

# Descriptions of Scelionidae from Tenerife (Hym. Proctotrupeidea)

By LARS HUGGERT  
Skolgatan 100.590246 Umeå, Sweden

Ent. scand. 5. 1914. 66—12.

### Abstract

Three new species of scelionid wasps are described viz. *Trissolcus lauri*, *Xenomerus canariensis* and *Idris adejensis*. The genus *Dissolcus* Ashm.

is sunk as a synonym to *Trissolcus* Ashm. and an aberrant specimen of *Pseudaphanomerus hyalinatus* Szél. is discussed.

### *Trissolcus* Ashm.

*Trissolcus* Ashm. 1893: 161

*Dissolcus* Ashm. 1893: 164 syn. n.

*Asolus* Nak. 1900: 17

*Aphanurus* Kieff. 1912: 69

*Immsia* Cam. 1913: 104

*Microphanurus* Kieff. 1926: 91

### *Trissolcus lauri* n. sp.

♀. Length about 1.2 mm. Colour black, except for trochanters, posterior tip of femora, tibiae and tarsi being more or less brownish.

Head from above with almost no posterior excavation and no occipital carina; slightly wider than thorax, about 2.5 times as wide as long with temples very short (fig. 1); eyes with rather dense, short pilosity and posterior ocelli separated from eye-margin by about their diameter; POL 16 to 3 OOL; along posterior eye-margin to about the level of posterior ocelli there is an indistinct groove, which follows the ventral eye-margin to the mouth (fig. 2); frons slightly convex with a rather large, shallow depression from antennal toruli to almost anterior ocellus, in front of which there is a smaller one joining the former, which is shiny with a transverse rugosity; inner orbits and vertex with rugose reticulation, more strigose towards eyes.

Head in side view with eye 1.5 times the length of head; genal groove, postorbital ridge and the ridge bordering lower genae distinct (fig. 2).

Head from in front (fig. 3) triangular, about 1.3 times as wide as high with length of the

eye about equal to width of vertex; head with sparse pilosity.

Antenna (fig. 4) rather long and slender; scape as long as length of eyes in front, about as long as segment two to five (37:40); pedicel equal to the next segment; segment four and five slightly shorter and equal; sixth and seventh still shorter but slightly wider; eighth to tenth about equal and slightly wider, forming an indistinct clava with the somewhat longer segment eleven, which is tapering to its apex.

Thorax rather depressed and mesonotum wider than long (35:23) with parapsidal furrows extending about 1/3 length of mesonotum posteriorly; between them there is a shorter, indistinct one; sculpture punctate-reticulate to reticulate and mesonotum rather shiny; scutellum with the same sculpture, transverse (25:10), separated by a fine scutellar groove; apex of scutellum with some larger foveolae and dorsetium rugulose sculptured; thorax covered with whitish, short, not too dense hairs; metapleura hairless, shiny; propodeum short with one small and one larger foveola on each side medially and in the middle a protruding slightly longitudinally sculptured part to which the gaster is attached.

Legs with tarsi longer than tibiae; first segment of fore tarsus with its tibial spur as in fig. 5.

Fore wing with stigmals about three times as long as marginalis; postmarginalis long, about twice as long as stigmals (fig. 6); wing about 2.6 times as long as wide, slightly shorter than length of body; disc rather densely pilose, except for a narrow strip anteriorly; marginal fringe almost twice as long as width of stig-

malis. Hind wing rather wide, almost 4.5 times as long as wide with the fringe 1/4 the width of wing.

Gaster rather depressed and rectangular in shape, about 13 times as long as wide; first tergite with longitudinal ridges from concave anterior to posterior margin and about three times as wide as long; second tergite about as long as wide with the ridges from the previous tergite continuing over its base and then more or less finely alutaceous, diverging over the whole surface; next tergites hardly visible but the last one protruding, with whitish hairs;

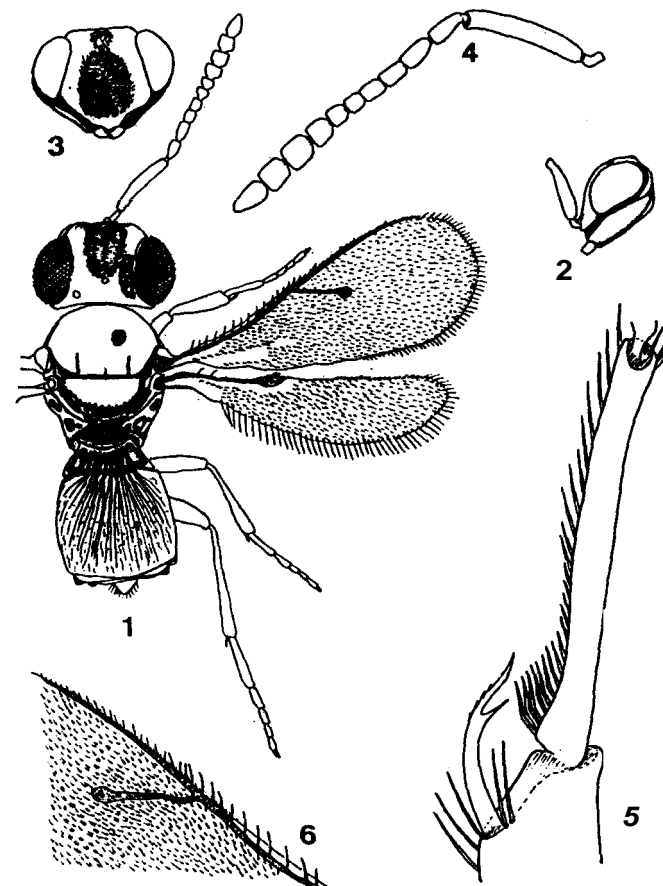
hind corners of two of the last sternites v lateroapically from above.

Holotype ♀. Spain: Canary Islands, Ten Las Mercedes 18.1.1972. L. Huggert. S from spongy wood, bark and mosses on decaying trees, mostly *Laurus*. In coll.

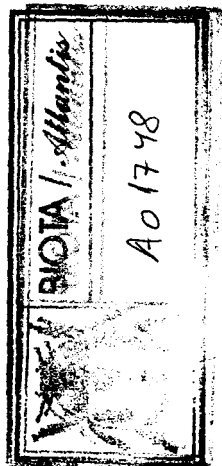
Paratypes. 29 ♀. Same data as above. In Huggert.

Biology. Unknown but probably the species a parasite of eggs of Heteroptera associated with deciduous woods.

Descriptions of Scelionidae from Tenerife (Hym. Proctotrupeidea)



Figs. 1—6. *Trissolcus lauri* n. sp. Female. Dorsal view (1); head in side view (2); head from in front (3); antenna (4); fore tibial spur (5); part of fore wing (6).



This is a highly interesting species and it seems to be a link between the genera *Trissolcus* and *Dissolcus*. Because of its rather slender and only moderately arched thorax, rather depressed gaster and extensively pilose eyes it is a somewhat strange element in the former genera *Trissolcus*, *Asolcus* and *Microphanurus*, as understood by Kieffer (1926), and others. However, it differs from *Dissolcus* in having an indistinct median furrow posteriorly on mesonotum; but this has been proved to be a variable feature (Masner, 1958). Marginalis is shorter than it is said to be in the type-species *D. nigricornis* Ashm. The head is slightly broader than thorax and there is a wide and rather shallow depression with transverse rugulosity between the antennal toruli and the median ocellus, as in e.g. *Trissolcus tumidus* (Mayr) (sensu Delucchi, 1961; *deluchii* Kozlov, 1968), which seems to be close to the new species.

In my opinion, the characters upon which *Dissolcus* was based are only of intrageneric value.

#### *Xenomerus canariensis* n. sp.

In Europe only one species of this genus is known, *X. ergenna* Walk., the female of which was unknown until Masner (1956) reported to have discovered it. It was later described by Szabó (1966). At the same occasion he also created the new genus *Niteogryon* for the species *Trimorus medon* Walk. and *N. latimetascutum* n. sp. This genus was, however, regarded as a mere subgenus of *Xenomerus* by e.g. Hellén (1971), which seems to be appropriate.

When visiting Tenerife in the first half of January 1972, I found a female *Xenomerus*, here described as new, illustrated by figures also of the female of *X. ergenna* (fig. 7).

The new species, *X. canariensis*, stands so close to *X. ergenna* that it seems sufficient to mention the separating features. According to the four specimens of *X. ergenna* in my collection, these characters are little varying.

♀. Length 1.3 mm. Colour the same as in *X. ergenna*. Form and microsculpture of head the same. Antennae with clava about as long as pedicellus plus the four following segments (35:35); the clava of *X. ergenna* is clearly longer (45:40); scapus as long as the four following segments (32:32) (fig. 11), but in

*X. ergenna* as long as the five following segments (40:40) (fig. 8).

Sculpture on thorax as in *X. ergenna*, scaly on the anterior 3/4 of mesonotum and smooth on the posterior 1/4 and scutellum. Fore wing slenderer with longer fringe apically; submarginal and marginal veins with bristles (fig. 12), these slightly longer than in *X. ergenna* (fig. 7); *stigmalis* shorter than in the latter, about 1/12 the length of submarginalis plus *marginalis*, about 1/8 in *X. ergenna*; *stigmalis* in *X. canariensis* (fig. 13) forms a more open angle with *marginalis* than in *X. ergenna* (fig. 9); disc slightly infumate in the new species. Hmd wing, spur of fore leg and first segment of tarsus as in *X. ergenna* (fig. 10).

First tergite of gaster in *X. canariensis* (fig. 14) with broader, shorter and fewer striae at its base, not so densely striated from side to side as in *X. ergenna*; anterior margin of first tergite relatively more elevated, posterior half smooth and convex; in *X. ergenna* striated almost to the hind margin (fig. 7); striation at base of second and third tergites shorter in *X. canariensis*.

Holotype ♀. Spain: Canary Islands, Tenerife, Las Mercedes 18.1.1972. L. Huggert. Sieved from spongy wood, bark and mosses on decaying trees, mostly *Laurus*. In coll. Huggert.

Biology. Unknown.

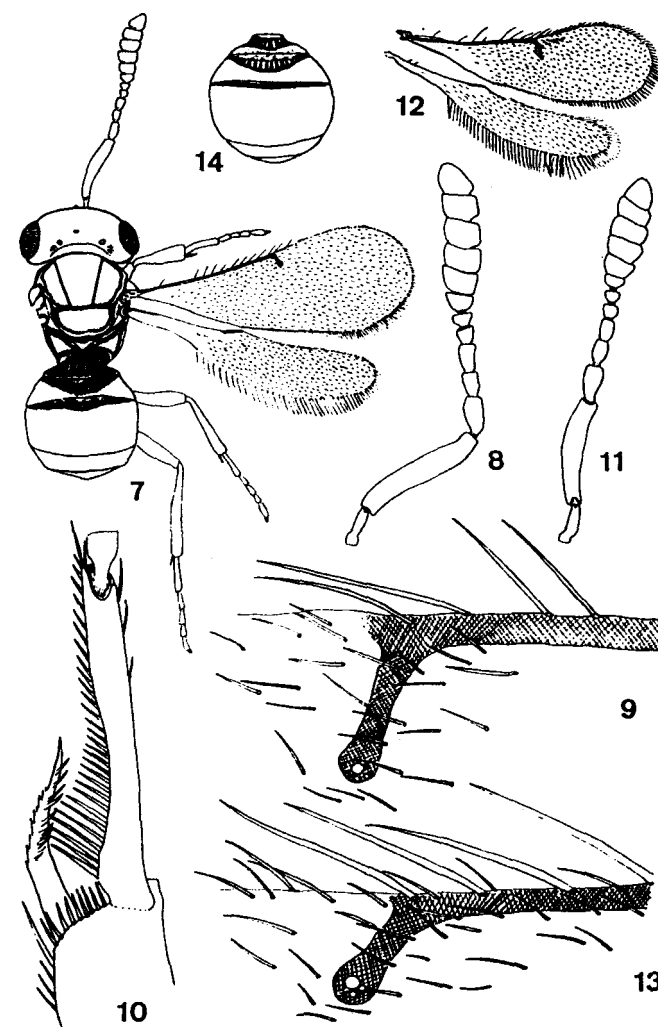
#### *Idris adejensis* n. sp.

♀. Length about 1.1 mm. Colour of head and thorax black; legs light brown to yellow; antennae darker brown with posterior tip of scape and segments four to six slightly lighter; gaster chestnut brown with first tergite and base of second light brown.

Head from above 2.4 times as wide as long with a distinct occipital carina; occiput as much concave as frons is convex (fig. 15); distance between eyes measured over median ocellus 1.3 times the length of an eye (25:20); POL 22 to 1 OOL; eyes with short pilosity and head with sparse but longer hairs; sculpture from coriaceous with punctures to granulate-pustulate and head rather shiny.

Head in side view 1.6 times as long as high with malar space somewhat shorter than greatest length of an eye (14:18); genae finely coriaceous with scattered punctures.

Head seen from in front 1.2 times as wide

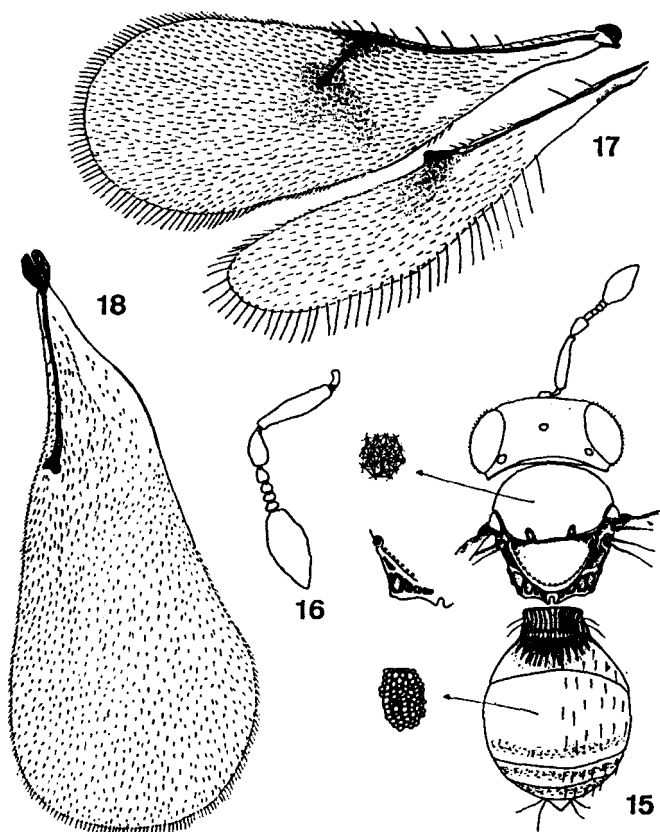


Figs. 7-14. *Xenomerus ergenna* Walk. Female. Dorsal view (7); antenna (8); part of fore wing (9). — *X. canariensis* n. sp. Female. Fore tibial spur (10); antenna (11); wings (12); part of fore wing (13); gaster (14).

as high, with a median ridge from antennal toruli to mid frons; frons on both sides of ridge smooth and towards inner orbits successively more longitudinally reticulate to coriaceous.

Antenna (fig. 16) with scape as long as distance between inner orbits and median

ocellus seen from above; scape about as long as the next five segments together and about 4.3 times as long as wide; pedicellus about as long as segments three to five and 2.2 times as long as wide; segment three about 1.4 times as long as wide; fourth to sixth segments equal,



Figs. 15–18. *Idris adejensis* n. sp. Female. Dorsal view (15); antenna (16); wings (17). — *Pseudaphanomerus hyalinatus* Szel. Fore wing of female (18).

about as long as wide; clava about 2.3 times as long as wide and slightly longer than segments two to six.

Thorax narrower than head (38:48); mesonotum wider than long (38:23) with short parapsidal furrows about 1/6 the length of mesonotum; sculpture coriaceous with punctures, or perhaps better described as punctures in a net-work of meshes, and shiny (fig. 15); scutellum along the semicircular margin with a row of small pits and about 1.6 times as wide as long with the same sculpture as on mesonotum; thorax with rather sparse and short pubescence; hind margin of propodeum not very

pronounced, with the two median teeth rather small and disc having, on each side, only three distinct longitudinal ridges.

Legs with no peculiarities. Fore wing slightly brownish with an infumate spot around stigmalis; marginal fringe moderately long; wing about 2.8 times as long as wide and as long as thorax plus gaster; stigmalis about 4 times the length of submarginalis plus marginalis, the latter very short, without contact with wing margin (fig. 17). Hind wing slightly brownish with marginal fringe about 1/3 the width of wing and with an infumate vague spot below hamuli.

Gaster about 1.4 times as long as wide; first tergite about twice as wide as long, striated longitudinally all over from side to side and with two long setae on each side (fig. 15); second tergite as long as the first but twice as wide, striated from anterior to posterior margin in the middle and with successively shorter striae laterally; third tergite the longest, three times as long as the former about 1.5 times as wide as long with reticulate to rugose sculpture; tergites four and five about equal in length, half that of the first and successively narrower to the tip-like sixth tergite which has two long setae on each side. Gaster with rather long whitish pilosity.

Holotype ♀. Spain: Canary Islands, Tenerife, Barranco del Inferno 14.1.1972. L. Huggert. Sieved from fallen leaves of *Salix canariensis* close to the stream. In coll. Huggert.

Paratype ♀. Same data as above. The head is missing. In coll. Huggert.

Biology. Like other species belonging to Baeninae it most probably is a parasite of spider egg-sacs.

Due to the kindness of Dr. G. Szélnyi, Budapest, I have been able to study the species of *Idris* described by him (1953) and by Szabó (1965). My new species seems not to be very close to any of them or to those two described by Ogioblin (1929). In Kieffer's monograph (1926) it runs to *I. semicastaneus* (Kieff.) but this is said to have the head as much as 3 times as wide as long, against only 2.4 in our species. Likewise, neither of Priesner's (1951) species match *I. adejensis* n. sp. very well.

It could, however, possibly be conspecific with *I. diversus* (Woll.) from Madeira, of which I have unfortunately not been able to study the type.

On my inquiry, Dr. Z. Bouček, with usual kindness, studied the two types of Wollaston's species in the British Museum and compared them with some drawings sent by me. I want to thank him for his trouble and due to him I am now convinced that *I. adejensis* is actually a new species. Among other things he states that the sculpture on the mesonotum of *diversus* Woll. is engraved and reticulate as in the gaster of my species. In the *Idris* spp. studied by me the mesonotal sculpture is a very good character, subject to little variation. Besides, *I. diversus* has no traces of parapsidal furrows.

#### *Pseudaphanomerus hyalinatus* Szel. (1941: 160;

This species was described from Hungary and I have seen specimens collected in Czechoslovakia by Masner and in central Sweden by Jansson. In coll. Sundholm, Mus. Lund, there was a specimen from Canary Islands labelled "Tenerife, Valle de San Andrés 4.1967. N. Gyllensvard leg."

Compared with other specimens, I have seen it differs in some respects; frons is slightly more depressed and occiput not at all so strongly excavated; head and thorax are more shiny and not so densely pilose; antennal clava is somewhat slenderer and the sixth segment slightly narrower.

As in specimens from Czechoslovakia, the fore wing has marginal cilia although Szélnyi in his description says "Flügel ... unbewimpert" (fig. 18).

I have not been able to find any reliable characters by which the Canary specimen may be separated and thus think that it falls within the variability of *P. hyalinatus*.

#### References

- ASHMED, W. H., 1893. A monograph of the North American Proctotrypidae. — U.S. Nat. Mus. Bull. Washington. 4 51—472.
- CAMERON, P., 1913. On the parasitic Hymenoptera reared at Dehra Dun, Northern India from the lac (*Tachardia*) and sal insects. — Ind. For. Rec. Calcutta, 4 91—110.
- DELUCCHI, V., 1961. Le complexe des *Asolcus* Nakagawa (*Microphanurus* Kieffer) (Hymenoptera, Proctotrupeida) parasite oophage des punaises des céréales au Maroc et au Moyen Orient. — Cahiers Rech. Agr. Rabat. 14 41—67.
- 1963. L'identité de l'espèce *Asolcus simoni* Mayr. 1879 (Hymenoptera, Proctotrupeida) parasite oophage des punaises des céréales. — Rev. pathol. végét. et entomol. agric. France. Paris. 42 13—14.
- DELUCCHI, V. & VOEGELE, J., 1961. *Asolcus ghorfii* n. sp. (Hymenoptera, Proctotrupeida) parasite oophage d'a punaises des céréales au Maroc. — Cahiers Rech. Agr. Rabat. 14: 37—39.
- HELLÉN, W., 1971. Die Scelioninen Finnlands (Hymenoptera: Proctotrupeida). — Fauna Fennica. Helsinki. 23: 1—25.
- KIEFFER, J. J., 1926. Scelionidae. — Das Tierreich. Berlin und Leipzig. 48: 1—885.

- KOZLOV, M. A., 1968. Telenominae (Hymenoptera, Scelionidae) of the Caucasus—egg-parasites of Hemipterous grain-pests. — Tr. vses. cntomd. obshchest. Leningrad. 52: 188—223. (In Russian.)
- MASNER, L., 1956. First preliminary report on the occurrence of genera of the group Proctotrupoidea (Hym.) in CSR. (First part — family Scelionidae). — Acta faun. ent. mus. nat. Pragae, 1: 99—126.
- 1958. Some problems of the taxonomy of the subfamily Telenominae (Hym. Scelionidae). — Trans. 1. Int. Conf. Insect Pathology and Biol. Control, Praha: 375—382.
- 1961. The genera Gryon Hal., Idris Foerst. and Hemisius Westw. (Hym. Scelionidae). — Acta Soc. ent. Českoslov. Pragae. 58 (2): 157—163.
- 1964. A comparison of some Nearctic and Palearctic genera of Proctotrupoidea (Hymenoptera) with revisional notes. — Acta Soc. ent. Českoslov. Prague. 61: 123—155.
- 1965. The types of Proctotrupoidea (Hymenoptera) in the British Museum (Natural History) and in the Hope Department of Entomology, Oxford. — Bull. Brit. Museum, London. 1: 1—154.
- MUESEBECK, C. F. W. & WALKLEY, L. M., 1956. Type species of the genera and subgenera of parasitic wasps comprising the superfamily Proctotrupoidea (order Hymenoptera). — Proc. U.S. National Museum, Washington. 105: 319—419.
- NAKAGAWA, H., 1900. Illustration of some Japanese Hymenoptera parasitic on insect eggs. I. — Spec. Rep. Imp. Agric. Exp. Sta., Japan. 6: 1—26.
- NIXON, G. E. J., 1935. A revision of the African Telenominae (Proctotrupoidea, fam. Scelionidae). — Trans. R. ent. Soc. London. 83 (1): 73—103.
- OGLOBLIN, A. A., 1929. Two new species of Acolus (Scelionidae, Hym.) from Podkarpethian Russia. Novi zástupci rodu Acolus (Scelionidae, Hym.) z Podkarpatské Rusi. — Čas. Čsl. Spol. Entom. Prague. 26: 51—55.
- PRIESNER, H., 1951. New genera and species of Scelionidae (Hymenoptera, Proctotrupoidea) from Egypt. — Bull. Inst. Fouad I, Désert, Héliopolis. 1: 119—149.
- SUNDHOLM, A., 1970. Hymenoptera: Proctotrupoidea. — South African Animal Life, Lund. 14: 306—401.
- SZABÓ, J. B., 1965. Remarks on the systematics of the genus Idris Förster, 1856, with redescription of Idris coxalis Kieffer, 1908, and description of some new Palearctic species (Hymenoptera, Scelionidae). — Ann. Hist. Mus. Nat. Hung. Pan Zool., Budapest. 57: 367—373.
- 1966. Ökologische, ethologische, tiergeographische und systematische Untersuchungen an paläarktischen Gryoninen (Hymenoptera: Proctotrupoidea, Scelionidae). — Acta Zool. Hung., Budapest. 12: 419—449.
- SZELÉNYI, G., 1941. Neue Gattungen und Arten der paläarktischen Scelioniden (Hym. Proctotrupoidea). — Zool. Anz., Leipzig. 134: 158—168.
- 1953. In Székessy, V. "Bátorliget élővilága." Die Tier- und Pflanzenwelt des Naturschutzgebietes von Bátorliget und seiner Umgebung. — Budapest: 431—432.
- VOEGELE, J., 1965a. Nouvelle méthode d'étude systématique des espèces du genre Asolcus. Cas d'Asolcus rungsi. — Al Awamia, Rabat. 14: 95—113.
- 1965b. Contribution à l'étude des Asolcus du Maroc. Espèces à sillons parapsidaux. Description de A. histani n. sp. — Al Awamia, Rabat. 16: 99—122.

Manuscript received May 20, 1973.