



## ***Agadirus trojani* gen. et sp. nov.: a new owlfly (Neuroptera: Ascalaphidae) from Morocco**

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### **Abstract**

A new owlfly, *Agadirus trojani* gen. et sp. nov., (Ascalaphidae: Ascalaphinae), is described from the Anti–Atlas Mountains, Morocco. The habitus is unmistakable and differs from all other owlflies, but shares some superficial features with the genus *Puer* Lefèbvre, 1842. *Agadirus* gen. nov., belongs to the subfamily Ascalaphinae (split eyed owlflies) and has genitalia consistent with the tribe Ascalaphini as defined by Tjeder and Hansson (1992).

**Key words:** Myrmeleontiformia, Ascalaphinae, Palaearctic, North Africa

### **Introduction**

The lacewing family Ascalaphidae comprise less than five hundred medium to large-sized species world-wide. Closely allied with Myrmeleontidae, adults are very strong fliers and aerial predators with diurnal, crepuscular or nocturnal activity. Some diurnal species are colorful, very abundant and easily recognizable among the flying-insect fauna of grasslands, meadows and glades in the Euro–Mediterranean region (e.g. *Libelloides* Schäffer, 1763). Due to their large dimensions and striking appearance, these colorful species are noticeable even by occasional observers and considered very common. On the contrary, many species are extremely elusive, difficult to collect, linked to peculiar habitats and rarely found in collections. Emblematic cases include the West–Palaearctic species *Puer maculatus* (Olivier, 1789), rediscovered in Europe a century and a half after its last reported capture (U. Aspöck & H. Aspöck 1987) and the still undetermined species of the genus *Ascalaphus* Fabricius, 1775 recently found in south Sardinia (Pantaleoni *et al.* 2011).

It is not surprising that a single, apparently diurnal and distinctive new owlfly was collected in the Anti–Atlas Mountains, Morocco; an area where other new interesting species of Myrmeleontiformia have been recently discovered (H. Aspöck & U. Aspöck 2009; Ábrahám 2009, 2010). Due to its small dimensions, dark body color and wing markings, it shows a superficial resemblance to the genus *Puer* Lefèbvre, 1842.

### **Material and methods**

Morphological observations were performed using a Leica MZ9.5 stereomicroscope. A Leica MZ16 stereomicroscope equipped with a Leica DFC320 digital camera was used both for morphological measurements and photographs, which were subsequently elaborated using LAS (Leica Application Suite) applied software Version 2.5.0 R1. The software Adobe Photoshop CS5 Extended Version 12.0 was utilized for post-shoot image processing.

The length of the specimen was measured from the vertex of the head to the tip of the abdomen. The length of the wings was measured from the base to the apex, and the width was taken as the maximum width perpendicular to the length measurement line.