



## Two new species of *Eupholus* Boisduval (Coleoptera, Curculionidae, Entiminae), with observations on coloured cuticular exudates in weevils

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### Abstract

Two new species of *Eupholus* Boisduval from Papua New Guinea are described as new: *Eupholus mimicus* sp. n. and *E. sedlaceki* sp. n.. A key to the *Eupholus* species with yellow colour patterns is provided. *E. sedlaceki* is closely related to *E. euphrosyne* Porion but differs in coloration. Male and female terminalia of *E. euphrosyne* are illustrated for comparison. *E. mimicus* is superficially very similar to *E. euphrosyne*, but its yellow colour pattern is composed of scales whereas in the latter it is formed by loose particles. These two species belong to different species groups, and the conspicuous colour patterns have evidently evolved convergently. The occurrence and function of extracuticular pigments among species of Eupholini is discussed.

**Key words:** weevils, New Guinea, pigments, mimicry

### Introduction

Weevils of the genus *Eupholus* Boisduval are undoubtedly among the most beautiful examples of the Papuan fauna. A relatively large body size and a usually splendid coloration attracted the attention of collectors in recent years, Porion (1993, 2000) and Limoges & Porion (2004) publishing picture books on the genus. Riedel (2002) described some important genital characters. New species are still being discovered in the genus, even from relatively well known and comparatively accessible areas of New Guinea (Riedel & Porion 2009), and another two new species are described here. One of them is superficially very similar to *Eupholus euphrosyne* Porion, but its yellow coloration is produced by different means. These characters are discussed in detail below.

### Material and methods

The study is based on the examination of 19 specimens. Depositories are abbreviated using the following codens:

ANIC	Australian National Insect Collection, Canberra, Australia.
ARC	Alexander Riedel Collection, stored in SMNK, Germany.
BPBM	Bernice P. Bishop Museum, Honolulu, HI, USA.
SMTD	Staatliches Museum für Tierkunde, Dresden, Germany.
SMNK	Staatliches Museum für Naturkunde, Karlsruhe, Germany.
TPCJ	Thierry Porion Collection, Jaujac; later to be deposited at Muséum de Lyon, Rhône, France

Habitus illustrations were made using a Canon Eos 1Ds camera (11 MP) equipped with a macro lens (Canon 100 mm, respectively Canon MPE 100 mm) mounted on a repro-stand. The camera was moved