

***Pteromalus ellisorum*, a new species from the Canary Islands (Hymenoptera: Chalcidoidea, Pteromalidae)**

by

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ABSTRACT. — A new species, *Pteromalus ellisorum*, is described from Lanzarote. Differences with the two related species, *P. bifoveolatus* Förster and *P. squamifer* Thomson are discussed.

For some years Albertine and Willem Ellis have sent me many chalcids, collected during their travels in the Mediterranean region and the Canary Islands. In a collection from Lanzarote a number of specimens represent a new species of *Pteromalus* Swederus. It is a great pleasure to me to dedicate this species to the collectors.

Pteromalus ellisorum sp. n. (figs 1-2)

Female. — Colour: Head and thorax dark green with brassy reflections; mandibles testaceous proximally, darkened towards teeth, which have a dark brown rim. Antennae dark brown, scape testaceous at least basally, underside of flagellum lighter brown. Legs light brown, trochanters testaceous; femora and tibiae of middle and hind legs darker brown in the middle parts. Tarsi testaceous or light brown with dark brown last segment. Wing veins greyish brown. Tegulae testaceous. Gaster very dark blue-green with some purple reflections.

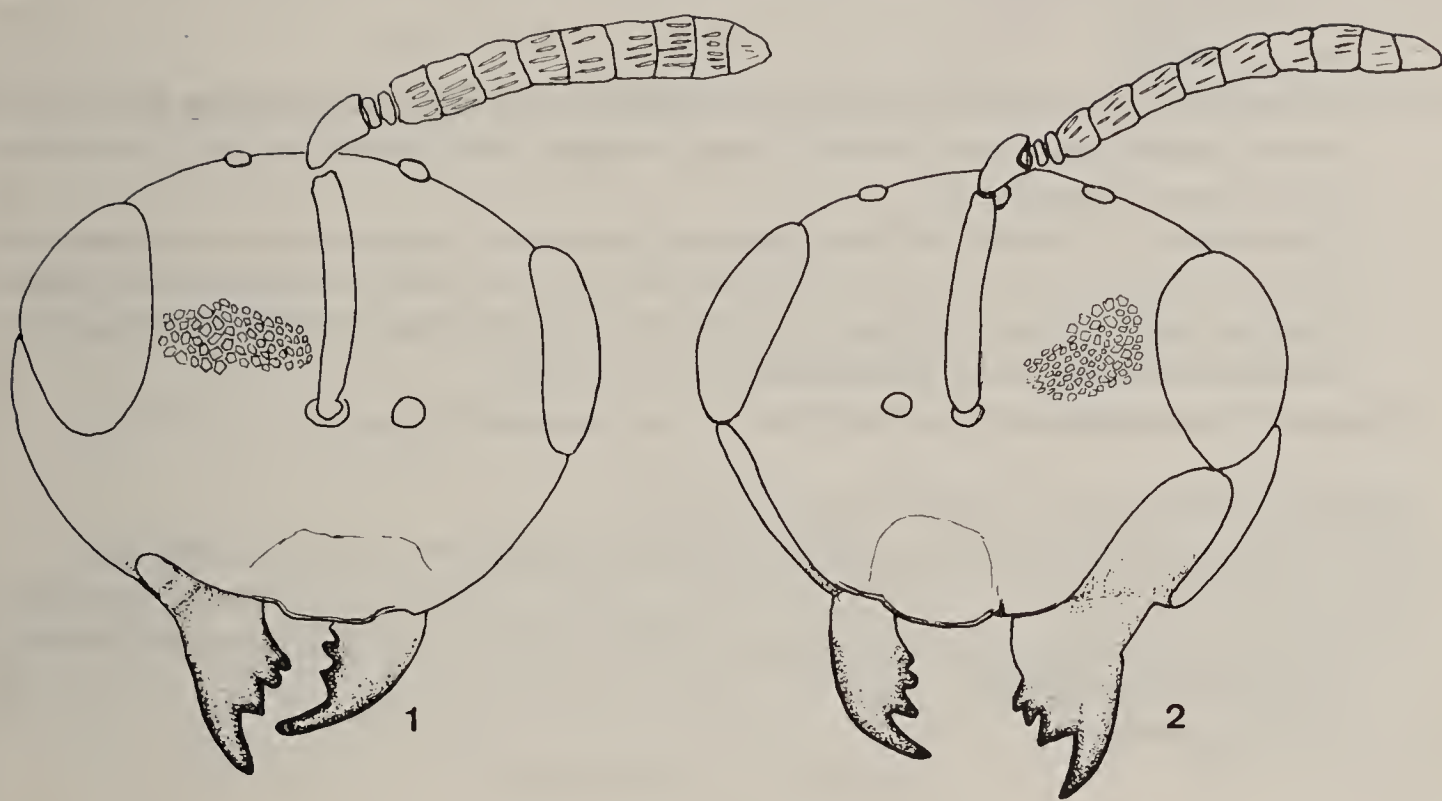
Length: 1.9-2.3 mm.

Morphology: Head (fig. 1) oval in frontal view; 1.3-1.4 times as long as broad. Clypeus truncate to very faintly and broadly emarginate; reticulate but smooth near anterior margin. Anterior margin slightly produced. A tendency to striation on clypeus and face is visible near oral fossa only. Oral fossa : malar space = 2.3-2.9. Oral fossa extending beyond bases of mandibles, forming there a small pit, which seems to have a membranous bottom. Mandibles falcate with lower margin sinuate, both with four teeth, outer tooth of each mandible twice as large as the others. Eyes rather protuberant, 1.3-1.4 times as long as broad. Lower edge of antennal toruli above level of ventral edge of eye. Antennae (fig. 1): scape as long as eye; length of funicle plus pedicellus 0.7-0.8 times breadth of head. Head in dorsal view 2.3-2.4 times as broad as long. POL : OOL = 1.6. Length of ocelli one third to one quarter the distance between the lateral ocelli.

Thorax about 1.5 times as long as broad, uniformly reticulate all over its surface. Length of pronotum 1/6 of mesoscutum; collar finely margined; mesoscutum 1.8 times as broad as long; scutellum convex, 1.1 times as long as broad, as long as or a little longer than mesoscutum; frenum hardly indicated. Propodeum half as long as scutellum, reticulate as remainder of thorax. Reticulation of nucha formed by areoles which are only very slightly transverse. Lateral plicae sharp, just reaching nucha. Median carina irregular, more or less effaced in the middle and reaching nucha. Median area 1.6-1.7 times as broad as long; nucha occupying about 1/3 of median length of propodeum.

Fore wings reaching far beyond tip of gaster, costal cell with complete row of hairs on lower surface, apical third with 4-8 additional hairs; upper side basally bare to below parastigma, speculum extending to level of half length of marginal vein. Marginal : stigmal : postmarginal vein = 14 : 11 : 13.

Gaster 1.1-1.25 times as long as broad, distinctly shorter than thorax, not sharply pointed. Ovipositor sheaths not or hardly protruding. In larger specimens the first tergite occupies only a little less than half the length of the gaster, in smaller ones about 1/3.



Figs 1-2, *Pteromalus ellisorum* sp. n. 1, head female paratype; 2, head male paratype. Reticulation partly indicated

The male differs from the female as follows: colour of head bright green, brassy reflections less conspicuous; antennae testaceous, pedicellus and flagellum darkened on upper side. Legs testaceous. Bottom of pits between mandibular bases and eyes yellowish white. Gaster with a light, transverse spot at the end of the first gastral tergite.

Length 1.9-2.1 mm.

The oral fossa is greatly enlarged and reaches lower edge of eyes (fig. 2), leaving a malar space which is less than 1/4 of breadth of scapus or totally absent. Eyes more rounded: 1.2-1.3 times as long as broad. Scapus 1.05-1.12 times longer than eye; length of pedicellus plus funicle 0.9 times breadth of head; head in dorsal view 2.0-2.2 times as broad as long.

Median area of propodeum 1.4-1.5 times as broad as long. Tip of gaster rounded.

Biology: unknown.

Holotype: Male, "ESPANA, ISL. CANARIAS/Lanzarote, FAMARA/4-15.ii.1979/Ellis & Simon Thomas"; deposited in the collection of Instituut voor Taxonomische Zoölogie (Zoölogisch Museum), Amsterdam.

Paratypes: 13 females and 13 males, same data, deposited in the collections of the Departamento de Zoologia, Universidad de la Laguna, Santa Cruz, Tenerife, Dr. Z. Bouček, London, Dr. M. W. R. de Vere Graham, Oxford and in my own collection.

Pteromalus ellisorum sp. n. belongs to the subgenus *Pteromalus* s.str. The species is related to *P. bifoveolatus* Förster and *P. squamifer* Thomson. *P. ellisorum* has a truncate clypeus, which is obviously emarginate in the other two species. Moreover, the males of the new species are characterized by the complete or nearly complete absence of malar space and the clear yellowish white coloured bottoms of the pits in the oral fossae.

The truncate clypeus of *P. ellisorum* might suggest an affinity with the *altus* group. The species of that group however, differ by having three teeth on the left mandible and a shorter nucha, which is more or less separated from the remainder of the median area of the propodeum by a fossa with a different structure. Moreover the areoles on the nucha form an obvious transverse reticulation.

In the key to European species of *Habroclytus* (= *Pteromalus*) (Graham, 1969) the females can be inserted in couplet 92 (p. 514), provided that the text of couplet 11 (p. 498) is modified as follows:

- 11 (9) text unchanged 11a
 — text unchanged 12
 11a Propodeum half as long as scutellum, reticulation of median area continuing to the large convex nucha; plicae not reaching sides of nucha. Both mandibles with four teeth. Gaster shorter than thorax 92
 — Propodeum (cf Text-fig. 387) medially less than half as long as scutellum, plicae converging slightly to rather strongly in their posterior part; nucha more or less separated from the median area by a fovea, which is provided with some longitudinal rugae. Left mandible with three teeth. Group *altus* 75
 In couplet 92 the new species can be separated by the truncate clypeus.

In the key to the males *P. ellisorum* runs to couplet 4:

- 4 (3) Clypeus truncate; membranous pit between base of mandible and eye reaching eye *P. ellisorum* sp. n.
 — Clypeus emarginate, at least a space of half the breadth of antennal scape between membranous pit and eye 4a
 4a as 4 in Graham's key.

ACKNOWLEDGEMENTS

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REFERENCES

Graham, M. W. R. de Vere, 1969. The Pteromalidae of north-western Europe. — *Bull. Br. Mus. nat. Hist. (Ent.) Suppl.* 16: 1-908.

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EMIGRATIE VAN NOTONECTA GLAUCA LINNAEUS (HETEROPTERA, NEPOMORPHA). In de vijver in onze tuin (ca. 3 m² groot, 3 jaar oud en gevoed door regenwater) overwinterden dit jaar (1983) een groot aantal Ruggezwemmers (*Notonecta glauca*). Deze waren al vroeg in het jaar actief, maar de zonnige eerste april bleek warm genoeg voor een sterke activiteitsverhoging. Deze uitte zich in een massale emigratie. Eerst verschenen de dieren aan de wateroppervlakte, keerden zich om (dus met de rugzijde naar boven) en verhieven zich geheel of gedeeltelijk uit het water. Daarna klommen ze op de oever of op boven het water uitstekende plantestengels. Daarbij overwonnen ze met gemak de 5 cm hoge loodrechte stenen oeverwand. De plantestengels waren soms zo dicht bezet dat de dieren elkaar in het water duwden.

Na een opdrogings- en opwarmingsperiode van 15-20 minuten openden ze hun vleugels, vlogen een rondje boven de vijver en verdwenen. Er bevonden zich gedurende enkele uren (tussen 12.00 en 15.00 uur) steeds 10-20 exemplaren op de stenen oever en op plantestengels. Het maximale getelde aantal zonnende dieren was 35. Tussen 13.40 en 14.15 uur vlogen 32 exemplaren weg. Dit aantal varieerde met de intensiteit van de zon. Desondanks moet in de periode tussen 12.00 en 15.00 uur het aantal emigrerende dieren geschat worden op 100 à 200 exemplaren. Op het eind van de dag waren er nog vele dieren in de vijver te zien.

Deze opmerkelijke massale uittocht van *Notonecta glauca* is door mij nooit eerder waargenomen en ik ben benieuwd of het fenomeen zich volgend jaar zal herhalen. Het is echter mogelijk dat de populatie door deze emigratie voorlopig voldoende is uitgedund. De dieren kunnen de vijver ook verlaten hebben omdat het pionierstadium van de vijver ten einde loopt. De eerste april was zonnig en de temperatuur was ca. 15 °C.

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