

The occurrence of *Acanthodactylus hardyi* Haas, 1957 in the Hashemite Kingdom of Jordan and notes on its ecology

by Lina Rifai, David Modrý, Petr Necas and Zuhair S. Amr

Abstract. *Acanthodactylus hardyi* Haas, 1957 has traditionally been treated as a subspecies of the widely distributed *A. scutellatus*, but was recently elevated to specific rank. The occurrence of *A. hardyi* in Jordan was discovered very recently. Four specimens collected from Batn al Ghul and Al Hazim have the diagnostic features of *A. hardyi* and are therefore assigned to this taxon. This finding is considered as further proof of the validity of the taxon and of its recognition at the specific level. Ecological requirements and niche partitioning are discussed in the light of the co-occurrence of *A. hardyi* with *A. schmidti* and/or *A. opheodurus*.

Kurzfassung. *Acanthodactylus hardyi* Haas, 1957 war traditionell als Subspezies der weit verbreiteten Art *A. scutellatus* aufgefasst worden, wurde aber vor Kurzem auf Artrang erhoben. Erst kürzlich wurde das Vorkommen von *A. hardyi* in Jordanien entdeckt. Vier Exemplare, die in Batn al Ghul und in Al Hazim gesammelt wurden, weisen die diagnostischen Merkmale von *A. hardyi* auf und werden daher diesem Taxon zugeordnet. Diese Feststellung wird als weiterer Beleg für die Validität dieses Taxons und ihre Gültigkeit auf Artniveau gewertet. Die ökologischen Ansprüche und die Nischenaufteilung werden im Hinblick auf die Koexistenz von *A. hardyi* mit *A. schmidti* und/oder *A. opheodurus* diskutiert.

Key words. Taxonomy, distribution, zoogeography, Sauria, Lacertidae, Jordan, Near East.

Introduction

Lizards of the genus *Acanthodactylus* Wiegmann are common inhabitants of arid ecosystems in northern Africa and the Near and Middle East. Thanks to several morphological and ecological adaptations and the resulting fine niche partitioning, these lacertids often form rather diverse communities consisting of up to four syntopically living congeners. According to present knowledge, the genus *Acanthodactylus*, is represented in Jordan by 9 species, but the occurrence of *A. cf. pardalis* is questionable (DISI et al. 2001).

Acanthodactylus scutellatus (Audouin, 1809) is typically a psammophilous species inhabiting northern Africa and the Near East, east to Kuwait. Together with *A. aureus* Günther, 1903, *A. dumerili* (Milne Edwards, 1829), *A. longipes* Boulenger, 1918 and *A. taghitensis* Geniez & Foucart, 1995 it forms the relatively uniform *scutellatus* group within the genus *Acanthodactylus*. Traditionally, two subspecies are considered as valid within *A. scutellatus*: the nominotypic one, inhabiting Saharan Africa east to Sinai and southern Israel, and *A. s. hardyi* Haas, 1957, described from Saudi Arabia and subsequently reported also from Kuwait and Iraq (SALVADOR 1982). However, in the most recent study dealing with the biogeography and evolution of the genus *Acanthodactylus*, HARRIS & ARNOLD (2001) pointed out morphological differences between the nominotypic form and *A. s. hardyi*, and elevated the latter to specific rank. We follow this classification and treat *A. hardyi* as a separate species.