

A New Species of *Cerceris* from Hispaniola, West Indies (Hymenoptera: Crabronidae: Philanthinae)

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ABSTRACT: A new species of apoid wasp, *Cerceris howardevansi*, is described from Hispaniola, West Indies. It is the third species of the genus known from the Greater Antilles, and it belongs to the species group I of Scullen (1972).

KEY WORDS: West Indies, *Cerceris*, Philanthinae

The genus *Cerceris* is cosmopolitan in distribution, occurring on every continent and on many islands, mainly large ones (Scullen, 1965, 1972; Bohart and Menke, 1976). The nesting behavior has been studied by many investigators. Many species are solitary although communal nesting, nest-switching and nest-sharing have been observed (Evans and Hook, 1982, 1986; Hook, 1987). Females prey mainly upon beetles to provision their nests (Scullen, 1965; Bohart and Menke, 1976).

The *Cerceris* fauna of the West Indies has been studied by Giner-Marí (1941), Alayo (1968) in Cuba, and by Elliott *et al.* (1979, 1980) in the Bahamas. Ferguson (1984a) and Bohart and Menke (1976) listed the species of the area. Ferguson (1984a, b) revised much material from the West Indies and corrected names. Only one species of *Cerceris* has been known from Hispaniola; the purpose of this study is to add a new species to the known fauna of that island.

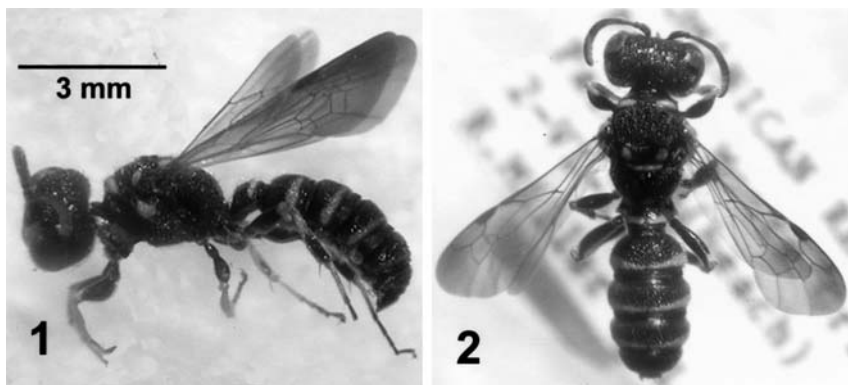
Cerceris howardevansi Genaro, new species

DIAGNOSIS: *Cerceris howardevansi* n. sp. belongs to the species group I of Scullen (1972). Diagnostic characters are small size (7.0–9.1 mm: Figs. 1, 2), black with creamy-yellow markings and forewings with stigma dark. Female with mandibles bidentate (Fig. 3) and mesosternal tubercle creamy-yellow at apex. Anterior surface of pygidium with few punctures, irregularly wrinkled (Fig. 4). Male face with small and widely separated hairs; apical segment of antenna not distorted; propodeal enclosure rugose, wrinkles scarcely reaching medial groove. A combination of characters, color and pattern of markings, clypeal form, form and sculpture of the pygidium, distinguish it from the other two West Indian species belonging to the species group I: *C. cubensis* Cresson and *C. hatuey* Alayo. In the Description, comparisons with other species are included in brackets.

DESCRIPTION: **Female.** Black with creamy-yellow markings (Fig. 2) [yellow in *C. cubensis* Cresson and *C. hatuey* Alayo]. Body length: 8.1 mm. Forewing length: 6.9 mm.

Head slightly wider than the mesosoma (Fig. 2). Black, the following creamy-yellow: mandible except apex, clypeus except free border of medial lobe, supra-clypeal area, frons, scape beneath, small round spot behind eye. Antenna brown, darker above. Medial clypeal lobe slightly depressed medially, margin with two lateral denticles on each side. Mandible bidentate. Gena and vertex closely and very coarsely punctate, punctures widely separated

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Figs. 1–2. *Cerceris howardevansi* n. sp. 1. Lateral aspect of male. 2. Dorsal aspect of female.

on frons, supraclypeal area and clypeus (Fig. 3). Interantennal lamella developed. Head covered by sparse white hairs, more dense on lateral area of clypeus [Clypeus of *C. cubensis* very similar to that of *C. howardevansi*, but female of *C. hatuey* has clypeal process emarginate, its free border without denticles.].

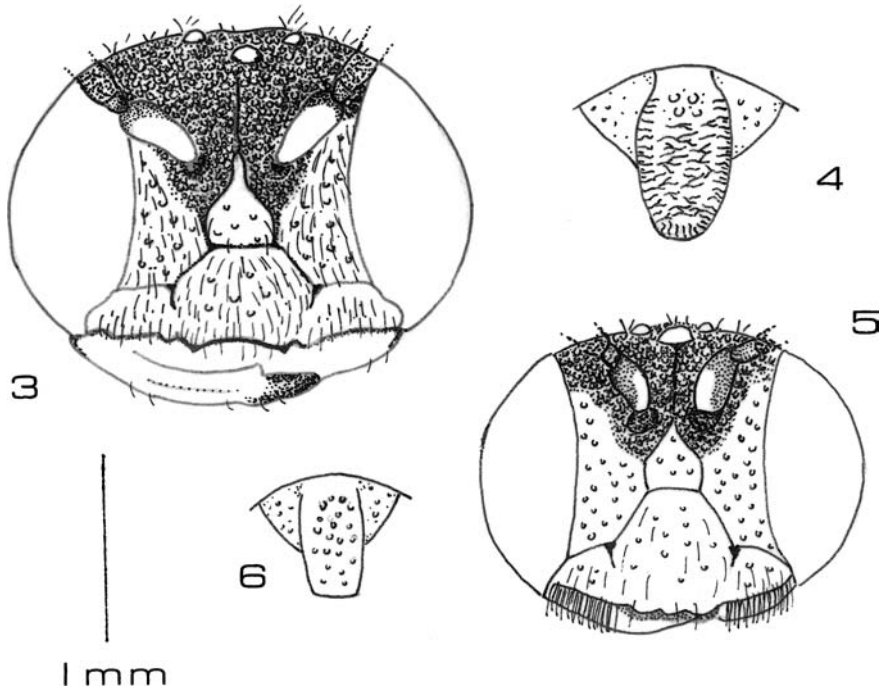
Mesosoma black except for the following creamy yellow: interrupted band on pronotum, two spots on scutellum, band on metanotum (Fig. 2), spot on mesopleuron, tegula, a small spot on mesosternal tubercle. Pygidium brown [*C. hatuey* has yellow lateral patches on the propodeum.]. Legs black except for the following creamy-yellow: apical patches on all femora at joints with tibiae, outer surfaces of fore and mid tibiae, basal area of hind tibia, tarsi. Wings infumated with brownish, marginal cell and apex anteriorly of forewing more strongly so, stigma and veins darker (Fig. 2).

Scutellum, mesopleuron, propodeum coarsely punctuate (punctures of same size as on head), scutum with contiguous punctures, tegula micropunctate on inner (black) surface, smooth on outer (creamy-yellow) surface; propodeal enclosure rugose, with a medial groove (wrinkles scarcely reach the medial groove) [in *C. hatuey* and *C. cubensis* propodeal enclosure is more rugose, wrinkles reaching the medial groove]. Vestiture white, sparse, short.

Metasoma black except creamy-yellow interrupted (in the middle) band on tergum I, a band (broader at sides) on apical borders of terga II–V (Fig. 2); two patches at sides of sterna II, III and IV, those on sternum II very small [Sternal marking extensive in *C. cubensis*.]. Terga coarsely punctuate (like head and mesosoma); sterna with small, sparse punctations. Pygidium as illustrated (Fig. 4), surface basally with a few large punctures [without punctures in *C. cubensis*], irregularly wrinkled. Pygidium with a cluster of small bristles on each side inserted on apical sternite. Vestiture white.

Male. As female with the following additions. Total body length: 7.0–9.1 mm ($N = 3$) (Fig. 1). Forewing length: 4.9–7.8 mm ($N = 3$). Head with creamy-white markings coarsely punctuate; without small round spot behind eye; clypeus as in Fig. 5, medial clypeal lobe not depressed, flat; hairy lateral lobes of clypeus as in Fig. 5. Creamy-yellow markings on mesosoma and metasoma reduced. Pygidium as illustrated, surface with large, deep punctures (Fig. 6) [Sides of pygidium of *C. cubensis* not parallel, angulate near basal end which is narrowed. Sides of pygidium in *C. hatuey* subparallel, not angulated, with basal end narrow].

TYPE MATERIAL: HOLOTYPE: Female, HISPANIOLA: Dominican Republic, Province Monte Cristi, Paroli (beach), 2.vi.1986, colls. R. Miller and L. Stange [Florida State



Figs. 3–6. *Cerceris howardevansi* n. sp. Female: 3. Face, 4. Pygidium. Male: 5. Face, 6. Pygidium.

Collection of Arthropods, Gainesville (FSCA)]. Three paratype males: (FSCA, Museo Nacional de Historia Natural de Cuba), same data as holotype.

ETYMOLOGY: The species is named for Howard E. Evans, who contributed to the increase of systematic knowledge of wasps, and who inspired me so much during a study of nesting behaviour of sphecoid wasps.

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