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Article



## Review of the genus Drylichus Heller (Insecta: Coleoptera: Dryopidae)

JÁN KODADA<sup>1</sup>, MANFRED A. JÄCH<sup>2</sup> & ČIAMPOR FEDOR JR.<sup>3</sup>

<sup>1</sup>Commenius University, Mlynská dolina B-1, SK - 842 15, Bratislava, Slovakia <sup>2</sup>Naturhistorisches Museum, Burgring 7, A - 1010 Wien, Austria <sup>3</sup>Institute of Zoology, Slovak Academy of Sciences, Dúbravská cesta 9, SK - 842 06, Bratislava, Slovakia E-mail: kodada@fns.uniba.sk; manfred.jaech@nhm-wien.ac.at; f.ciampor@savba.sk

## Abstract

The genus *Drylichus* Heller, which has not been treated since the original description in 1916, is reviewed taxonomically. The type species, *Drylichus hylesinoides* Heller (New Caledonia), is redescribed. Two new species, *D. fidelitas* **sp. nov.** (Lifou Island) and *D. monteithi* **sp. nov.** (New Caledonia), are described. *Drylichus* is hypothesized to be closely related with *Parnida* Broun (New Zealand), with which it shares the following characters: (1) shape of mouthparts and gular region, (2) distribution and morphology of sensilla on mouthparts, (3) configuration of antennomeres, (4) correspondence of several types of antennal sensilla, (5) shape of ventral sclerites of thorax and abdomen.

Key words: Insecta, Coleoptera, Dryopidae, taxonomy, Drylichus, New Caledonia, Loyalty Islands, Lifou Island

## Introduction

Only three dryopid genera are known from the Australian Region (Kodada & Jäch 2005; Jäch & Balke 2008), where they are confined to New Guinea (*Elmomorphus* Sharp), New Zealand (*Parnida* Broun) and New Caledonia (*Drylichus* Heller). Dryopids have not been collected from the Australian continent itself.

While *Elmomorphus* is an aquatic genus widespread in the Oriental Region, *Parnida* and *Drylichus* are both terrestrial and endemic to New Zealand and New Caledonia, respectively. Both endemic genera are rare and unrevised. *Drylichus* is certainly one of the rarest endemic beetle genera of New Caledonia. It has not been treated in any publication since almost 100 years! Despite considerable collecting efforts, only six specimens have been collected since the discovery of the type species, *Drylichus hylesinoides* Heller, in 1914.

These six specimens, all sampled by Geoff Monteith (Queensland Museum, Brisbane) in 1984 and 2000, represent three species, two of which are new to science.

## Material and methods

For detailed morphological study, specimens were relaxed in hot water, cleared in lactic acid and washed in distilled water and disarticulated. The body parts were studied under a Leica DM1000 microscope as temporary glycerine slides at magnifications up to 1000x. Dry preparations of specimens were examined with a Leica MZ16 microscope with diffuse lighting at magnifications up to 115x. All drawings were made with a drawing tube.

For scanning electron microscopy, head of *D. hylesinoides* and *D. fidelitas* was dissected, dehydrated in graded ethanol series, air-dried from absolute ethanol, mounted on stubs with Tempfix, sputter coated with gold, and then viewed with a Hitachi S800 microscope at 10 kv. Metric measures were made with a Leica MZ16 microscope with an ocular measuring scale (5 mm: 100).