

Ascalaphid Studies III. Remarks to the morphology of *Deleproctophylla gelini* (Navás, 1919) (Neuroptera: Ascalaphidae)

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ÁBRAHÁM L., MÉSZÁROS Z.: *Remarks to the morphology of Deleproctophylla gelini* (Navás, 1919) (Neuroptera: Ascalaphidae)

Abstract: In this paper a morphological description is given on a rare, little known own-fly species, *Deleproctophylla gelini* (Navás, 1919) from Morocco. With 4 figures.

Keywords: Own-fly, Morocco.

Introduction

In the past years, several Czech entomologists, among them also V. Major, recorded insect materials in Morocco on the coastal area of the Atlantic Ocean. This ascalaphid species came from his fieldwork carried out in 2003 and was identified as *Deleproctophylla gelini* by the authors.

Deleproctophylla gelini was described by Navás from the Gelin's collection (Niort, France) from Morocco, however since then newer specimens have not mentioned in the neuropterological literature (ASPÖCK et al. 2001).

Since the description, the name of the species has been found only in a faunistical list (ASPÖCK and HÖLZEL 1996) and in West Palaearctic catalogue of Neuroptida written by ASPÖCK et al. (2001) in which the noting on the taxonomical status of this species was „*Vermutlich valide Species. Scwertertaxon?*”. Besides, KIMMINS (1949) referred to this species by the description of *Deleproctophylla bleusei* from Algeria when the new taxon was compared to the drawing of male genitalia published by NAVÁS (1919).

Doubtfulness a round the species, described by Navás, can be originated from the fact that many types of specimens in Navás's collection were destroyed during the Spanish civil war (MONSERRAT 1986). However, *Deleproctophylla gelini* is a very characteristic species from morphological point of view.

Thereafter we tried to get connection with French entomologists who help us to trace the type material or more specimens found in the former Gelin's collection. Dr. B. Michel helped us to get information if the type material of *Deleproctophylla gelini* was being preserved. So, with the help of Dr. J. Legend we learned that the material of lectotype is preserved in the Museum National d'Historie Naturelle in Paris.

As very few specimens have been recorded and the original description is short, that is why a longer morphological description is given with the illustration of the genitalia of male and female as well.

Results

Material examined: 1♂, 2♀ Morocco, High Atlas, Tamri, 20 m, 28. 6. 2003, leg.: V. Major

Deposited: Entomological Collection of Somogy County Museum, Kaposvár

Sexual dimorphism absent. Small sized species: male length of body 17–18 mm, male length of forewing 18–19 mm, length of hindwing 15–16 mm; female length of body 19–21 mm, length of forewing: 21–22 mm, length of hindwing 17–18 mm.

Head: wider than thorax. Eyes large, oval, divided superficially by a furrow. Vertex narrower than eyes in dorsal view, yellow with indistinct brown stripe along the epicranial suture. Subtriangular-shaped brown spots on posterior surface of the vertex laterally. Hairs on vertex rather long, but sparse pale and brownish or brown. Hair bicoloured pale proximally, brown distally. Somewhat dense brown hairs on the vertex beside the occiput and postorbital sclerite. Frons yellow with dense long white tufts of hairs directed forwardly. Genae yellow with brownish pattern, hairless. Clypeus and labrum also yellow with short rare silkiness light hairs curved to mouthpart. Mandibule yellow with dark brown apex. Maxillae and labial palpi yellow, but the last ones ochreous. The other mouthpart segments yellow with white hairs expect ligula with black medium long hairs ventrally and at the joins of last two segments of maxillae and labial palpi where the hairs short black. Occiput yellow with transversal brown stripe on the upper third portion. Postorbital sclerite yellow. Hairs on postorbital sclerite long brown and pale curved to eye.

Antennae 15–16 mm, shorter than the distance between base of forewing and pterostigma. Scape yellow with long dense white hairs. Between scapes long dense tuft of white hairs intermingled with few dark brown ones curved upwards toward the vertex. Pedicel

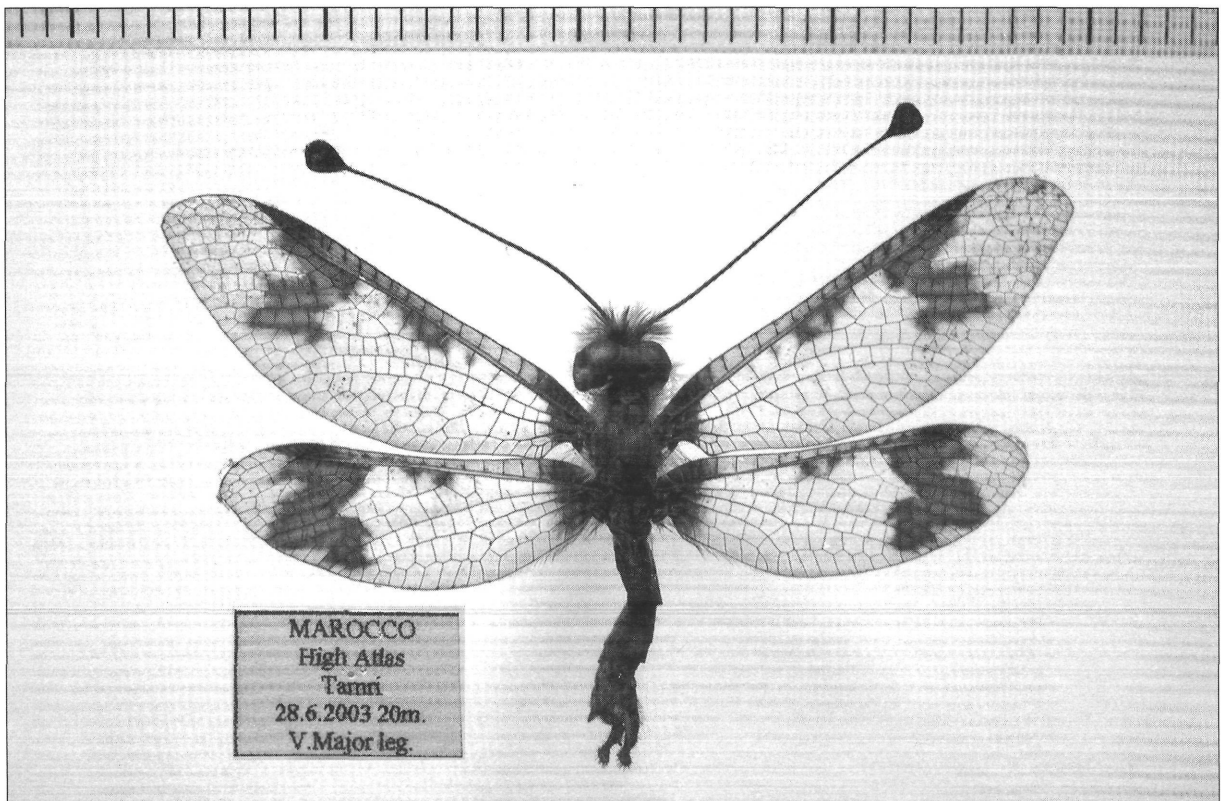


Fig. 1. Male of *Deleproctophylla gelini* (Navás, 1919)

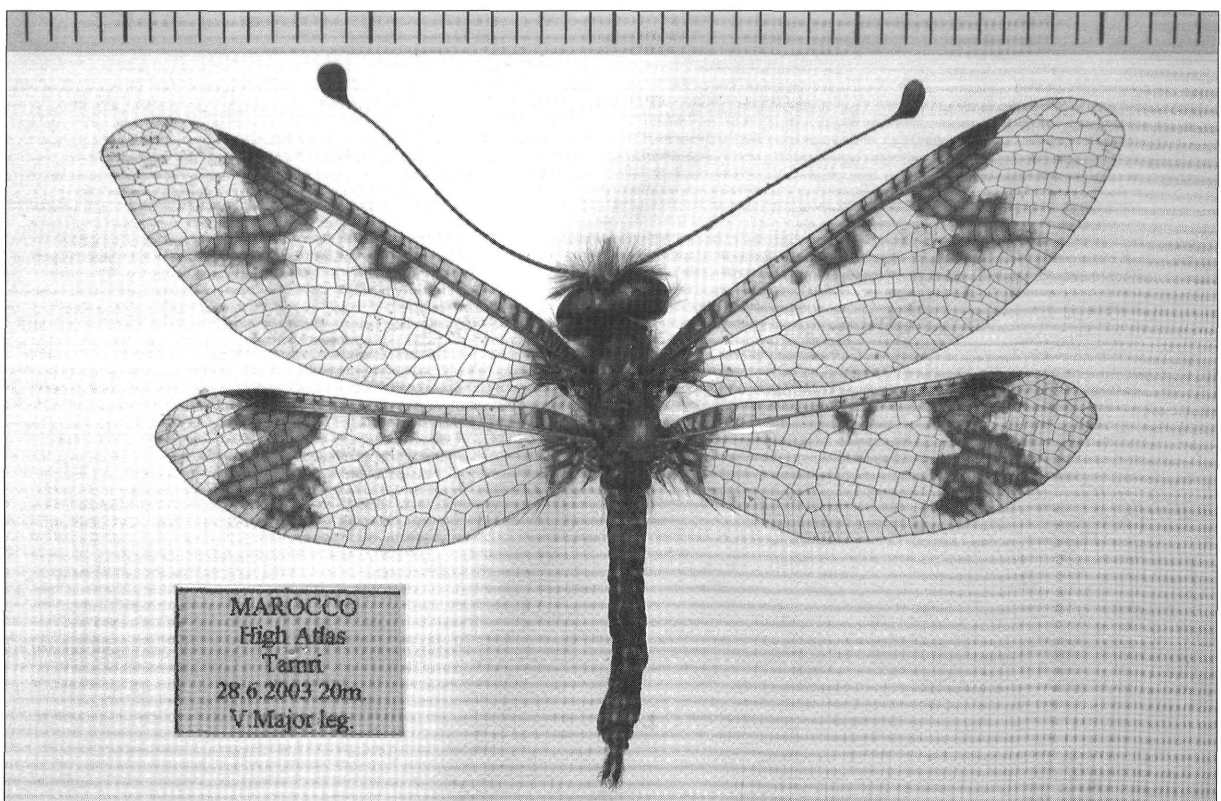


Fig. 2. Female of *Deleproctophylla gelini* (Navás, 1919)

dark brown with long brown hairs. Flagellum brownish-yellow with narrow brown ring of each segment distally. Segments 1—4 with long rather sparse brown hairs, flagellar segments otherwise with very rare short black setae. Brownish-yellow club subglobular-shaped with flattened apex, but apex of the club segments rather yellow with short brown verticils. Bristle of club small brown.

Thorax: Pronotum short brown but strongly flexed upwards; anterior and posterior margins yellow with pale hairs on both margins. Lateral projection brown anteriorly with brownish hairs, yellow posteriorly with pale hairs.

Mesonotum: Prescutum yellow with larger irregular-shaped brownish pattern and dark brown stripe broadening outwardly. Mesoscutum yellow on dorsum but with large indistinct brown pattern laterally. Mesoscutellum dark brown, yellow, brownish and yellow broad alternating stripes transversally. Brownish stripe along the suture longitudinally. Hairs on mesonotum pale rather sparse medium long and on mesopterothorax long pale.

Metanotum: Postnotum yellow with dark brown stripe in the middle longitudinally, hairless. Metascutum and metascutellum yellow with brownish stripe in the middle longitudinally and with medium long pale hairs. Sides yellow with short sparse pale and white hairs.

Legs yellow. Coxa, trochanter with long soft white hairs but short stiff black hairs on femora, tibia and tarsus. Tarsal segments 2—4 as long as wide; segment 1 a bit longer than wide, segment 5 twice as long as wide on all legs. Tibial spurs black as long as segment 1 or bit shorter. Planta with bristles, 2 of them almost as long as claws. Claws rather long black.

Wings elongately oval about 3× longer than broad with rather acute apices. Forewing and hindwing subequal, hindwing slightly shorter than forewing. Forewing: 21—22 mm long, 7—8 mm wide. Hindwing: 17—18 mm long, 6—7 mm wide. Membrane transparent with larger Z-letter-shaped brown brand crossed the radial area but not reaching M1 on forewing. Rather elongately brown spot right under R extending from Rs originated towards pterostigma and dark brown area at

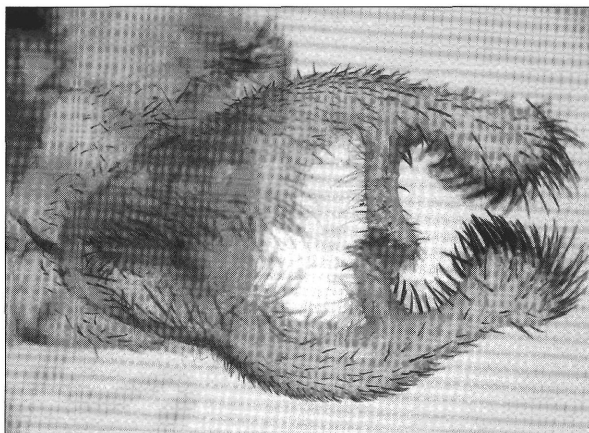


Fig. 3. Male ectoprocts in dorsal view

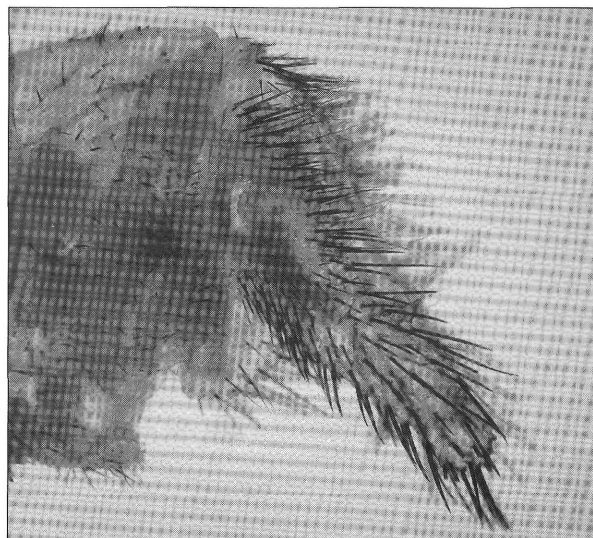


Fig. 4. Female genitalia in lateral view

the base of wing. C yellow with short covering smoothly black setae. In costal area membrane tinged brownish or brown, veins yellow at the base of wings but brown distally. Sc and R also yellow short sparse brown setae. Pterostigma rhomboid-shaped, brown with 4—5 yellow cross-veins. Apical area beyond vein Sc+R with three rows of unequal cells. The other longitudinal veins mostly brown except basal part of wings yellow where the membrane brown pigmented. 5 radial cross-veins in front of origin of Rs in forewing, 2 in hindwing. Hindwing colour and pattern similar to forewing but preapical Z-letter-shaped cross-brand reaches the hind margin. Brown pattern under R around Rs originated on hindwing smaller than on forewing. Anal area of forewing obtusely angled, hairless. Ambient vein on anal area with long soft pale and brownish hairs.

Abdomen: shorter than hindwing; 11—12 mm long, yellow with brownish or brown drawings. Tergite 1 split dorsally into a pair of lateral plates, yellow with extend brown pattern. Tergites 2—3 yellow with dark brown stripe in the middle longitudinally. The other tergites yellow with brownish spot in the middle distally. Hairs on tergite long sparse white proximally, but short black distally. Sternites yellow, hairs similar to tergites.

Genitalia: Male. Tergite 9 fused with a central suture like inflection, subtriangular-shaped with small projection caudo-ventrally flexed outwardly; yellow with some scattered small brownish spots in lateral view. Setae medium long stiff black on projection and margin caudally. Ectoprocts strong not fused dorsally, yellow with an oval-shaped brown spot in lateral view. Ellipsoid-like forceps with club-like apex and with strong projection curved inwardly. Stiff black setae on ectoprocts in lateral view especially strong on rounded apex. Sternite 9 yellow, shorter than wide with two lateral projection curved caudo-ventrally and with a lobe centrally curved dorsally. Apices of both lateral projection rather subacute, while apex of lobe arched in

ventral view. Gonarcus arch-like, fused with parameres. In caudal view apex of parameres ring-form strongly sclerotised with a small projection curved ventro-laterally. Pelta present, small, narrow; pulvini bag-like.

Female. Tergite 9 subtriangular-shaped with rounded margin caudo-ventrally; yellow with larger brown spot in lateral view. Setae medium long black, but rather sparse and stiff. Ectoprocts not fused dorsally strongly elongated caudo-ventrally, apices rounded; yellow with an oval-shaped brown spot and stiff black setae in lateral view. Ventrovalvae fused into a single plate, yellow with convex margin caudally and stiff black setae. Ligulla rounded apices, faintly sclerotised in ventral view. Distivalvae yellow, semi-circular-shaped with stiff black setae.

Distribution: Only known from Morocco, habitat dry sandy coastline. Duration of flight is from the end of June to the middle of Augustus.

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