

# Morphological characterisation of a population of *Rana ridibunda* Pallas, 1771 in the Dalaman area, Turkey

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**Abstract:** 91 specimens of the Marsh or Lake Frog *Rana ridibunda* from the vicinity of Kapıkargın Village (Dalaman, Muğla province, Turkey) were investigated morphometrically and from the viewpoint of colouration and colour pattern. While the specimens were found to be identical morphometrically with *Rana ridibunda*, the venter of 87% of the specimens was more or less covered with fine black or yellow warts, which is not known from elsewhere in Turkey.

**Kurzfassung:** Morphologische Merkmale, Färbung und Zeichnungsmuster von 91 Exemplaren des Wasserfrosches *Rana ridibunda* aus der Umgebung von Kapıkargın (Dalaman, Provinz Muğla, Türkei) wurden untersucht. Während sich die morphologischen Merkmale der Population von anderen Populationen von *Rana ridibunda* nicht unterscheidet, war die Unterseite von 87% der Exemplare mehr oder weniger stark mit schwarzen und gelben Warzen bedeckt. Dies ist von anderen Gebieten der Türkei nicht bekannt.

**Key words:** *Rana ridibunda*, morphology, colouration, pattern, Kapıkargın, Middle East.

## Introduction

Accepted until recently as a monotypic species, *Rana ridibunda* was originally described by Pallas from Atyrau (terra typica restricta). Its range includes Central and Southern Europe, Northern Africa and Western Asia. The Turkish population was treated by BODENHEIMER (1944), BARAN (1969), YILMAZ (1984) and OLGUN (1986) as the *Rana ridibunda* complex, sensu lato. Based on some morphological and colouration parameters, ARIKAN (1988) separated the population from Beyşehir and named it *R. r. caralitana*. Later the same subspecies was reported from Eğridir, Suğla Lake, tributaries of the Çarşamba Stream in the Lakes District; westerly from Gölcük (Isparta), Çivril (Denizli), southerly from the foothills of the Taurus Range and easterly from the vicinity of İvriz-Ereğli (Konya) (ATATÜR et al. 1990, ARIKAN et al. 1994, 1998, BUDAK et al. in press). On the other hand, SCHNEIDER et al. (1992) claimed that the previously accepted *R. ridibunda* populations of Israel should now be treated as a separate species, *R. levantina*, according to their morphological and bioacoustical characteristics, and they also included the western populations of Turkey in the same species on the basis of the bioacoustical results of JOERMANN et al. (1988). In a later taxonomic reassessment of Middle Eastern water frogs, SCHNEIDER & SINSCH placed the same group in *R. bedriagae* (SCHNEIDER & SINSCH 1999, SINSCH & SCHNEIDER 1999). In a more recent study on Turkish populations, KUMLUTAŞ et al. (1999) placed the Black Sea populations in the nominate race.

In order to contribute further to a better understanding of the systematics and taxonomy of