



NEW DISTRIBUTIONAL RECORD OF *IDRICERUS DECREPTIUS* (MYRMELEONTIDAE, NEUROPTERA) FROM KHYBER PAKHTUNKHWA PROVINCE OF PAKISTAN

WAQAS AHMAD

Department of Zoology, University of Peshawar, Peshawar 25120, Khyber Pakhtunkhwa, Pakistan
Email: waqaschakisar@gmail.com (corresponding author): ORCID ID 0000-0002-3478-6895

ABSTRACT

Idricerus is a genus in the family Myrmeleontidae of Neuroptera. It includes two species in Pakistan: *Idricerus decrepitus* (Walker) and *Idricerus sogdianus* (McLachlan). The present study in the Shangla Valley was conducted to assess the distribution of owl fly fauna, and it revealed a new distribution record for *I. decrepitus*.

Key words: Shangla, new records, taxonomy, distribution, owl fly, insects, antlions, Pakistan, Neuroptera, Chakesar, arthropods, Myrmeleontidae.

Antlions belong to the family Myrmeleontidae (Neuroptera), with more than 2100 described species from 302 genera (Oswald, 2021). Their larvae have an important function as predatory insects, actively helping to pest management by attacking arthropods, particularly ants. (Machado et al., 2019). Various researchers have revised this family in a series of publication from Pakistan (Hassan et al., 2019; Hassan and Liu, 2021; Hassan et al., 2022; Hassan et al., 2023). *Idricerus* is a genus of tribe Haplogleniini in the subfamily Ascalphinae (Hassan and Liu, 2021). At present, there are five described species within the genus *Idricerus*, and these species are distributed across both the Palearctic and Oriental regions (Machado et al., 2019). In, Pakistan so far been documented to include two species, *Idricerus decrepitus* (Walker) and *Idricerus sogdianus* (McLachlan). This study investigated *I. decrepitus* from the mid-hills of district Shangla in Khyber Pakhtunkhwa Province Pakistan. This resulted in the revelation of new distribution records for *I. decrepitus*.

MATERIALS AND METHODS

From June 2022 to June 2023, a survey was carried out to investigate the Antlion fauna in various habitats such as forests, open fields, marshy areas, and waterways in the district Shangla in Pakistan's Khyber Pakhtunkhwa province. A single adult male specimen was photographed while resting on a surface and then collected by sweeping net from Shangla Valley (34. 478° N, 72, 4611° E) on 1.vi.2023 at an altitude of 1050 meter. The photographs were taken using the Xiaomi Mi A3 mobile camera (Xiaomi Communications Ltd., China). The specimens were

then pinned, and photographs from multiple angles were taken while the identification of *I. decrepitus* was confirmed by (Hassan and Liu, 2021). Photographs of the adult habitus were taken with the Xiaomi Mi A3 mobile camera assisted by a macro lens. Photographs were adjusted and organized with PicsArt and Adobe Photoshop. The collected specimen has been deposited in the Entomological Museum, Department of Zoology, University of Peshawar, Pakistan.

RESULTS AND DISCUSSION

Idricerus decrepitus (Walker, 1860) was observed with conspicuous specklings along the crossveins in the fore and hind wings, a light brown pterostigma, two crossveins in the forewing, and four crossveins in the hindwing. Moreover, it can be easily distinguished by the yellow legs with broadly dark brown femora and the dorsomedial black band on the tibia. *I. decrepitus* is also having the presence of dark brown to yellowish brown specklings along the crossveins and in the apical region beyond Sc+R. Another distinguishing feature is the anal portion of the forewing, which has a faintly or clearly formed triangular protrusion. Furthermore, the combined length of Ta 1-Ta 2 is equivalent to the length of tibial spurs in both the fore- and mid-legs. Additionally, *I. decrepitus* is known for its unique habitat preference, often found in damp and marshy areas near freshwater sources (Fig. 1). Its feeding habits are also noteworthy, as it primarily relies on nectar from various flowering plants, contributing to the pollination process. Earlier it was recorded from Rawalkot Valley, Azad kashmir (Zhang et al., 2015; Hassan and Liu, 2021).

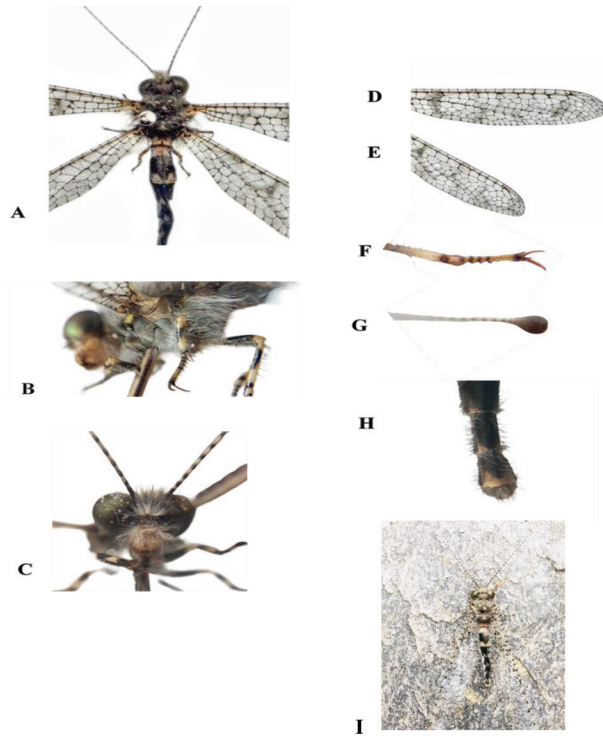


Fig. 1. *I. decreptius* Male. A. Head, thorax and Abdomen, dorsal view; B. Lateral view. C. Head, anterior view; D-E Pterostigma of right fore- and hind wing; F. leg Distal Part. G. Antennae; H. Abdomen Distal part. I. Field photograph

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CONFLICT OF INTEREST

No conflict of interest.

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