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Review of the systematics, distribution, biogeography and natural history of Moroccan amphibians

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Abstract

The amphibian fauna of the Kingdom of Morocco was traditionally regarded as poor and closely related to its European counterpart. However, an increase in research during the last decades revealed a considerable degree of endemism amongst Moroccan amphibians, as well as phenotypic and genotypic inter- and intraspecific divergence. Despite this increase in knowledge, a comprehensible overview is lacking while several systematic issues have remained unresolved. We herein present a contemporary overview of the distribution, taxonomy and biogeography of Moroccan amphibians.

Fourteen fieldtrips were made by the authors and colleagues between 2000 and 2012, which produced a total of 292 new distribution records. Furthermore, based on the results of the present work, we (i) review the systematics of the genus *Salamandra* in Morocco, including the description of a new subspecies from the Rif- and Middle Atlas Mountains, *Salamandra algira splendens* ssp. nov.; (ii) present data on intraspecific morphological variability of *Pelobates varaldii* and *Pleurodeles waltl* in Morocco; (iii) attempt to resolve the phylogenetic position of *Bufo brongersmai* and erect a new genus for this species, *Barbarophryne* gen. nov.; (iv) summarize and assess the availability of tadpole-specific characteristics and bioacoustical data, and (v) summarize natural history data.

Key words: North Africa, Maghreb, Amphibia, Anura, Urodela, tadpole, identification key