

# **Bentonia gen. nov. (Hymenoptera: Braconidae: Orgilinae) from Brazil**

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**Key words:** Hymenoptera; Braconidae; Orgilinae; *Bentonia*; Neotropical; Brazil; key.

The new genus *Bentonia* from Brazil (type species *Bentonia longicornis* spec. nov.) is described and illustrated. The two species known are keyed.

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## **Introduction**

The genera of the subfamily Orgilinae Ashmead, 1900 were recently revised by van Achterberg (1987). Among material kindly made available by Mr T. Huddleston (BMNH) a new and highly aberrant genus belonging to the tribe Mimagathidini Enderlein, 1905, was discovered, represented by two species which are described below. The biology of the new genus is unknown, but the few data available for the Mimagathidini indicate that they are endoparasites of larvae of Pyralidae and Tortricidae.

For the identification of the subfamily Orgilinae, see van Achterberg, 1990, and for the terminology used in this paper, see van Achterberg, 1988.

## **Descriptions**

### ***Bentonia* gen. nov. (figs 1-19)**

Type species: *Bentonia longicornis* spec. nov.

Etymology.— Named after the collector of all known specimens, Mr F.P. Benton. Gender: feminine.

Diagnosis.— Antenna very long (figs 4, 9), its length 1.7 (♀)-2.1(♂) times fore wing; scapus ovoid, ventrally longer than dorsally, and its outer apex oblique (fig. 10); clypeus normal, straight ventrally; third labial palp segment short and together with fourth segment inserted on second segment; occipital carina wide, absent medio-dorsally, and ending abruptly dorsally, apically protruding (fig. 7); epistomal suture present, shallow; malar suture shallow and narrow; mandible distinctly widened ventro-basally (figs 15, 17), strongly twisted apically and outer tooth longer than inner tooth; length of mesosoma 1.2-1.3 times its height; dorsal pronope large (fig. 13); lateral carina of mesoscutum largely absent; prepectal carina strong, complete, and reaching anterior margin of mesopleuron (fig. 10); precoxal sulcus com-

plete and narrowly crenulate (fig. 10); propleuron flat; mesopleuron angulate ventro-posteriorly; mesosternal sulcus shallow, narrow and nearly smooth; notauli complete, indistinctly crenulate and posteriorly united in a very deep medio-posterior depression (figs 13, 16; deeper than in *Stantonia*); mesoscutum setose and (sparsely) punctate; scutellum with deep elongate depression (figs 13, 16), without medio-posterior depression; scutellar sulcus with median carina; metanotum with median carina anteriorly (fig. 16); metapleural flange medium-sized and flattened; propodeum with median carina distinct anteriorly (fig. 14), and with high lamella posteriorly (fig. 10); vein 1-M of fore wing straight and long (fig. 4); vein r-m of fore wing present; vein cu-a of fore wing vertical, interstitial (fig. 14); vein 2-M of fore wing sclerotized; vein SR1 of fore wing straight; outer face of hind tibia with few pegs (fig. 11); hind coxa with coarse rugae (figs 8, 10); length of first tergite about 4 times its apical width (fig. 14), its dorsal carinae absent; second metasomal tergite smooth, and without depressions; second and base of third tergites with sharp lateral crease (fig. 10); ovipositor with minute notch, no teeth and valvilli submedially or behind middle of ovipositor; length of ovipositor sheath 0.1-0.2 times fore wing.

**Distribution.**—Neotropical (Brazil).

**Biology.**—Unknown.

**Note.**—Runs in the key to the genera of the subfamily Orgilinae (van Achterberg, 1987) to the genus *Stantonia* Ashmead, 1904 from which it can be separated as follows:

- 3b. Scutellum with deep longitudinal depression (figs 6, 16); hind coxa with coarse transverse rugae (figs 8, 10); mesoscutum with deep medio-posterior depression (figs 13, 16); propodeum with a high lamella apically (fig. 10); dorsal apex of occipital carina angulate (figs 7, 10); median carina of metanotum present anteriorly (fig. 13); median carina of propodeum strong (fig. 14); mesopleuron angulate ventro-posteriorly ..... *Bentonia* gen. nov.
- Scutellum evenly convex; hind coxa with at most medium-sized and less numerous rugae; mesoscutum at most with a rather shallow depression medio-posteriorly; propodeum without high apical lamella; dorsal apex of occipital carina normal, not angulate protruding; median carina of metanotum absent or obsolescent; median carina of propodeum usually absent, if present then weakly developed; mesopleuron rounded ventro-posteriorly ..... *Stantonia* Ashmead

#### Key to species of the genus *Bentonia* nov.

1. Scutellum only with elongate median depression, without carina, and posterior border of depression rounded, not carinate (figs 6, 13); hind coxa, propodeum and metasoma with blackish patches; length of ovipositor sheath about 0.1 times fore wing (fig. 10); tegula largely dark brown; apex of hind tibia dark brown; valvilli of ovipositor submedially situated (fig. 10) ..... *B. longicornis* spec. nov.
- Scutellum with median carina in elongate depression anteriorly (fig. 16), and posterior border of depression carinate (fig. 16); hind coxa, propodeum and metasoma without dark patches; length of ovipositor sheath about 0.2 times fore wing; tegula yellowish; apex of hind tibia blackish; valvilli of ovipositor distinctly behind middle of ovipositor ..... *B. scutellaris* spec. nov.

**Bentonia longicornis spec. nov.**  
 (figs 1-15)

**Material.**— Holotype, ♀ (BMNH), “Brazil: Cepec, Itabuna, Bahia, 15-17.ix.1983, F.P. Benton”. Paratype, 1 ♂ (BMNH), topotypic and same date.

Holotype, ♀, length of body 6.2 mm, of fore wing 6.5 mm.

**Head.**— Antennal segments 58, length of third segment 1.4 times fourth segment, length of third, fourth and penultimate segments 4.6, 3.2 and 2.6 times their width, respectively (figs 9, 10); length of maxillary palp 1.5 times height of head; in dorsal view length of eye twice temple (fig. 2); temple directly narrowed posteriorly, punctulate-coriaceous; OOL:diameter of ocellus:POL = 7:4:5; frons smooth medially, rugulose laterally, punctate posteriorly (fig. 2); vertex flattened near stemmaticum, convex, punctate laterally; face convex, punctate and sublaterally superficially rugose (fig. 1); clypeus convex and coarsely punctate; length of malar space 1.3 times basal width of mandible.

**Mesosoma.**— Side of pronotum crenulate medially and posteriorly, punctate anteriorly and remainder smooth (fig. 10); mesopleuron smooth (beside precoxal sulcus); metapleuron sparsely punctulate; interspaces between punctures on mesoscutum about equal to diameter of punctures; middle lobe of mesoscutum with weak median carina (fig. 13); scutellum with elliptical depression, without median carina or posterior carina (fig. 6); surface of propodeum with some coarse rugae, remainder largely smooth.

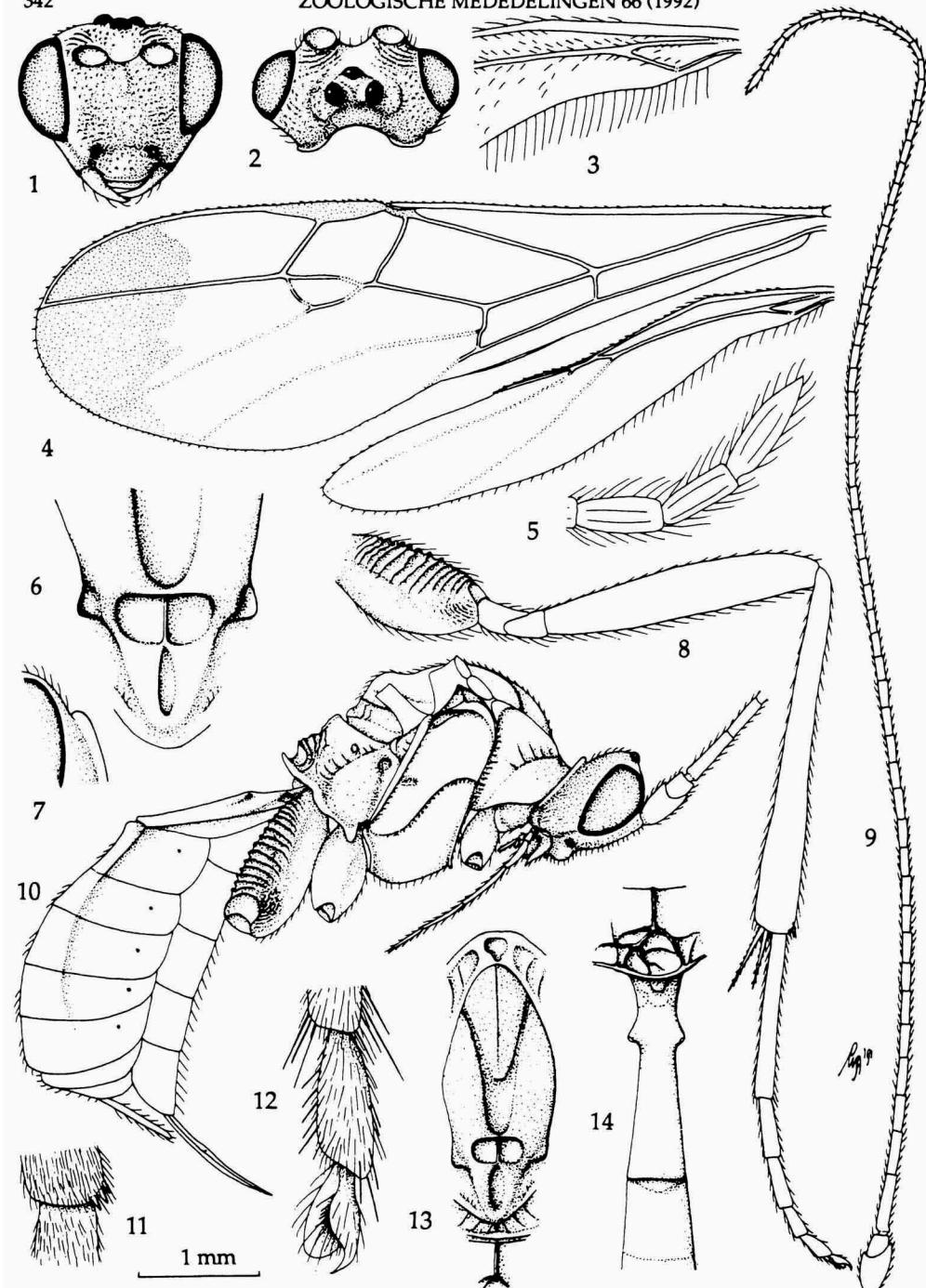
**Wings.**— Fore wing: r:SR1 = 13:53; 2-SR:r-m = 16:9; 1-SR+M straight; subbasal cell sparsely setose; CU1b subequal to 3-CU1. Hind wing: membrane largely glabrous basally (fig. 3).

**Legs.**— Hind tarsus more elongate (fig. 8) than fore and middle tarsi; length of femur, tibia and basitarsus of hind leg 5.4, 7.7, and 9 times their width, respectively; length of hind tibial spurs 0.4 and 0.6 times hind basitarsus.

**Metasoma.**— Length of first tergite 4.0 times its apical width, its surface smooth and shiny, medially flattened and its spiracles strongly protruding (fig. 14); second tergite with indistinct medio-basal convexity (fig. 14); second suture shallow, straight and smooth; length of ovipositor sheath 0.11 times fore wing; valvilli situated submedially in ovipositor (fig. 10).

**Colour.**— Pale yellowish; head dorsally, hind femur and tibia brownish-yellow; stemmaticum, flagellum largely, pedicellus dorsally, pterostigma, tegulae (but humeral plate yellowish), inconspicuous patch subapically on first tergite, ovipositor sheath, apex of middle and hind trochantellus, apex of hind femur and tibia, third-fifth fore tarsal segments, second-fifth middle and hind tarsal segments, apex of hind basitarsus and large patch near apex of fore wing dark brown; stripe on outer side of scapus, patch on middle of mesoscutum, two patches subapically on hind coxa, three patches apically on propodeum, first tergite medially, third-fifth tergites apically, blackish; remainder of wing membrane subhyaline.

**Variation.**— Paratype: length of body 6.7 mm, and of fore wing 6.3 mm; antennal segments 58, length of antenna 2.1 times fore wing; length of first metasomal tergite 3.7 times its apical width; colour as of holotype.



Figs 1-14, *Bentonia longicornis* gen. nov. & spec. nov., ♀, holotype. 1, head, frontal aspect; 2, head, dorsal aspect; 3, detail of basal part of hind wing; 4, wings; 5, apex of antenna; 6, detail of scutellum, dorsal aspect; 7, detail of dorsal apex of occipital carina, lateral aspect; 8, hind leg; 9, antenna; 10, habitus, lateral aspect; 11, apex of hind tibia, outer aspect; 12, outer hind claw; 13, mesosoma, dorsal aspect; 14, propodeum, first and second metasomal tergites, dorsal aspect. 1, 2, 13, 14: 1.2 × scale-line; 3, 7, 11: 2 ×; 4, 8-10: 1 ×; 5, 12: 5 ×; 6: 2.4 ×.

**Bentonia scutellaris spec. nov.**  
(figs 16-19)

Material.— Holotype, ♀ (BMNH), “Brazil: Cepec, Itabuna, Bahia, 5-8.vi.1983, F.P. Benton”. Paratype, 1 ♂ (BMNH), topotypic, 15-17.ix.1983.

Holotype, ♀, length of body 6.6 mm, of fore wing 6.4 mm.

Head.— Antennal segments 56, length of third segment 1.3 times fourth segment, length of third, fourth and penultimate segments 4.2, 3.3 and 3.0 times their width, respectively; length of maxillary palp 1.4 times height of head; in dorsal view length of eye 3.4 times temple; temple directly narrowed posteriorly, granulate; OOL:diameter

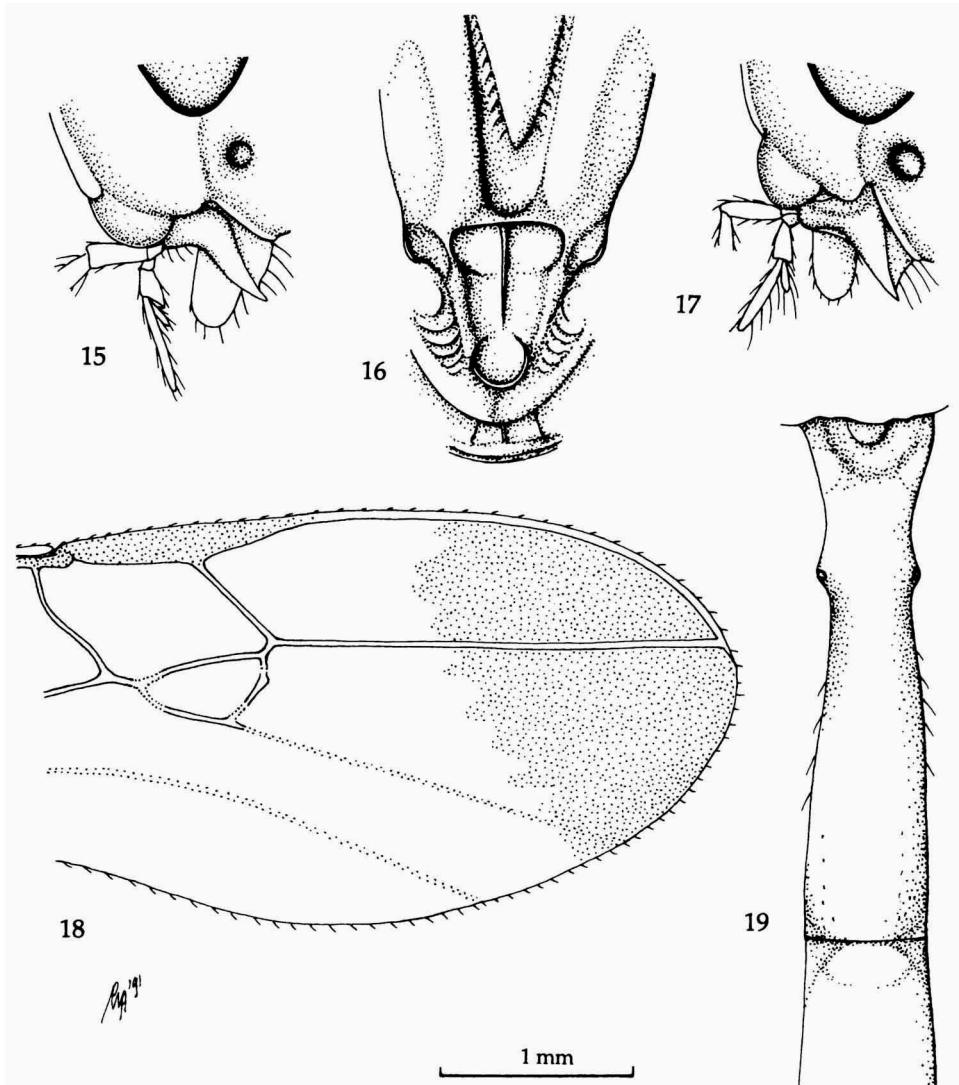


Fig. 15, *Bentonia longicornis* gen. nov. & spec. nov., ♀, holotype; figs 16-19, *B. scutellaris* gen. nov. & spec. nov., ♀, holotype. 15, 17, detail of occipital flange and mandible, lateral aspect; 16, detail of scutellum, dorsal aspect; 18, apical half of fore wing; 19, first metasomal tergite, dorsal aspect. 15-17: 2 × scale-line; 18: 1 ×.

ter of ocellus:POL = 12:9:5; frons nearly flat and smooth medially, with some microsculpture, convex and setose sublaterally; vertex flattened near stemmaticum, slightly convex and sparsely finely punctate; face convex, rather sparsely punctulate and with long pale setae; clypeus convex and sparsely punctulate; occipital flange very wide, wider than of *B. longicornis*, fig. 17 versus fig. 15); length of malar space 0.8 times basal width of mandible.

**Mesosoma.**— Side of pronotum crenulate medially and posteriorly, punctate anteriorly and remainder smooth; mesopleuron smooth (beside precoxal sulcus); metapleuron sparsely punctulate; mesoscutum sparsely finely punctate; middle lobe of mesoscutum without weak median carina, low anteriorly; scutellum with wide depression, depression with median carina, and with carina posteriorly (fig. 16); surface of propodeum smooth laterally, posterior half with coarse rugae.

**Wings.**— Fore wing: r:SR1 = 18:73; 2-SR:r-m = 20:14; 1-SR+M somewhat sinuate; subbasal cell sparsely setose; CU1b subequal to 3-CU1. Hind wing: membrane largely glabrous basally (fig. 3).

**Legs.**— Ventral row of setae of hind tarsus inconspicuous (obsolescent in *B. longicornis*); length of femur, tibia and basitarsus of hind leg 5.4, 8.5, and 8.3 times their width, respectively; length of hind tibial spurs 0.4 and 0.5 times hind basitarsus.

**Metasoma.**— Length of first tergite 4.0 times its apical width, its surface smooth and shiny, medially flattened and its spiracles distinctly protruding (fig. 19); second tergite with indistinct medio-basal convexity (fig. 16); second suture shallow, straight and smooth; length of ovipositor sheath 0.22 times fore wing; valvilli situated behind middle of ovipositor.

**Colour.**— Brownish-yellow; stripe on outer side of scapus, apical quarter of hind tibia, apical half of hind basitarsus and remainder of tarsus blackish; antenna (except scapus) and stemmaticum, veins, pterostigma, apical patch of fore wing dark brown; ovipositor sheath brown.

**Variation.**— Paratype has length of body 6.3 mm, and of fore wing 5.7 mm; antennal segments 55, vein r-m of fore wing straight; length of first metasomal tergite 3.9 times fore wing; colour very similar to colour of holotype.

### Acknowledgements and abbreviations

I wish to thank Mr T. Huddleston for the loan of the specimens, and Dr A. Polaszek (Amsterdam) for his comments on the first draft. BMNH stands for The Natural History Museum, London.

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