



# SOME PTEROMALIDAE (HYM., CHALCIDOIDEA) FROM MONEGROS, WITH DESCRIPTIONS OF FOUR NEW SPECIES

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### **ABSTRACT**

Four new species of Pterornalidae (Hymenoptera, Chaicidoidea), Gastrancistrus ornatus sp. n., G. fulviventris sp. n., Rhopnliciis nudicoxalis sp. n. and Mesopolobits blascoi sp. n. are described. All were collected in the Monegros region near Zaragoza, Spain, together with Mesopolobirs szelenyii Bouček, 1974, new to Spain. Biological information. and host records for some of the species, are included.

Key words: Hymenoptera, Pteromalidae, Gastrancistrus, Rhopalicus, Mesopolobus, neiv species. Spain.

### RESUMEN

Algunos Pteromalidae (Hym., Chalcidoidea) de los Monegros, con descripción de cuatro especies nuevas.

Se describen cuatro especies nuevas de Pterornalidae (Hymenoptera, Chaicidoidea): Gastrancistrus ornatus sp. n., G. fulviventris sp. n., Rhopalicus nudicoxalis sp. n. y Mesopolobus blascoi sp. n. Todas fueron recolectadas en la región de Los Monegros cerca de Zaragoza (España), junto con Mesopolobiis szelenyii Boufek, 1974, nuevo para España. Se incluye información biológica y datos sobre hospedadores para algunas de ellas.

Palabras clave: Hymenoptera, Pteromalidae, Gastrancistrus, Rhopalicus, Mesopolobus. especies meras, España.

# INTRODUCTION

Retuerta de Pina in the Monegros region near Pina de Ebro, Zaragoza. is a very dry locality with open woodland of mainly Juniperus thririfera L. and Pinus halepensis Miller growing on herb-rich calcareous grassland supporting Artemisia, Eryngium, Gypsophila, Onopordum, Rosmarinus, Suaeda, Teucrium, etc. The insects of Retuerta de Pina have been regularly and intensively sampled since 1990, using a variety of techniques. by Javier Blasco-Zumeta who sent me the Chalcidoidea for identification.

The chaicid fauna includes elements previously known from North Africa or south-eastern Europe. Several species are undescribed and many others are apparently unrecorded from Spain. It is hoped to publish further accounts of the chalcids of Retuerta de Pina as the material is studied. The present paper

deals with some distinctive and sometimes common species of Pteromalidae, four of which are nevertheless previously undescribed.

Gastrancistrus ornatus sp. n. (figs. 1-3)

Type niaterial

Type locality: Retuerta de Pina, Pina de Ebro, Monegros (Zaragoza, Spain). UTM 30TYL2896.

Holotype: female. swept from Juniperus thurifera, 34-111-1990 (J. Biasco-Zumeta leg.). In Museo Nacional de Ciencias Naturales, Madrid. Paratypes: all same locality and collector as holotype. 1 98-IV-1989 swept from Rosmarinus officinalis L., 1 910-IV-1990swept from Juniperus thurifera, 1 0 same data as holotype. 3 0 0 25-IV-1991 Moericke trap.

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Paratypes deposited in the Natural History Museum (London) and in my own collection.

# Etymology

The name refers to the ornate wing markings.

### Female

Length 1.9-2.2 nim. Body green to blue-green, sometimes bronzed on mesoscutum and face; gaster greenish. Antenna brown, the scape weakly metallic escept at base and ventrally. Legs brown, coxae of larger specirnens metallic except at their apices; femora dark brown ventrally and narrowly mid-dorsally, tibiae dark brown dorsally, otherwise light brown; tarsi light brown except fifth segments which are darker. Front wing (fig. 3) with distinct brown markings on apical two-thirds, most intense beneath parastigma and across stigma but leaving a clear circular area beneath marginal vein; parastignia, base of marginal vein, postmarginal and stigmal veins dark brown, basal part of submarginal vein and marginal vein except at its base pale testaceous.

Head 1.15 times as broad as thorax; in dorsal view 2.4 times as broad as long with temples short and receding and frons protruding slightly in front of eyes: in facial view (fig. 1) almost 1.5 times as broad as high. Ocelli large in a triangle of about 130°, posterior ocellus separated from inner orbit by 1.5 times its diameter. Antennal toruli slightly above lower margins of eyes. Clypeus not produced, about twice as broad as long, anterior margin very weakly emarginate. Oral fossa 2.4 times as broad as malar space. Mandible (fig. 1) with four acute teeth whose tips are almost in line. Vertes and from very finely reticulate, rather dull; clypeus and prominence above it smooth and shining; lower half of inner orbit very finely carinate. Antenna (fig. 1) with scape alrnost as long as an eye, reaching level of middle of median ocellus. pedicel plus flagellum very slightly longer than breadth of head: pedicel in profile about 1.3 times as long as broad, broader than base of first funicle segment: anelli small and transverse; first funicle segment about 2.5 times as long as broad, narrow basally but apically as broad as pedicel: funicle segments 2-5 progressively broadening and shortening. the fourth subquadrate, the fifth slightly broader than long: clava somewhat longer than last two funicle segments together, its apex bluntly rounded with dorsal surface rather convex in profile. Sensillae and setation as in figure 1.

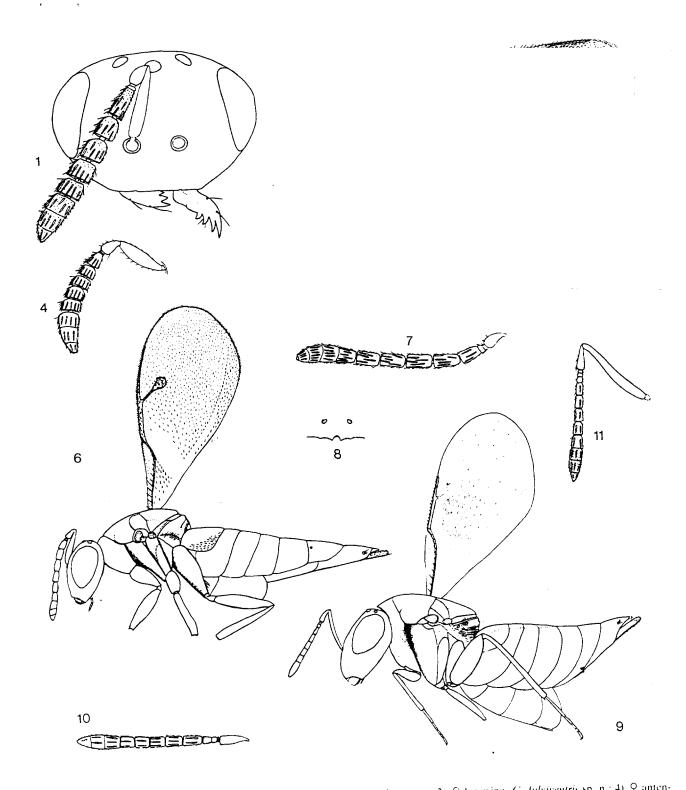
Thorax plus propodeum only 1.2 times as long as broad: pronotum with collar poorly defined, descen-

ding steeply to neck: mesoscutum with fine. dense sculpture. its surface rather dull: niid-lobe of mesoscutum with more than 50 hairs which arise frorii distinct punctures: scutellum 1.2 times as long as broad with 5-S long setae in an irregular row on each side. as densely sculptured as mesoscutum but rather more shiny; scutello-axillar sutures anteriorly curved inwards to reach posterior margin of mesoscutum well mesad of the deep notauli: base of scutellum about half the ininimum distance between the notauli. Mesepisternum and mesepimeron separated by an elongated. vertical fovea. mesepimeron and the mesepisternum in front of the fovea smooth and shining. Mesosternal mesolcus well defined. Propodeuni medially rather longer than frenal area, smooth and shining without median carina or plicae but raised medially into a rounded crest at anterior margin: callus with 6-S setae. Forewing (fig. 3) with lengths marginal; stigmal: postmarginal veins as 49:33:55; stigma very large and rounded with distinct uncus. separated from posterior edge of postmarginal vein by about 1.2 times its height; costal cell in distal half with a single row of hairs on its upper surface close to anterior margin, undersurface hairy escept at base, the hairs distally in about 5 irregular rows; basal vein and upper surface of basal cell hairy: cubital vein with a single row of hairs closing basal cell and speculum; speculum on upper surface reaching to cubital vein and about middle of marginal vein. effaced by scattered hairs on lower surface; disc of wing densely hairy, no bare area between stigmal and postni arginal veins.

Gaster ovate in dorsal view, from scarcely as long (holotype) to distinctly longer than mesosonia: petiole smooth, transverse; first tergite of gaster with triangular basal depression: ovipositor sheaths slightly projecting, reaching just beyond apices of pygostylar setae: tip of hypopygium situated beyond middle of gaster.

Male

Similar to female but with brown markings on forewing restricted to a fascia beneath parastigma and another between postmarginal and stigmal veins. Antenna (fig. 2) with scape about 4 times as long as broad, only weakly expanded; 6 funicle segments, the first tapering basally as in female and twice as long as its maximum breadth; funicle segments 2-6 subquadrate to slightly longer than broad; clava with small apical stylus; flagellum with hairs standing out at an angle of about 60°, the hairs about half as long as the breadth of their segments. Gaster obovate, not laterally compressed.



Figs. 1-11.—Gastrancistrus ornatus sp. n.: 1)  $\mathcal{Q}$  head in front view. 2)  $\mathcal{G}$  antenna. 3)  $\mathcal{Q}$  forewing. G. fulviventris sp. n.: 4)  $\mathcal{Q}$  antenna. 5)  $\mathcal{Q}$  forewing. Rhopalicus nudicoxalis sp. n.: 6)  $\mathcal{Q}$  body. 7)  $\mathcal{Q}$  pedicel and flagellum. 8) Clypeus. Mesopolobus blascoi sp. n.: 9)  $\mathcal{Q}$  body. 10)  $\mathcal{Q}$  pedicel and flagellum. 11)  $\mathcal{G}$  antenna.

# Biology

Host unknown, possibly a species of Cecidomyiidae (Diptera) forming galls on *Juniperus thurifera*. There is a single annual generation with adults flying in March and April.

# Diagnosis

The wing markings and very large stigma distinguish G. ornatus from all previously described Palaearctic species of Gastrancistrus; it does not fall into any of the species groups recognised by GRAHAM (1969). The American species G. biguttatipennis (Girault, 1917). represented in the Natural History Museum (London) by a female from Jacksonville, Florida labelled «paratype», has an enlarged stigma and dark wing markings but the iatter are arranged differently from those of G. ornatus; it also has entirely yellow legs.

# Gastrancistrus fulviventris sp. n. (figs. 4. 5)

# Type material

Type locality: Retuerta de Pina. Pina de Ebro. Monegros (Zaragoza, Spain). UTM 30TYL2997.

Holotype: female coliected in colour water trap ainongst *Rosmarinus officinalis*, 22-IV-1990(J. Blasco-Sunieta leg.). In Museo Nacional de Ciencias Naturales, Madrid, Paratypes: all same locality and collector as holotype. 2 ° ° collected with holotype. 1 ° 14-IV-1990 colour trap, 1 ° 7-V-1991 Malaise trap. 1 ° 7-V-1991 colour trap, 1 ° 7-V-1991 Moericke trap. 1 ° 20-V-1991 Moericke trap. 1 ° 20-V-1991 swept from *Carduus bourgeanus* Boiss. & Reut. Paratypes deposited in hluseo Nacional de Ciencias Naturales (Madrid). the Natural History Museum (London) and in my own collection.

### Etyniology

The name refers to the yellow gaster.

# Female

Length 1.5-1.9 mm. Head, thorax and propodeum dark green to blue-green, sometimes weakly bronzed; scrobal area coppery; gaster yellow, apical borders of tergites 2-6 somewhat brownish, ovipositor brown. Antenna brown, scape testaceous basally and ventrally; flagellum testaceous ventrally. Legs including coxae yellowish, only the fifth segments of the

tarsi fiiscous: hind tibia and front and middle femora sometimes slightly brownish. Wings clear: venation brown, darkest on parastigma and base of marginal vein.

Head 1.16 times as broad as thoras: in dorsal view 2.4 times as broad as long and similar in shapr to that of G. ornatus  $(q,v_*)$ ; in facial view 1.4 times as broad as high. Ocelli large, in a triangle of about 120°, posterior ocellus separated from inner orhit by 1.7 times its diameter. Antennal toruli slightly above lower margins of eyes. Clypeus small, not produced, more than twice as hroad as long nith anterior margin truncate. Oral fossa 2.4 times as broad as malar space. Mandible as in G. ornatus. Sculpture of head similar to G. ornatus but generally rather weaker and hence appearing more shiny. Antenna (fig. 4) with scape about 0.85 times as long as an eye, its apex short of the median ocellus by the diameter of the latter; pedicel plus flagellum only 0.73 times breadth of head: pedicel in profile about 1.5 times as long as broad. almost as broad as apes of first funicle segment; ane-Ili small and transverse: first funicle segment not quite as long as pedicel. slightly longer than hroad: funicle segments 2-5 all transverse; clava about as long as preceding 3 funicle segments. Sensillae and setation of flagellum as in figure 4.

Thorax plus propodeum 1.3 times as long as broad; pronotum descending steeply to neck, without collar; mesoscutum and scutellum with sculpture similar to G. ornatus; mesoscutum more densely hairy than that of G. ornatus, the hairs arising from punctures; scutellum 1.2 times as long as broad bearing 14-20 setae irregularly arranged on both sides of a bare median strip. Scutello-axillar sutures, notauli, mesopleuron, mesosternum and propodeum as described for G ornatus. Forewing (fig. 5) with lengths marginal sugmal: postmarginal veins as 47;28;44; stigma very large and rounded with distinct uncus, separated from posterior edge of postmarginal vein by less than its height; trichiation of wing much as in G ornatus

Gaster ovate in dorsal view, about as long as but narrower than mesosoma; petiole smooth and transverse; basal tergite with subtriangular basal depression; tips of ovipositor sheaths hardly visible in dorsal view; apex of hypopygium situated before the middle of the gaster.

# Male

Differs from female in having brownish and weakly metallic coxae; gaster brown, rather pale on basal two-thirds. Antenna with scape about 3.5 times as long as broad, hardly expanded; 6 funicle segments, the first 1.3 times as long as broad, segments 2-6 subequal, slightly transverse; clava about 2.1 times as

long (including apical stylus) as broad; flagellum with hairs standing out at an angle of 50°-60°, about 0.8 times as long as their segments. Gaster obovate, not laterally compressed.

# Biology

Host unknown but almost certainly a species of gall-forming Cecidomyiidae (Diptera). The collection dates in April arid May indicate a single annual generation.

# Diagnosis

G. fulviventris is allied to G. ornatus (described above) but differs in having clear wings and, in females, yellow gaster and legs. The stigma is relatively larger than that of G. ornatus and of any described species of Gastrancistrus except G. clavatus (Thomson, 1876). The latter differs from G. fulviventris as follows: female gaster longer than head plus mesosoma and with exserted ovipositor; basal cell of forewing bare; marginal vein about 1.5 times as long as postmarginal vein; propodeal callus with at most 4 setae.

# Rhopalicus nudicoxalis sp. n. (figs. 6-8)

# Type material

Type locality: Retuerta de Pina, Pina de Ebro. Monegros (Zaragoza, Spain). UTM 30TYL2794.

Holotype: female. 24-V-1991. in Malaise trap (J. Blasco-Zumeta leg.). In Museo Nacional de Ciencias Naturales, Madrid. Paratypes: all same locality and collector as holotype, 1  $\circ$  5-III-1990 swept from Rosmarinus officinalis, 1  $\circ$  24-III-1990 swept from Juniperus thurifera, 3  $\circ$  9 1  $\circ$  9-IV-1990 swept from J.  $3 \circ O'$  11-XI-199() swept from J. thurifera,  $1 \circ O'$ 11-XI-1990 Moericke trap. 1 0 11-XI-1990 Malaise trap, 4 9 9 4-I-1991 swept from *J. thurifera*, 1 9 20-I-1991 Malaise trap, 1 9 20-II-1991 Moericke trap, 4 0 0 25-IV-1991 Moericke trap, 1 0 25-IV-1991 Malaise trap. 1  $\bigcirc$  25-IV-1991 colour trap. 299 10 7-V-1991 Moericke trap. 197-V-1991 Malaise trap, 1 of 7-V-1991 colour trap. In Museo Nacional de Ciencias Naturales (Mndrid). the Natu-<sup>T</sup>al History Museum (London) and my own collection.

# Etymology

Named in reference to the characteristically bare dorsal surface of the hind coxa.

Female

Length 2.0-3.1 mm. Head and thoran blue-green, dull, often bluish violet on frenal area, upper parts of pleura and propodeal callus; gaster with basal tergite green to greenish blue and last tergite basally greenish, elsewhere dark brown. Scape. pedicel and last segment of clava pale testaceous, antenna otherwise brown. Cosae concolorous with thoras. front coxa testaceous apically: femora brownish. middle and hind femora darker than front femur, hind femur with weak metallic reflections in large specimens; tibiae testaceous; tarsi testaceous with last segments brown. Forewing usually weakly infumate around stigma and sometimes also weakly infumate apically; venation testaceous. stigmal vein darkest and stigma dark brown.

Head slightly broader than thoras (41:38); in dorsal view 2.2 times as broad as long, temples 0.25 times eye length; in facial view about 1.4 times as broad as high. Ocelli in a triangle of about 120°, POL 2.1 times OOL. Antennal toruli with upper margins at level of rniddle of eyes, somewhat nearer median ocellus than anterior margin of clypeus. Clypeus (fig. 8) with anterior margin medially incised, the incision flanked by 2 small. obtuse teeth. Oral fossa about twice as broad as malar space. Right mandible with 4 teeth. left with 3. Vertex, frons and clypeus entirely densely reticulate. dull; face with scattered short, white hairs. Antenna: scape including radicle 0.9 times as long as height of eye. reaching far above vertex (fig. 6): pedicel plus flagellum (fig. 7) 1.15 times as long as breadth of head; pedicel in profile about twice as long as broad; 2 anelli together half as long as pedicel: funicle of 6 segments, rather slender. funicle segments 1-5 of equal breadth ranging from much more slender than the pedicel (small specimens) to slightly broader than the pedicel; first funicle segment at most slightly longer than pedicel and almost twice as long as broad; funicle segments 2-5 similar, twice as long as broad: sixth funicle segment shorter and slightly broader than fifth. closely applied to clava: clava of 3 distinct segments. 1.2 times as broad as mid-funicle and equal to combined length of two preceding funicle segments, apically rounded. Antennal sensillae and setation as in figure 7.

Thoras plus propodeum (fig. 6) 1.3 times as long as broad; thoras dorsally with very dense, reticulate sculpture, dull with numerous short, white, scattered hairs; pronotuni with collar very short and not margined; notauli visible only in anterior half of mesoscutum; side of axilla longitudinally reticulate, appearing striate when viewed obliquely; scutellum slightly broader than long, moderately convex. Mesopleuron reticulately sculptured except for a narrow, smooth and shining strip along the anterior margin of the up-

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per mesepimeron. Propodeum short. medially only about one-quarter the length of the scutellum; median carina absent: plicae indicated only at posterior margin; median area with dense reticulate sculpture (much as scutellum); spiracles almost touching metanotum: callus with about 30 white setae: nucha represented only by a short, transversely aciculate strip: petiolar emargination broad. Forewing (fig. 6) with lengths of submarginal:marginal:stigmal:postmarginal veins as 37:20:15:25; stigma large and round, as long as its petiole and separated from postmarginal vein by rather more than its height, uncus short: costal cell with a short line of hairs on uppersurface above parastigma. its undersurface with 4 lines of hairs in apical half reducing rather abruptly to a single line proximally; basal cell hairy except at base: speculum of moderate size. estending beneath basal one-third of marginal vein, open below. Legs (fig. 6) with front and hind femora rather swollen; hind coxa dorsally with a few long setae near apex but without hairs proximally; hind tibia with one

Gaster 2.5 to 2.9 times as iong as broad, more than twice as long as mesosoma; tergite 7 about 1.5 times as long as broad. endin; in an acute, membranous point; posterior margins of tergites almost straight; ovipositor sheaths reaching slightly beyond apex of tergite 7; tip of hypopygium situated before middle of gaster; petiole small, transverse and smooth.

# Male

Resembles female but legs and antennae paler, the front cosa with only a small metallic spot basally; gaster without a pale basal spot. Antenna with scape broader than in female. 4.4 times as long (exciuding radicle) as broad: pedicel plus flagellum about 1.3 times as long as breadth of head. flagellum filiform with short hairs. Forewing with marginal vein somewhat thickened. about 6 times as long as broad.

# Biology

Many specimens of both sexes have been reared from galls of an *Oligotrophus* species (Dipt.. Cecidomyiidae) collected from *Juniperus thurifera* by J. Blasco-Zumeta. This is an exceptional host group for *Rhopalicus*; all other species whose hosts are known attack Coleoptera.

# Dingtiosis

R. nudicoxalis runs to Rhopalicus in thr generic key of BOUČEK & RASPLUS (1991) but, because of

its dorsally bare hind cosa, not in that of GRAHAM (1969). GRISSELL (1983) provides the most recent review of Rhopalicus and recognizes five speciss. R. nudicoxalis differs from all of these in having dorsally bare hind coxae. and the combination of large stigma. extensively pilose basal cell and elongated female gaster. The propodeum is more strongly sculptured than in other species and its surface descends very steeply to the supracoxal flange so that, in dorsal view, the connection between flange and nucha is not visible. The hind coxal foramen is separated from the petiolar foramen by a relatively broad strip. In these propodeal characters, R. nudicoxalis approaches Boharticus Grissell, 1983, a nearctic genus associated with Juniperus, but in Boharticus the clypeus is not medially incised and the sides of the axillae are reticulate and not longitudinally striate as in Rhopuli-

# Mesopolobus blascoi sp. n. (figs. 9-11)

# Type material

Type locality: Retuerta de Pina, Pina de Ebro. Monegros (Zaragoza, Spain). UTM 30TYL2896.

Holotype: female, 8-VII-1991, in colour water trap beside Onopordum nervosum Boiss. (J. Blasco-Zumeta leg.). In Museo Nacional de Ciencias Naturales. Madrid. Paratypes: all same locality antl collector as holotype, 1 of 23-VIII-1989 swept from Gypsophila hispanica Willk., 1 Q 10-II-1990 colour trap. 1 of 25-11-1990 swept from Rosmarinus officinalis, 3 Q Q 4 of 28-V-1990 Moericke trap. 1 Q 1 o" 24-VI-1990 colour trap. 1 of 11-VII-1990 Moc-18-IX-1990 Malaise trap. 2 ΩΩ 6-X-1990 colour trap. 1 ♀ 17-XI-1990 colour trap. 1 ♀ 7-I-1991 Moericke trap. 1 ♀ 12-I-1991 colour trap. 29 ♀♀ 1 ♂ 9-11-1991 colour trap,  $1 \ Q$  19-11-1991 Malaise trap.  $3 \ QQ$ 20-II-1991 colour trap, 1 of 9-IV-1991 Moericke trap. 1 ♀ 8 ♂ ♂ 7-V-1991 Moericke trap. 1 ♀ 20-V-1991 Moericke trap. 1 of 243-1991 Malaise trap. 2 99 3 OO 26-V-1991 swept from Osyris albu L. 1 9 26-V-1991 swept from Onopordum nervosum. 4 09 1 O 1-VI-1991 swept from Thapsia villosa L. 1 O 9-VI-1991 swept from Reseda lutea L.. 3 ♀♀ 6 ♂ ♂ 9-VI-1991 swept from Tamarix canariensis Willd., 4 ♀♀ 6 ♂♂ 15-VI-1991 swept from Tamarix canariensis, 3 QQ 2 OO 20-VI-1991 Malaise trap. 1 Q 6-VII-1991 swept from Onopordum nervosum. 6-VII-1991 swept from Artemisia herba-alba Asso. 2 00 taken with holotype, 1 9 18-VII-1991 swept from Eryngium campestre L., 200 30-VII-1991 swept from Juniperus thurifera. 1 o 1-VIII-1991

swept from Gypsophila hispanica,  $1 \$ 27-IX-1991 es gall of Stephaniola salsolae (Tavares) on Salsola vermiculata L. Deposited in Museo Nacional de Ciencias Naturales (Madrid), the Natural History Museum (London) and in rny own collection.

Additional material: Canary Islands. Fuerteventura. Tarajalejo, 1999 1000 es cecidoniyiid galls on ?Salsola sp.. leg. 2-1V-1987 hí. Boness.

# Etymology

1 have much pleasure in dedicating this species to Javier Blasco-Zumeta.

### Female

Length 1.3-2.6 mm. Head and thoras dark bluish green, the pronotum and scutellum sometimes slightly bronzed; gaster blackish with basal two-thirds of first tergite greenish blue. Antenna light brown. two apical claval segments very pale. Legs with coxae brown, weakly rnetallic; femora and tibiae not metallic, brown with apices of tibiae slightly paler and a poorly-defined, pale longitudinal stripe on anterior face of front tibia; tarsi pale testaceous with only claws and apex of last segment dark. Forewing (fig. 9) with a rather weak brownish cloud estending from behind marginal and postmarginal veins to the posterior rnargin but with clear strips beneath marginal vein and around stigmal vein; submarginal. marginal and postmarginal veins pale testaceous but dark-edged; stigmal vein whitish and not dark-edged. faint.

Head 1.2 times as broad as thoras: in dorsal view 2.2 times as broad as long with frons slightly convex and temples short and rounded. hardly one-fifth of eye length: in facial view 1.2 times as broad as high. Ocelli small, 'in a triangle of about 130°, posterior ocellus separated from inner orhit by about 3 times its diameter. Antennal toruli with centres very slightly below level of lower margins of eyes. Ciypeus anteriorly very weakly ernarginate. striate, the striae not estending onto face or genae which are uniformly finely reticulate. Oral fossa only 1.4 times as broad as malar space. latter about 0.7 times height of an eye. Left mandible with 3 teeth. right with 4. Antenna (fig. 10) slender: scape shorter than an eye. not reaching niedian ocellus; pedicel plus flagellum 0.9 times breadth of head: pedicel 3.3 times as long as broad, almost as long as first four flagellar segments: 3 anelli, the first transverse, second subquadrate. third longer than broad and about as lonp as first two: first funiclesegment about 1.8 times as long as broad. as broad as pedicel; funicle segments 2.5 subequal in

length, increasing slightly in breadth distally but all longer than broad: clava almost as long as 3 preceding segments, bluntly pointed without terminal stylus.

Thoras plus propodeiim 1.25 times as long as broad: pronotum (fig. 9) with collar from almost onethird (holotype) to one-fifth length of niesoscutum. its anterior edge without a raised margin but forming an acute angle with the anterior face of the pronotum: dorsum of thoras with strongly raised reticulation, coarsest on pronotal collar and mid-lobe of mesoscutum: scutellum broader than lonp: mesepisternurn with upper triangular area smooth. Propvdeurn short: niedian area 4.j times as broad as long with median carina and plicae weak but complete. smooth with short anterior carinulae; spiracular sulcus shallow, spiracles large, elonpated, about half as long as propodeum and virtually touching the rnetanotum. Forewing (fig. 9) disc with sparse pilosity, uppersurfaces of costal and basal cells bare: speculum large and estending beneath marginal vein to the stigmal vein as a broad. bare strip: apical fringe absent: setae on marginal and postmarginal veins short and stout: lengths of submarginal:marginal:postmarginal veins as 18:9:6:5. Legs relatively short; front and hind femora rather stout.

Gaster (fig. 9) ovate. 1.1 to 1.3 times as long as rest of body and about twice as long as broad. fully as broad as thoras: basal tergite occupies one-seventh the total length: last tergite as long as its basal breadth: ovipositor sheaths slightly projecting: hypopygium reaching middle of gaster.

### Male

Length 1.0-1.9 mm. Head. thoras and propodeum green; gaster with tergites 5-7 metallic green, tergite 4 and tergite 1 basally brownish, otherwise whitish to yellow. Antenna (fig. 11) testaceous escept for dark brown clava which is pale at apes. Legs with coxae nietallic green, otherwise testaceoiis. Wing with veins coloured as in female: discal cloud weaker.

Head with a small, dull area of fine. dense sculpture behind malar sulcus. Antenna (fig. 11) slender basally, with 5 funicle segments, all longer than broad, and 3 anelli, the third as long as broad. Maxillae unrnodified.

Thoras as in female. Propodeum longer than in female with median area about 1.7 times as broad as long. Forewing with a short marginal fringe between tornus and apex but without fringe between apex and postmarginal vein: lengths of subniarginal:marginal:stigmal:postmarginal veins as 52:25: 17:16. Middle tibiae unmodified

Gaster oval, slightly longer than mesosoma.

# Biology

M. blascoi is an abundant species at Retuerta de Pina. adults being found almost throughout the year. It is a parasitoid in galls of Stephaniola salsolae (Tavares, 1901) (Dipt.. Cecidomyiidae) on Salsola vermiculata, several males and females being reared from galls collected at Pina de Ebro by J. Blasco-Zumeta. Additional material, reared by Dr. M. Boness from probably the same host, was obtained from Fuerteventura, Canary Islands.

# Diagnosis

M. blascoi is distinguished from other species of Mesopolobiis by its sparsely hairy forewing which lacks a marginal fringe between postmarginal vein and apex, and by its short postmarginal vein which is not quite as long as the stigmal vein. These characters are combined in Dibrachys Forster, 1856 and allied genera, but the structure of the rest of the body is characteristic of Mesopolobus. BOUCEK & RAS-PLUS (1991) recognize two subgenera in Mesopolobus: Sturovia Bouček, 1961 and Mesopolobus Westwood, 1833. Dr. Z. BouCek. to whom specimens of M. blascoi were shown in 1991, was of the opinion that they were attributable to Sturovia. However, the new species differs from other Sturovia in having a relatively longer marginal vein, facial striae not extending beyond the clypeus, female gaster twice as long as broad and the propodeum lacking reticulate sculpture. M. blascoi is not at present assigned to a subgenus.

### Mesopolobus szelenyii BouCek. 1971

M. szelenyii does not appear to have been recorded since it was described from Azerbaijan and Uk-

raine. Many examples of both sexes were found in the collections from Retuerta de Pina. their identity confirmed by Dr. **BouCek.** 

Seven female specimens of what appear to be *M. szelenyii* were reared by Dr. M. Boness from the sample of cecidomyiid galls on ? Salsola from Fuerteventura that also produced *M. blascoi* (see above). These specimens differ from *M. szelenyii* from Retuerta de Pina in being a much brighter green with pale legs (except coxae).

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