Opius (Phlebosema) hydrellivorus spec. nov., a parasite from Hydrellia in rice in Guyana (Hym., Braconidae, Opiinae)

by

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ABSTRACT — A parasite reared from *Hydrellia* spec. in rice, *Opius (Phlebosema) hydrellivorus* spec. nov., is described. It has been reared in Guyana and most probably in Surinam. A key to the related Neotropical species is added.

INTRODUCTION

In connection with a research project being carried out by Mr. Indal Rambajan (Georgetown, Guyana) on the parasites of phytophagous insects on rice, a name is required for a small braconid reared from a *Hydrellia* spec. (Diptera, Ephydridae) in rice. It belongs to the very large genus *Opius* Wesmael, 1835, the species of which are endoparasites of larvae of Diptera. The hosts are almost exclusively species with mining larvae.

Opius (Phlebosema) hydrellivorus spec. nov. (Fig. 1-7)

Holotype, ♀, length of body and of fore wing both 1.9 mm (but 1.7 mm in the ♀-paratypes).

Head.- Antennal segments 20 (as both ♀-paratypes), length of 3rd segment 1.1 times 4th segment, length of 3rd and 4th segment 3.0 and 2.7 their width, respectively, the penultimate segments 2.3 times their width; palpi medium-sized (Fig. 1), slender; length of maxillary palp ca. 0.7 times height of head; genal carina remains separated from occipital carina; eye bare; dorsal length of eye 1.4 times temple; temple roundly narrowed behind (Fig. 6); POL : ∅ ocellus : OOL = 10 : 4 : 7; frontal suture absent; frons weakly convex; vertex smooth; stemmaticum somewhat protruding; occipital carina absent dorsally, laterally present and area in front of it crenulate; face unevenly convex, smooth (except for some indistinctly developed microsculpture); anterior tentorial pits medium-sized, deep, round; clypeus convex, narrow, its apical margin thick; hypoclypeal depression present (Fig. 7); epistomal suture deep, complete; occipital flange absent; malar space 0.8 times basal width of mandible; malar suture absent; mandible with two teeth, 2nd tooth sharp, subequal to 1st tooth; mandible slightly widened basad; width of head 1.4 times width of mesoscutum.

Mesosoma.- Length of mesosoma 1.4 times its height; pronope absent, but a transverse suture present; side of pronotum smooth except for some microsculpture posteriorly and anteriorly; epicnemial area finely rugose; precoxal suture rather narrow, superficially rugose-crenulate and posterior two-fifths absent (Fig. 1); pleural suture narrow, smooth (except for some microsculpture); episternal scrobe narrow and deep; mesopleura smooth, but below precoxal suture more or less finely punctulate; metapleural flange absent, without protruding carina; metapleura microsculptured, except for some carinae; notauli present in basal third only, nearly smooth and with some setea along its imaginary course; mesoscutum convex, shiny, faintly microsculptured, without medial suture or pit, inclivous anteriorly (Fig. 1); scutellar suture deep, rather narrow, with four short longitudinal carinae; scutellum nearly smooth and flat, its lateral carina absent; side of scutellum almost smooth; surface of propodeum reticulate and microsculptured, without medial carina; length of posterior surface of propodeum about equal to dorsal surface, without distinct areola; propodeal spiracle small, round.

Wings.- First discoidal cell longly petiolate anteriorly; r 1: r 2: r 3 = 5 : 38 : 100; CU 2 slightly narrowed distad; r 3 almost straight (Fig. 2); nervulus short; d 1 : d 2 = 3 : 12; nervellus short; 1st brachial cell open ventrally; sm 2 absent, except for a weakly pigmented trace; fringe medium-sized; parastigma rather large; cuqu 1 : r 2 : cuqu 2 = 11 : 19 : 5; n. rec. narrowly antefurcal; metacarp ends near apex of radial cell.

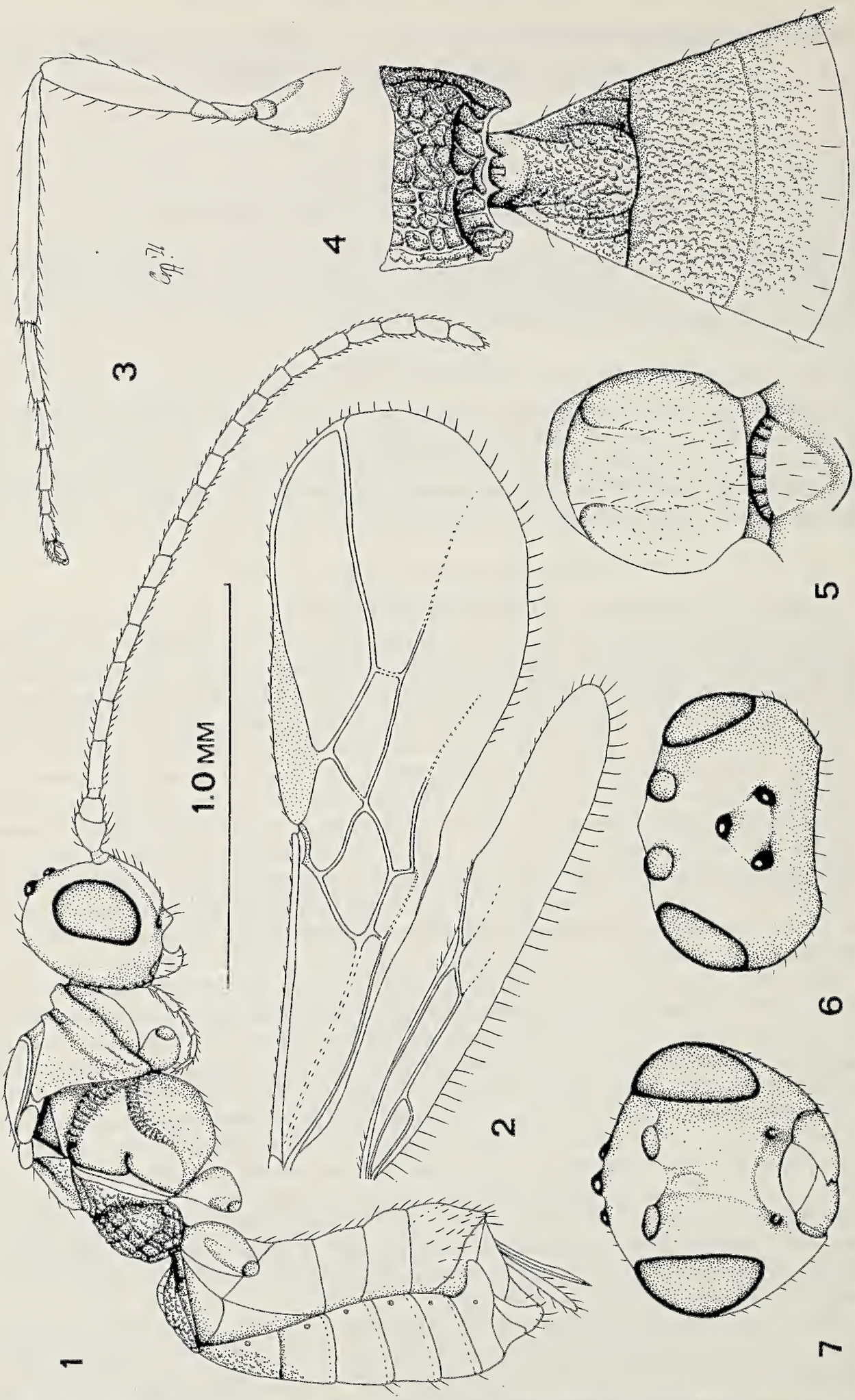

Fig. 1-7, *Opius (Phlebosema) hydrellivorus* spec. nov.; 1-3, 5-7, holotype; 4, paratype, ♀, 1, habitus, lateral aspect; 2, wings: 3, hind leg, lateral aspect; 4, propodeum and three basal segments of metasoma, dorsal aspect; 5, mesonotum, dorsal aspect; 6, head, dorsal aspect; 7, head, frontal aspect. 1-3: scale line; 4-7: 1.5 times scale line.

Legs.- Hind coxa smooth; femur and tibia smooth; all tarsal claws simple and slender; femur, tibia and basitarsus of hind leg 4.0, 9.3 and 6.5 times their width, respectively; tibial spurs inconspicuous.

Metasoma.- Length of 1st tergite 0.7 times its apical width, its surface densely reticulate-rugose, flattened medially, dorsal carinae present in basal half, spiracles flat, somewhat behind middle; glymma wide, narrowed apicad; laterope deep, elliptical; dorsope shallow; 2nd and 3rd tergites (except for the smooth margin of the latter) coriaceous (Fig. 4); length of 3rd tergite 0.8 times 2nd tergite; remainder of metasoma smooth; setae of 4th-6th tergites in rows; 2nd tergite with lateral crease; ovipositor straight; ovipositor sheath 0.12 times fore wing; hypopygium large.

Colour.- Brownish yellow; antenna (except for parts of scapus and pedicellus), stemmaticum, telotarsi, tegulae and ovipositor sheats, dark brown; pterostigma brown; wings slightly infuscated.

Holotype in author's collection, to be deposited in the Rijksmuseum van Natuurlijke Historie, Leiden: "British Guyana, Burma, endopar. of Hydrellia sp. in rice, 8.II.1976". Paratypes: topotypic, 2 ♀♀ and 1 ♂ (the allotype) (author's collection and Naturhistorisches Museum, Wien).

The male is essentially like the female, but length of body 2.1 mm, length of fore wing 1.9 mm, antennal segments 25 and length of 1st metasomal tergite 0.9 times its apical width in the allotype.

Notes.- *O. hydrellivorus* spec. nov. is well characterized by the combination of the comparatively low number of antennal segments, the reduction of sm 2 resulting in the open brachial cell and the smooth pleural suture. According to Fischer (1968) this species belongs to the *coleogaster*-group of his section C. The species in this group share the following characters: medial mesoscutal pit or suture absent; precoxal suture sculptured, hypoclypeal depression present, and n. rec. antefurcal or interstitial. The Neotropical species of the *coleogaster*-group with the second metasomal tergite sculptured and without sublongitudinal sutures may be keyed as follows: (the insertion of the species described by Fischer are based on his extensive descriptions)

1a. Antennal segments of ♀ 25-31; sm 2 present; B 1 closed posteriorly; subdiscoideus from B 1 medially; body blackish, if yellowish, then propodeum finely rugose and tegulae yellowish 2

b. Antennal segments of ♀ 20; sm 2 absent, except for a weakly pigmented trace; subdiscoideus from B 1 more posteriorly (Fig. 1); body mainly yellowish; tegulae dark brown; propodeum reticulate; Guyana . . . . . *hydrellivorus* spec. nov.

2a. Pleural suture finely crenulate; antennal segments of ♀ 25-29; body mainly blackish . . 3

b. Pleural suture smooth, antennal segments of ♀ 31; body mainly reddish or yellowish; Brazil . . . . . *glabriceps* Fischer, 1968

3a. Face smooth, shiny; antennal segments of ♀ 25; length of body ca. 1.4-1.6 mm; Costa Rica 4

b. Face shagreened, dull; antennal segments of ♀ 29; length of body ca. 2.0 mm; Peru . . . . . *parvicrenis* Fischer, 1965

4a. Temple almost as long as eyes dorsally; length of r 2 ca. 2.0 times cuqu 1 . . . . . *subvisibilis* Fischer, 1964

b. Temple about half as long as eyes dorsally; length of r 2 ca. 1.3 times cuqu 1 . . . . . *uniformis* Fischer, 1963

According to Fischer (in litt.) this species is new to science and shows relationship to the Nearctic O. *myakkensis* Fischer, 1964. But *myakkensis* has the first brachial cell closed, the nervulus nearly interstitial and the body colour is mainly black.

The only other known New World species reared from *Hydrellia* spp. is *O. hydrelliae* Muesebeck, 1933 from California. But e.g., *hydrelliae* has the vertex chagreened, the n. rec.

postfurcal, the body mainly black, and the length of the hind femur ca. 6 times its width.

The species described in the present paper is probably identical with the *Opius* species reared from a *Hydrellia* species in Surinam mentioned by Van Dinther (1960:123).

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