex and having a blunt tooth-like projection in the middle of its apical margin and a polished depression just above it, nervellus slightly inelous, straight, or angulate and with a faint suggestion of interruption, nervellus slightly distad of basal vein and inelous, glymma present, and thyridium of tergite 2 distad from base of tergite by about its diameter. Its relationships are unclear.

Description: Face and clypeus rugose with junction of face and clypeus depressed, suggesting a demarcation of clypeus from face and a depressed epistomal area (Fig. 1).

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Figs. 1-4. Aspidon niger sp. n. 1-2, front view of head. 3, back view of head. 4, abdomen and ovipositor.

Tentorial pits rather deep and wide, demarcating the clypeus laterally from face. Clypeus weakly convex, slightly wider than the distance between tentorial pits, its lateral margins reflexed and smooth. Apical margin of clypeus convex, smooth, and somewhat impressed, with a polished bifid tubercle in the middle, area just above the tubercle with a pit-like polished depression (Fig. 2). Malar space about 0.4x the basal
width of mandible. Mandible stout, without any flange along its lower margin, but the lower margin with a smooth thick border. Mandibular teeth equal. Occipital carina obsolete ventrally, slightly curved towards hypostomal carina but not joining it (Fig. 3). Hypostomal carina slightly raised near base of mandible.

Epomia strong and close to front margin of pronotum, its upper end curved and merging with striations on pronotum. Notauli absent, its position indicated by different sculpture. Scutellum weakly convex, its lateral carina on basal 0.3 only. Prepectal carina strong, curved, and extending to the level of the notch along the posterior border of pronotum. Postpectal carina complete and slightly raised except in front of middle coxae. Speculum weakly convex, finely granulose, and shiny (Fig. 9). Propodeum rugose, with a moderately deep median groove. Areola wider at costulae and open apically, its lateral carinae diverging away from the median groove; costulae incomplete; lateral lindudinal carinae weaker as compared to other carinae. Propodeal spiracle oval.

Fore wing with a pentagonal and sesiade areolet, the second recurrent vein joining at or slightly distad of its middle (Fig. 5); nervulus distad of basal vein by 0.2-0.3x its distance, inelusive, its lower end a little curved. Hind wing with nervellus either straight or angulate below the middle (Figs. 7-8). Discoidella in the form of a spectral vein represented by a convex crease surrounded by a pair of closely spaced microtrichial lines that do not touch the nervellus (the convex crease may reach up to nervellus) (Figs. 7-8). Axillus in the form of a nebulous vein represented by an arc of brown pigment with orderly row of microtrichia along its edges (Figs. 7-8). Submedian cell in fore wing and hind wing largely devoid of microtrichia (Figs. 5-8). Legs of normal proportions. Hind basitarsus without a midventral row of closely spaced hairs. Longer hind tibial spur 0.5-0.6 the length of basitarsus. Tarsal claws strongly pectinate.

Abdomen slender. Petiole flattened dorsally and smooth dorsally, with a pit-like gynma just below and touching the dorsolateral carina, the latter forming the dorsolateral edge on the tergite and extending only up to the spiracle (Fig. 10). Thyridium of tergite 2 oval and away from base of tergite by its diameter (Fig. 11). Ovipositor compressed, about 2.0x its length as the apical depth of abdomen, slightly upcurved and with a subapical notch (Fig. 4). Ovipositor saccate weakly spatulate.

The name of the genus is derived from the Greek, aspis, meaning shield (clypeus) + odon, tooth, referring to the tooth-like formation on the clypeus. The name is masculine.

Affinites. The affinites of Aspidon are uncertain. The modification on the clypeal margin reminds one of Campeletis, but the two genera are rather different in the nature of the areolet, clypeus, and other structures. The structures of the clypeus, arcolet, areola, first tergite, and ovipositor readily separate the new genus from Rhimphoctona, Pyrrhomy, Trunsemna, and Luctricinus, whereabouts it may key out in the keys given in Townes (1970). It shows some resemblance with Campeletis montanus, but the latter genus has a flat clypeus without any teeth, occipital carina meeting hypostomal carina, areolet petiolate, and the first tergite without a dorsolateral margin. The shape of areola is different in the two genera. The eyes are a little more strongly indented in Campeletis, and the nervellus is straight.

Aspidon niger Gupta, new species (Figs. 1-11)

Male and female: Body covered with white pubescence; pubescence on propodeum longer and on abdomen shorter. Tergites with sparser pubescence dorsally.

Face and clypeus rugose (Fig. 1). Frons rugose centrally. Frons otherwise, area around ocelli, vertex, ocellus, and temple finely granuloise. Lower portion of temple subpolished and shiny. Intercellular distance about 2.0x the ocellocular distance. Pronotum rugoso-striate. Mesoscutum finely rugoso-pinetate on a granular surface, its
Figs. 5-8. *Aspidon niger* sp. n. 5, fore wing. 6, hind wing. 7-8, enlarged portions of hind wing.
central area more rugose than punctate. Scutellum weakly convex, with shallow but close punctures and shiny. Mesopleuron rugoso-punctate (Fig. 9). Mesosternum with distinct, well formed punctures. Metapleuron rugose, rugosities finer than on mesopleuron. Propodeum rugose. Structure of propodeum, wings, and legs as described under the genus.

Pettiole smooth dorsally and laterally, with a gymma and its dorsolateral carina extending up to the epipleural only (Fig. 10 11). Postpetiolo granulose (Fig. 11). Tergite 2 narrowed basally, granulose, its thyrarium oval, distant from base of the tergite by about its diameter, and with a shallow groove-like connection with the base (Fig. 11). Tergite 3 and the following tergites subpolished and with shallow granulations. Ovipositor as described under generic description.

Black. Tegula, fore, and middle tibiae and tarsi dorsally, base of hind tibia, basal 0. 3 of tergite 2, apical band on tergite 2, sternite 2, and membranous portion of sternite 1, yellow. Legs otherwise black with reddish-brown marks on fore and middle tibiae and tarsi. Fore femur with a orange brown dorsal line. Wings brownish-hyaline, with a blackish-brown patch covering the radial cell and part of 3rd cubital cell.

Length: 11-13 mm.; fore wing 7-8 mm.; ovipositor 3 mm.


Georgia: Athens: University Botanical Garden, 1 male, June 1983; 6 males and 7 females, July 1983, Matthews & Gupta (UF, GAINESVILLE).


The specimens show variations in a few characters. The apical protuberance on the clypeus is not bifid in the specimens from Texas, except rarely. The nervellus varies from being straight, without a bend, to distinctly angulate below the middle, sometimes angulate close to its lower end. The fiscoidella is always represented as an unpigmented groove bordered by rows of closely spaced microtrichia (spectral vein); the fiscoidella comes close to and touches the nervellus when the latter is angulate, but the microtrichia are always disorderly near the nervellus and are not arranged in rows.

Genus Charmops Gupta, new genus, Porizontinae

Type species: Charmops granulosa Gupta, new species

Diagnosis: Charmops appears distinctive by its smaller size, body largely granulose with abdomen largely polished and shiny, inner eye margins parallel-sided, and areola broadly open behind and confluent with a trough-like petiolar area. The areol is absent, nervellus is not intercepted, hind basitarsus is without any midventral row of closely spaced hairs, and the gymma is absent.

Description: Inner eye margins parallel-sided. Face appears wider (Fig. 12). Face and clypeus 0.8x as long as their width between inner eye margins, covered with long white pubescence. Clypeus without any demarcation from face (Fig. 12). Apical margin of clypeus convex, somewhat thickened medially, and shiny. Lateral margins of clypeus slightly extending beyond the level of tentorial pits and separated from face by a groove. Mandibles of normal shape, without any wide flange along its lower margin. Upper tooth more pointed and slightly longer than the lower. Occipital carina joining hypostomal carina very close to the base of mandible.
Figs. 9-11. *Aepidon niger* sp. n. 9, side view of thorax. 10, side view of petiole. 11, dorsal lateral view of postpetiole and tergites 2-3.
Epomia distinct along pronotal collar. Notauli absent. Scutellum weakly convex, its lateral carina on basal 0.3 only. Propsectal carina rather strong, curved, and extending to the level of the notch along posterior margin of pronotum (Fig. 13). Postpectal carina complete and not effaced or weakened opposite middle coxae. Propodeum with a median trough in the combined areola and petiolar area (Fig. 17). Areola broadly confluent with petiolar area. Propodeal carinae strong. Costula complete. Propodeal spiracles small and circular. Areollet absent (Fig. 14). Nervulus opposite basal vein or slightly distad of it, moderately inclivous. Nervellus not intercepted (Fig. 15); a concave flexion line visible passing through a bulla in the lower part of nervellus. Discoidella absent (Fig. 15), sometimes with only very faint trace of a spectral vein (no closely set row of microtrichia). Brachiella in the form of an unpigmented spectral vein represented by a row of closely set microtrichia. Axillae in the form of a nebulous vein represented by an arc of brown pigment with orderly row of microtrichia along the arc. Submedian cell in fore wing with microtrichia (Fig. 16). Submedian cell of hind wing without microtrichia in its basal half (Fig 22). Legs of normal proportions except hind femur thicker and shorter. Tarsal claws without pectination. Hind tibia without any midventral row of closely set hairs.

Petiole with dorsolateral carina present between base and spiracle; without bylla; with a few rugosities laterally (Fig. 23). Epipleura of tergite 3 partly separated from tergite. Thyridium of tergite 2 almost circular and separated from base of the tergite by about its diameter (Figs. 18-19). Tergites shiny and with sparse hairs (Fig. 20). Ovipositor about 2.0x as long as the apical depth of abdomen, slightly upcurved, and moderately sclerotized and stout, its apical notch somewhat distant from tip (Fig. 21). Ovipositor sheaths slender and moderately widened apically.

The name of the genus is derived from the Greek, *charma*, meaning joyous or happy + *ops*, face, referring to the facial expression of the genus. The name is feminine.

Affinities: *Charmops* keys to couplet 31 in Townes’ 1970 key to the porizontine genera, by virtue of having a non-intercepted nervellus, hind basistarsus without a continuous row of short hairs midventrally, areollet absent, occipital carina joining hypostomal carina (close to mandibular base), and by the absence of bylla. It is, however, different from *Philositus* (keyed under couplet 31) by having a wider clypeus with its apical margin convex, propodeum with a deeper trough, non-pectinate tarsal claws, circular thyridium that is away from the base of 2nd tergite by about its diameter, and slender ovipositor not more than 2.5x the apical depth of abdomen and slightly upcurved. From other related genera it is different by the absence of bylla and the nature of epipleura of tergite 3. Species of *Charmops* are smaller and more slender.

*Charmops granulosa* Gupta, new species

(Figs. 19-23)

Female: Face and clypeus granulose to ruguloso-granulose, with a few scattered punctures (Fig. 12). Apical margin of clypeus impunctate, shiny, and somewhat thickened medially. Malar space 0.6x the basal width of mandible. Frons rugulose. Vertex and occiput dorsally granulose. Interocellar distance 1.4x the ocellular distance. Temples shallowly granulose and subpolished.

Pronotum subpolished, ruguloso-granulose, its median trough with some striations. Pronotal collar shiny with epomia running parallel to its anterior margin. Mesoscutum and mesopleurum granulose (Fig. 13). Speculum shiny, impunctate, area anterior to speculum with some striations. Mesosternum more finely granulose than mesopleurum. Metapleurum with coarser granulations than the lower part of mesopleurum. Propodeal trough largely rugose (Fig 17); hasolateral areas rugulose; median lateral area and pleural area granulose, granulation similar to that of metapleurum. Legs, wings, and
Fig. 12-16. Charmaps granulosus sp. n. 12, front view of head. 13, side view of thorax. 14, fore wing. 15, hind wing. 16, enlarged view of fore wing.
Figs. 17-21. *Charmops granulosa* sp. n. 17, propodeum and tergite 1. 18-19, tergites 1-2. 20, dorsal view of abdomen. 21, lateral view of abdomen and ovipositor.
abdominal structures similar to that described under the genus. Postpetiole granulose, finely granulose-striate at places (Fig. 18). Second and the following tergites polished and shiny (Figs. 19-20). Tergite 2 superficially punctate basally; others impunctate and with sparse hair.

Black. Mandible except apically, scape, pedicel, tegula, wing bases, and legs largely yellow to yellowish-brown. Mandibular teeth, flagellum, apical 0.3 of hind tibia, and hind tarsus dorsally, brownish to brownish-black. Hind coxa black in basal half. Tergite 1 and base of tergite 2 black. Tergites 2-6 blackish-brown, and tergite 7 yellowish-brown to blackish. Sternites white with blackish median marks. Ovipositor sheaths blackish. Color of abdomen variable. Sometimes whole abdomen uniformly blackish or tergite 1 black and the rest of abdomen brownish-black, or apical tergites yellow laterally. Specimens from Pine Hill Estates, Gainesville have the apical smooth margin of clypeus brownish.

Male: Similar to the female but face more hairy, hairs longer and denser, smooth apical margin of clypeus wider and brownish, granulations on meso- and metapleura weaker, tending to be granuloso-mat rather than granulose, and abdomen brownish-black.

Length: 4.4-5.5 mm.; fore wing 3.3-3.5 mm; ovipositor about 1.5 mm.


The specimen from Georgia has the apical compressed portion of abdomen largely yellowish-brown as is the coloration of the legs. The ovipositor appears a little shorter than in the specimens from Florida.

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A NEW FLORIDIAN ATHYREODON ASHMEAD (HYMENOPTERA: ICHNEUMONIDAE), WITH COMMENTS ON RELATED SPECIES OF THE NORTHERN NEOTROPICS

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ABSTRACT

The ophionine ichneumonid genus Athyreodon occurs from Florida, Cuba, and Texas to Brasil. Its 3 northernmost continental species are found on the Atlantic and Gulf Coastal Plains of the southern United States and eastern México. Athyreodon umbrifer n. sp. inhabits peninsular Florida, A. rivinae (Porter) extends from south Texas to Costa Rica, and A. atriventris (Cresson) ranges between México and Brasil. Athyreodon flies mostly at night. It is collected often at light, and some species flock to mercury vapor lamps. It becomes most abundant from late spring to mid summer, when many