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Nomenclature, lectotype designation and type locality restriction for *Amietophrynus mauritanicus* (Schlegel, 1841) (Anura, Bufonidae)

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As part of his function as assistant to the director of the Rijksmuseum van Natuurlijke Historie in Leiden, the Netherlands (RMNH, currently Naturalis Biodiversity Center), the German biologist Hermann Schlegel received several herpetological specimens from Algeria for identification purposes during the mid-19th century. These specimens were sent to him by Moritz Wagner, who undertook an expedition to Algeria between 1836 and 1838 (Wagner *et al.* 2012). As part of the publication describing the specimens collected on this expedition, Schlegel (1841) provided a description and diagnosis of *Amietophrynus mauritanicus* (Schlegel 1841) mainly based on a single specimen which is still extant in the RMNH. This specimen was treated as holotype by M. S. Hoogmoed in Frost (1985). During a recent appraisal of historical documentation dealing with north-west African amphibians (Beukema *et al.* 2013) we came across the account of Schlegel (1841) describing *A. mauritanicus*, and noticed the following issues; (i) Schlegel did not intend to describe *A. mauritanicus* as a new species; (ii) a single specimen is described in detail, but it is obvious from the description that it was based on multiple observed individuals; (iii) there is confusion on the type locality, which has been described to comprise multiple regions (e.g. Frost 2012) despite the assumed presence of only a single type specimen; (iv) Schlegel is shown as sole author while the account is in the plural (i.e. ‘wir’ – see also Wagner *et al.* 2012). Herein, we address these issues, provide a lectotype designation and restrict the type locality of *A. mauritanicus* following the International Code of Zoological Nomenclature (ICZN 1999).

Schlegel (1841) explicitly did not intend to describe *A. mauritanicus* as a new species: he used the adjective *mauritanicus* merely to indicate the origin of the collected material, but clearly stated he did not think it represented a new species (“*Wenn wir der in Algerien vorkommenden grossen Kröte diesen neuen Namen beilegen, so geschieht dies nur, um ihre Herkunft anzudeuten, und wir wollen dieselbe keineswegs schon als neue Art angesehen wissen* [While we attribute a new name to this large toad native to Algeria, we only do so to indicate its origin, and do not intend in any way to already describe a new species]”). There is thus little doubt that the nomen *Bufo mauritanicus* was not used as valid when proposed, hence the requirements of Article 11.5 are not met. Schlegel (1841) was uncertain about the specific allocation of the Algerian specimen(s), being unable to decide if they belonged to *Bufo viridis* Laurenti or *Bufo arabicus* Heyden, but he clearly seemed to treat *Bufo mauritanicus* as a junior synonym of one of these nomina. According to Art. 11.6 of the Code, *Bufo mauritanicus* is thus not made available by its publication in Schlegel (1841). However, this nomen has been widely adopted as valid for the North African species; it is still applied to today, as well as before 1961 (see for example Doumergue 1901; Pasteur 1959). Therefore, the conditions of Art. 11.6.1 apply and the nomen *Bufo mauritanicus* is available under the authority of Schlegel (1841). We are of the opinion that Art. 11.5.1 does not apply here: according to the glossary of the Code conditionally means “made with stated reservations”; we interpret the text of Schlegel (1841) as a publication of this nomen as a junior synonym and not as a publication with reservations. However, we can only agree that these various articles of the Code are open to more than one interpretation and that they would need to be clarified in the next edition of the Code. Whatever interpretation is true, the conclusions are the same: *Bufo mauritanicus* Schlegel, 1841 is an available nomen.

It is generally accepted that the description of *A. mauritanicus* was based on a single specimen now housed in the Naturalis Biodiversity Center (RMNH 2122; Fig. 1A), which was described by Schlegel (1841) in detail (see for ex. Frost 1985; Wagner *et al.* 2012). Likely due to the fact that Schlegel (1841) did not mention any kind of type specimens in his account, the RMNH specimen was later treated as holotype (Frost 1985). However, the original account makes it

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