



## *Eupholidoptera karatolosi* sp.n. and *E. mirzayani* sp.n. (Orthoptera, Tettigoniidae), two new bushcrickets from Greece and Iran

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### Abstract

*Eupholidoptera karatolosi* Mofidi-Neyestanak & Quicke from Greece and *E. mirzayani* Mofidi-Neyestanak & Quicke from Iran, two new species of bushcrickets (Orthoptera, Tettigoniidae: Platycleidini), are described and distinguished from closely related species based on morphology. Species relationships within *Eupholidoptera* Maran are discussed and some species are given new assignments. A simplified illustrated identification key to the species of *Eupholidoptera* is provided to accommodate the new species. They are being described since they have been used to generate DNA sequence data that will be published elsewhere as part of a phylogenetic study of the tribe Platycleidini.

**Key words:** *Eupholidoptera*, Platycleidini, new species, description, morphology, Mediterranean

### Introduction

The Tettigoniidae is a heterogeneous group with more than 1120 recognised genera and 6800 species and are the largest family within the Orthoptera (Bisby *et al.*, 2007). They are also one of the most widespread Old World groups of the order (Jago, 1997). Bushcrickets usually live in the open, mainly dry habitats over a wide range of altitudes, and the Mediterranean region has an especially diverse tettigoniid fauna (Samways, 1989; Çiplak, 2003). Among the Mediterranean countries, Greece is very rich in *Eupholidoptera* Maran species and their allies (Willemse, 1980; Willemse, 1984; Nadig, 1985) and more than third of the species of this genus have been collected from there (Bisby *et al.*, 2007; Eades *et al.*, 2007).

*Eupholidoptera* is a relatively large genus (Tilmans, 2002), with 45 current recognised species. A checklist giving type-localities is presented (Table 1). Originally Ramme (1951) suggested *Eupholidoptera* as a genus for a group of *Pholidoptera* Wesmael species. However, this was invalidly published because he did not mention any type-species for this new genus (Koçak, 1981). Subsequently Maran (1953) designated *Locusta chabrieri* Charpener as the type-species of *Eupholidoptera* thus making this name available.

Morphologically, the species of *Eupholidoptera* are rather uniform and identification can be difficult. In particular, females of most species are very alike those of the type species and in some cases almost impossible to distinguish. Morphological identification has been mostly done by examining male abdominal terminalia (Karabağ, 1961; Willemse, 1980; Ünal & Naskrecki, 2002; Ünal, 2006) but female terminalia are also valuable and have been used in their taxonomy (Ramme, 1930, 1951; Bey-Bienko, 1967; Harz, 1969; Adamovic, 1972; Salman, 1983; Tilmans, 2002).