# Pambolus oblongispina sp. n. from Honduras (Hymenoptera: Braconidae: Pambolinae)

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ABSTRACT. *Pambolus oblongispina* sp. n. is described from Honduras; little known *Pambolus longicornis* (Enderlein, 1920) is redescribed. An identification key for the three neotropical species of the genus *Pambolus* Haliday, 1836 is given. 23 original figures are included.

Key words: entomology, taxonomy, new species, redescription, *Hymenoptera*, *Braconidae*, *Pambolus*, Honduras, identification key.

### INTRODUCTION

After the publication of my paper on the tropical members of *Pambolus* (Papp 1996) I received five *Pambolus* specimens from Dr. R. Danielsson (Zoological Museum, Lund) collected in Honduras, Central America: one female and four males. The single female proved to be a new species and the four males represent *Pambolus longicornis* described by Enderlein (1920). The two species are described and redescribed, respectively, and my earlier identification key (Papp l.c.) is completed with the new species.

ABBREVIATIONS APPLIED IN THE DESCRIPTIONS:

Ocelli — OD = longest diameter of ocellus, OOL = shortest distance between hind ocellus and eye, POL = shortest distance between two hind ocelli.

Wing venation — m-cu = transverse medio-cubital vein, r = transverse radial vein, CU1a = parallel vein, I-M = basal vein, 2-SR = first transverse cubital vein, 3-SR and 4-SR = second and third sections of radial vein.

Sex — M = male, F = female.

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### ACKNOWLEDGEMENT

My sincere thank should go to Dr. R. Danielsson (Zoological Museum, Lund) who made his *Pambolus* material from Honduras available for studies, and to Dr. T. Huflett (Museum and Institute of Zoology, Polish Academy of Sciences, Warszawa) for the loan of the holotype of *Pambolus longicornis* from the Enderlein Collection deposited at his institution.

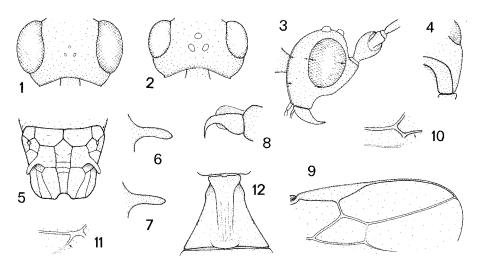
### Pambolus (Phaenodus) longicornis (Enderlein)

(Figs 2-12)

Phaenodus longicornis Enderlein, 1920: Arch. Naturg. 84 (A) 11 (1918): 145 "F" = M, type locality: "Südbrasilien, Santha Catharina", male holotype at the Zoological Institute, Warszawa; examined. — Shenefelt 1975: 1161 (literature up to 1963). PAPP 1996: 46 (in key).

MATERIAL EXAMINED (6 MM). — Holotype male: Brazil: Santha Catharina, leg. Lüderwaldt. — 5 MM: Honduras: Parque Nacionale Cusuco, 5 km N Buenos Aires, 15°29'N and 88°13'W, 30 March 1995 (1 M taken with Malaise trap), 30 July 1995 (2 MM), 15 January 1966 (2 MM taken with Malaise trap set up in an oak-pine cloud forest), leg. R. Cave.

Depository of the five males from Honduras: Four males are housed at the Zoological Museum, Lund and one male at the Hungarian Natural History Museum (Department of Zoology), Budapest.



1. Pambolus hebes PAPP: head in dorsal view; 2–12. Pambolus longicornis (ENDERLEIN): 2 - head in dorsal view, 3 - head in lateral view, 4 - hypostomal and occipital carinae, 5 - propodeum, 6–7 - spine of propodeum in lateral view (6 - female holotype, 7 - male), 8 - claw, 9 - distal part of right fore wing, 10 - parallel vein or CU1a (see arrow) and distal half of first subdiscal cell of fore wing, 11 - recurrent vein or m-cu, 12 - first tergite

Through Dr. T. Huflejt's (Warszawa) kindness (see also acknowledgement) recently I have received the holotype of *Pambolus longicornis* for examination. Because of the lack of original material its redescription was disregarded in my paper on the tropical *Pambolus* species (Papp 1996) on one hand, and on the other in the original description (Enderlein 1920) several features were not considered which are currently needed in the taxonomy of the pamboline species. The holotype of *P. longicornis* is a male and not a female as it was indicated in the original description.

M. Body 2.2–2.6 mm long. Antenna twice as long as body and with 30–32 antennomeres. First flagellomere 3.4 times as long as broad apically, further flagellomeres gradually shortening and faintly attenuating so that penultimate flagellomere three times as long as broad. — Head in dorsal view (Fig. 2) transverse, 1.7 times as broad as long, eye somewhat more than twice as long as temple, the latter rounded, occiput excavated. Ocelli medium-sized, elliptic, POL: OD: OOL as 4:5–5.5:10. Eye in lateral view 1.3 times as high as wide and 1.4 times as wide as temple, temple ventrally widening so that here as wide as eye (Fig. 3, see arrows). Hypostomal and occipital carinae not meeting, far from each other (Fig. 4). Oral opening elliptic, twice as wide horizontally as high. Head polished, at most face above near antennal socket finely to very finely and transversely striolate.

Mesosoma in lateral view 1.4 times as long as high. Pronotum mediotransversely crenulate. Mesoscutum densely and finely granulate, notaulix distinct, shallow. Scutellar sulcus long and with either five or three crenulae. Scutellum just uneven, shiny. Propodeum areolate, areolae at most uneven (Fig. 5); pair of lateral spines short, as long as half fore basitarsus (Figs 6–7). Precoxal suture crenulate, mesopleuron above rugose, otherwise mesopleuron polished. — Hind femur 4.1 times as long as broad medially. Hind basitarsus as long as tarsomeres 2–4 and one-third of tarsomere 5 combined. Claws of legs as in Fig. 8.

Fore wing about as long as body or somewhat longer. Pterostigma narrow (Fig. 9), 4.7–5 times as long as wide and issuing r either from its middle or just distally from its middle, r either shorter than or almost as long as width of pterostigma. Second submarginal cell short, 2–SR 1.3–1.45 times as long as 3–SR, 4–SR straight, reaching tip of wing and 3.7–3.8 times as long as 3–SR. 1–M 1.6 times as long as m-cu, m-cu interstitial (holotype) or antefurcal (4 MM). Parallel vein (CU1a) issuing from outer side of first subdiscal cell (Fig. 10, see arrow). — Hind wing: m-cu vestigial, either interstitial (holotype) or antefurcal (4 MM) (Fig. 11, see arrow).

Metasoma about as long as mesosoma. First tergite (Fig. 12) evenly broadening posteriorly, as long as broad behind (male holotype) or somewhat broader behind than long (four males), pair of keels extending to hind half of tergite, pair of spiracles posteriorly from its middle, scutum striate, laterally from scutum tergite smooth, shiny. Further tergites polished, second tergite medio-basally finely substriolate to variable extent.

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Ground colour of body reddish yellow or brownish yellow. Occiput, mesoand metapleuron and last tergites more or less darkening, propodeum sometimes darkening, mesoscutum light reddish or brownish yellow. Scape and petiole brownish yellow or brownish, flagellomeres 1–2 to 1–4 progressively darkening and rest of flagellum brown. Palpi white. Legs yellow, hind tibia entirely (holotype) or apically (4 MM) and hind tarsus also entirely brownish. Wings hyaline, pterostigma and veins opaque yellow.

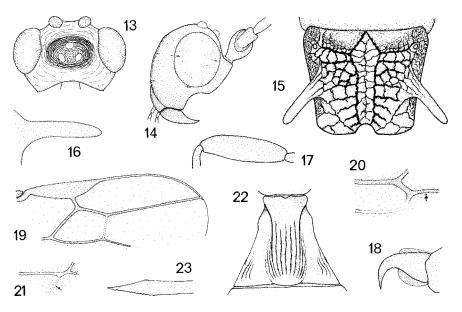
Female and host unknown.

DISTRIBUTION: Brazil, Honduras.

*Pambolus longicornis* EnderLein is closest to *P. oblongospina* sp. n., for their distinction see the key, p. 6 couplets 3(4) - 4(3).

## Pambolus (Phaenodus) oblongispina sp. n. (Figs 13-23)

Material examined (1 F). — Holotype female: Honduras, Fco. Morazan, Zamorano, yellow trays, 5–10 March 1997, leg. C. Hansson. — Holotype is deposited at the Zoological Museum, The University, Lund.



13–23. Pambolus oblongispina sp. n.: 13 - head in dorsal view, 14 - head in lateral view, 15 - propodeum, 16 - spine of propodeum in lateral view, 17 - hind femur, 18 - claw, 19 - distal part of right fore wing, 20 - parallel vein or CU1a (see arrow) and distal half of first subdiscal cell of fore wing, 21 - recurrent vein or m-cu of hind wing, 22 - first tergite, 23 - posterior end of ovipositor

ETYMOLOGY — The species name "oblongispina" refers to the very long pair of spines of the propodeum.

Description of the holotype — Body 4 mm long. Antenna long, 1.5 times as long as body and with 38 antennomeres. First flagellomere three times as long as broad apically, further flagellomeres gradually shortening and indistinctly attenuating so that penultimate flagellomere twice as long as broad. — Head in dorsal view (Fig. 13) transverse, 1.8 times as broad as long, eye large and 2.4 times as long as temple, the latter receded, occiput excavated. Ocelli medium-sized, elliptic, POL: OD: OOL as 5:5:10. Eye in lateral view nearly round, 1.2 times as high as wide, eye twice as wide as temple, temple ventrally clearly widening so that here nearly as wide as eye (Fig. 14, arrows). Hypostomal and occipital carinae not meeting. Oral opening elliptic, twice as wide horizontally as high. Face transversely rugulo-rugose, temple polished, frons-vertex-occiput around ocellar field with concentric striation (Fig. 13).

Mesosoma in lateral view 1.5 times as long as high. Pronotum crenulate transversely. Notaulix indicated by rugosity, on disc of mesoscutum this rugosity bordered outside by a weak keel. Between notaulices a medio-longitudinal weak keel. Lateral pair of mesoscutal lobes rugo-rugulose. Scutellar sulcus long and with five crenulae, crenulae 0.6 times as long as scutellum. Scutellum polished. Propodeum roughly and transversely rugose with long and narrow *areola basalis* bordered with strong keel (Fig. 15); pair of lateral spines long, as long as basitarsus of fore leg (Fig. 16). Precoxal suture wide and crenulate, mesopleuron above rugose and crenulate, otherwise mesopleuron smooth and shiny. — Hind femur 3.6 times as long as broad medially (Fig. 17). Hind basitarsus slightly longer than tarsomeres 2–4 combined. Claws of legs as in Fig. 18.

Fore wing about one-third shorter than body or three times as long as mid tibia. Pterostigma (Fig. 19) four times as long as wide and issuing r distally from its middle, r half as long as width of pterostigma. Second submarginal cell short, 2-SR 1.3 times as long as 3-SR, 4-SR straight, reaching tip of wing and 3.5 times as long as 3-SR. 1-M 1.6 times as long as m-cu. Parallel vein (CU1a) issuing from outer side of first subdiscal cell (Fig. 20, see arrrow). — Hind wing: m-cu present, in right wing anterfurcal (Fig. 21, see arrow) and in left wing interstitial.

Metasoma about as long as head and mesosoma combined. First tergite (Fig. 22) strongly broadening posteriorly, one-sixth broader behind than long medially, its scutum striate, laterally from scutum tergite striolate to uneven. Further tergites polished. Ovipositor sheath in lateral view as long as fore tarsomeres 1–4 combined. Posterior end of ovipositor finely serrate as in Fig. 23.

Ground colour of head and mesosoma black, that of metasoma rusty brown. Scape, pedicel and flagellomeres 1–7 brownish yellow, flagellomeres 8–9 darkening and further flagellomeres dark brown except white flagellomeres 20–26. Palpi white; cheek, clypeus and labrum brownish yellow. Margin around eye and face above around antennal socket rusty. Lateral lobe of mesoscutum and scutel-

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lum also rusty. First tergite black. Metasoma posteriorly somewhat lightening rusty brown. Spine of propodeum apically white. Legs white, tarsi brownish yellow. Wings hyaline, pterostigma and vein opaque yellow.

Male and host unknown.

DISTRIBUTION: Honduras.

The new species, *Pambolus (Phaenodus) oblongispina*, is closest to *P. (Ph.) longicornis* (Enderlein), for their distinction see the key below couplets 3 (4) — 4 (3).

### KEY TO THE NEOTROPICAL SPECIES OF THE GENUS PAMBOLUS

1 (2) Wings reduced or rudimentary, i.e. scale-form and venation indistinct (subgenus *Pambolus* Haliday, 1836). Head coriaceous rugulose, dull. Antenna short, somewhat longer than body and with 20–22 antennomeres. Temples in dorsal view very short, one-fifth to one-fourth as long as eye and receded (Fig. 1). Flagellum reddish yellow, last one or two flagellomeres brownish to brown. MF: 2–2.1 mm

P. (P.) hebes PAPP, 1996

- 2 (1) Wings fully developed and with distinct venation (subgenus *Phaenodus* Foerster, 1862) (Figs 9, 19). Head either smooth and shiny (Fig. 2) or sculptured (Fig. 13). Antenna long, at least one-and-a-half times as long as body and at least with 30 antennomeres. Temple in dorsal view longer, one-third to half as long as eye (Fig. 2, 13).
- 3 (4) Pair of spines of propodeum short, i.e. at least half as long as basitarsus of fore leg (Figs 6–7). Head smooth and shiny (Fig. 2). First tergite less broadening posteriorly, its striation weaker (Fig. 12). Propodeum areolate, areolae at most uneven (Fig. 5). Flagellomeres 27–29 white. Body light: its ground colour reddish yellow or brownish yellow with brownish to brown suffusion. M: 2.2–2.6 mm

P. (Ph.) longicornis (ENDERLEIN)

4 (3) Pair of spines of propodeum long, i.e. as long as basitarsus of fore leg (Fig. 16). Head sculptured: face transversely rugulo-rugose, vertex around ocellar field striate, temple polished (Fig. 13). First tergite more broadening posteriorly, its striation strong (Fig. 22). Propodeum roughly and transversely rugose with distinct *areola basalis* (Fig. 15). Flagellomeres 20–26 white. Body dark: its ground colour black with rusty to rusty brown pattern. F: 4 mm

P. (Ph.) oblongispina sp. n.

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