

Two new species of Chalcidoidea from Spain, associated with Spanish juniper (Hymenoptera)

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Abstract: *Thureonella punctata* gen.n. and sp.n. (Pteromalidae) and *Torymus flavovariegatus* sp.n. (Torymidae) are described from northern Spain. Both species obviously are associated with *Juniperus thurifera* L.

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Introduction

In northern Spain, in the province of Soria, a plain extends west of Soria. It is extensively grazed by sheep like some "causses" in France and is situated at an altitude of 800-1000 m above sealevel. Normally on these plains scattered oaks or beeches create a savannah-like landscape. An exception is found near the village of Abejar (Soria), where on a rather large area huge trees of *Juniperus thurifera* L. and the lower *J. oxycedrus* L. grow.

We, my wife and I, visited the area at the end of June 1987, when the herb layer was in full bloom. On *J. thurifera* we found many galls made by an apparently undescribed cecidomyiid midge (Nijveldt, pers. comm.). We collected hundreds of these galls but unfortunately, only some gallmidges emerged. Most probably the parasites were killed by mould and/or subsequent drying.

I collected in both juniper species and in the lower vegetation separately by sweeping. On *J. thurifera* were found a pteromalid belonging to a new genus of the subfamily Pteromalinae, and a peculiar new *Torymus* Dalman.

Thureonella gen. n.

gender: feminine.

Head and thorax, including propodeum and all pleurae, regularly reticulated. Head broader than mesoscutum; occiput not margined. Both mandibles with three teeth; clypeus truncate,

more or less reticulated. Antennae inserted somewhat below middle of face but above lower eye-line, 13 segmented, in female strongly clavate, in male less so. Funicle segments short, the first four at most subquadrate.

Pronotum short, not margined. Notauli incomplete. Propodeum without median carina, lateral plicae or spiracular sulci. Spiracles oval, situated halfway between front and hind margin of the sclerite. Hind coxae longer and slenderer than normally in Pteromalidae, resembling *Torymus*.

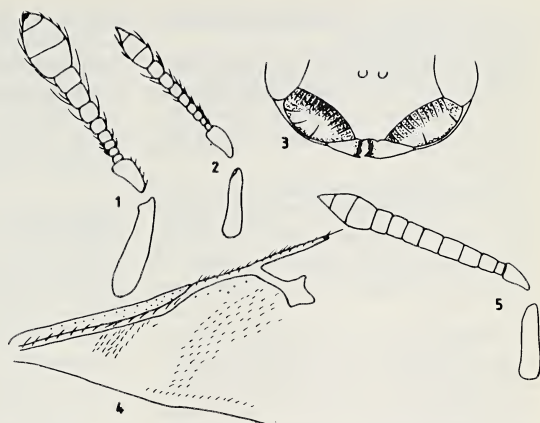
Gaster at most three times as long as broad. Hypopygium situated about halfway along gaster.

Type species: *Thureonella punctata* sp.n.

The name *Thureonella* suggests an affinity to *Juniperus thurifera*.

The genus is distinguished from the other Pteromalinae because of its short funicle segments, the reticulated pleurae, the strongly reticulated propodeum without plicae and carina and the position of the spiracles. The partly testaceous colour of the body of the type species is unique in Western Palaearctic Pteromalinae.

Thureonella is most closely related to *Anogmus* Förster and *Trychnosoma* Graham. Its runs in Graham's key to females of Western



Figs. 1-4. *Thureonella punctata* sp.n. 1, female, holotype, left antenna; 2, male, left antenna; 3, male, lower part of head; 4, female, paratype, proximal part of forewing.

Fig. 5. *Torymus flavovariegatus* sp.n., female, holotype, left antenna.

Palearctic Pteromalinae (1969) to couplet 110 and can be separated from the two by the following characters: the thorax of *Anogmus* is dorsally strongly flattened, in *Trychnosoma* and *Thureonella* it is moderately arched. In *Trychnosoma* the first four funicle segments are longer than broad and the gaster is more than four times as long as broad.

If the first funicle segment is considered as anelliform, one is led to couplet 192. *Thureonella* differs from *Cricellius* Thomson, *Lampotermia* Graham and the related, later described genera *Ottaria* Hedqvist and *Cecidolampa* Askew in the wholly reticulated pleurae.

In the key to the males it is to be placed in couplet 84: malar space short as in *Pteromalus* Swederus, however, the pit between mandibles and eye is not obviously membranous.

Thureonella punctata sp. n.

(figs. 1-4)

Material: Holotype, ♀ (Institute of Taxonomic Zoology, Amsterdam): ESPAÑA, Soria, M. J. Gijswijt; 10 km S. ABEJAR, on *Juniperus thurifera*, 24-27.vi.1987. Paratypes, 10 ♀♀ and 6 ♂♂ (1 ♀ and 1 ♂ in Museo Nacional Ciencias Naturales, Madrid; 1 ♀ and 1 ♂ in British Museum Natural History, London; 8 ♀♀ and 4 ♂♂ in author's collection); 10 ♀♀ and 5 ♂♂ same data as holotype, 1 ♂, ESPAÑA, Soria, M. J. Gijswijt; 10 km S. ABEJAR, 24-27.vi.1987.

Female: body testaceous; sutures between funicle segments, last tarsal segments and ovipositor sheaths dark brown. Gaster ventrally and last three segments dorsally darkened, ultimate segment with faint metallic tint. Upper part of frons, vertex, thorax dorsally and propodeum between spiracles vividly blue-green. Proximal wingveins testaceous, stigmal and postmarginal veins yellow to nearly hyaline. Wingdisc faintly brownish.

Length: 1.2-1.6 mm.

Head and thorax with distinctly raised reticulation, areoles rounded. Face, frons and thorax dorsally with white scale-like setae. Head frontally 1.3 times as broad as long. Toruli inserted closer to front edge of clypeus than to median ocellus. Width of frons about equal to length of eyes. Length of malar space: mouth=1:2. Dorsally the head is about twice as broad as long; POL:OOL=2:1; longest diameter of lateral ocellus slightly shorter than OOL (3:4). Temples rounded, one fifth of eye-length. Eyes nearly round. Antennae (fig. 1) strongly clavate; scapus broadest in proximal part, not reaching median ocellus; pedicellus twice as long as broad; funicle segments I and II not much larger than second anellus, III and IV gradually larger and subquadrate, V and VI broader than long; clava 1.6-1.8 times as long

as broad. Funicle + pedicellus as long as breadth of mesoscutum.

Thorax 1.4 times as long as broad. Pronotum short, 1/8-1/10 of length of mesoscutum; scutellum nearly as long as broad; dorsellum 5-6 times as broad as long, slightly shorter than propodeum.

Pleurae strongly reticulated like rest of thorax, without any smooth area; sutures rather deep. Coxae reticulated but less obviously than pleurae; hindcoxae large, 0.8 times as long as femora. One metatibial apical spur.

Forewing (fig. 4) 2.0-2.3 times as long as broad. Underside of costal cell with one complete hairrow and a partial second one in the apical half. Basal cell hairy at least in apical third. Speculum moderately large. Costal cell: marginal : postmarginal : stigmal vein = 3.2 : 1.3 : 1.3 : 1.0.

Gaster oval, 2.5-3.0 times as long as broad (when shrunken) and 1.7-1.9 times as long as thorax.

Male: general appearance as in female. Antennae (fig. 2) more slender. Space between maxillae and eyes (fig. 3) is an oval pit, well defined by two sutures. These sutures bear strong bristles, which point inward. The bottom of the pit is reticulate.

Length: 1.2-1.3 mm.

Torymus flavovariegatus sp. n.

(fig. 5)

Material: Holotype, ♀ (Institute of Taxonomic Zoology, Amsterdam); ESPAÑA, Soria, M. J. Gijswijt; 10 km S ABEJAR, on *Juniperus thurifera*, 24-27.vi.1987. Paratypes, 14 ♀♀ and 20 ♂♂ (1 ♀ and 1 ♂ in Museo Nacional Ciencias Naturales, Madrid; 1 ♀ and 1 ♂ in British Museum Natural History, London; 5 ♀♀ and 10 ♂♂ in Institute of Taxonomic Zoology, Amsterdam; 8 ♀♀ and 8 ♂♂ in authors's collection); 10 ♀♀ and 19 ♂♂ same data as holotype, 4 ♀♀ and 1 ♂, ESPAÑA, Soria, M. J. Gijswijt; 10 km S ABEJAR, 24-27.vi.1987.

Female: head, thorax dorsally and mesepipleuron green-bluegreen; antennae except scapus ventrally, ovipositor sheaths and last tarsal segments dark brown. Gaster dorsally darkened.

Remainder of body testaceous. In light coloured specimens also pronotum and propodeum partly testaceous. In darker specimens hindlegs and gaster brown and pleurae partly or wholly green. Wingveins and ciliae on disc brown. A brown cloud under stigma extends to middle of wingdisc.

Length: body + ovipositor 2.1-2.7 mm, body 1.7-2.2 mm.

Head dorsally twice as long as broad and 1.2 times as broad as thorax; POL:OOL=2.0, OOL slightly shorter than longest diameter of ocel; genae 1/3-1/4 of eyelength. Frontally the head is 1.2 times as broad as long, face thickly set with long white hairs, those on frons shorter. Lower margin of antennal toruli closer to clypeus than to median ocellus. Clypeus truncate. Antennae (fig. 5) with scapus 4 times as long as broad, reaching lower margin of median ocellus; funicle + pedicellus 1.1-1.2 times as long as breadth of head, pedicellus not quite twice as long as broad and somewhat longer than anellus + funicle segment I; funicle segment I quadrate and less broad than pedicellus and rest of funicle, II-IV subquadrate, V-VII broader than long; clava twice as long as broad or slightly longer and longer than last three funicle segments.

Thorax 1.6-1.7 times as long as broad and of usual shape; propodeum with faint alutaceous sculpture, nearly smooth, with 6-8 short rugae running from frontedge onto disc. Postspiracular sclerite and frontal part of mesepimeron slightly reticulated, other pleurae completely smooth. Longest hindtibial spur about as long as first tarsal segment. Hindcoxae dorsally hairy.

Wings basally hairy; costal cell : marginal : postmarginal : stigmal vein = 51 : 36 : 10 : 6; stigma with long uncus, space between stigma and postmarginal vein smaller than breadth of stigma. Speculum closed, reaching at most halfway marginal vein.

Gaster about as long as thorax, dorsally flattened. First ventral segment not exceeding length of hindcoxa + trochanter. Ovipositor 1.0-1.1 times as long as hindtibia.

Male: in general view as female. All funicle segments transverse. Wingcloud restricted to a brown rim around stigma. Speculum nearly absent. Gaster basally, at least ventrally, yellow marked.

Length: 1.25-2.00 mm.

Torymus flavovariegatus is the only species in the genus with a partly yellow coloured body. A dark cloud in the forewing only occurs in this species, in *T. favardi* Steffan and in *T. spilopterus* Boheman.

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