

On the distribution of *Uromastyx alfredschmidti* Wilms and Böhme, 2000 (Squamata: Agamidae: Uromastycinae)

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Abstract. The article reports on two new findings of *Uromastyx alfredschmidti* Wilms and Böhme, 2000 that allow for a more precise definition of its distribution range and, consequently, a new conservation assessment in compliance with IUCN parameters. Following review of available museum specimens, the Hoggar Mts. (Algeria), should not to be considered within the natural range of the species. Nomenclatorial clarifications on existing literature are also provided.

Keywords. *Uromastyx alfredschmidti*, distribution, conservation status.

The first record of the genus *Uromastyx* in SW Libya was reported by Scortecci (1937: 176), who stated that “*Uromastyx acanthinurus non è presente affatto nei dintorni di Gat e delle altre oasi del territorio, ma negli uadi in a prode rocciose quali lo Iseien* [E10°19' N24°48'], *lo Ertà a occidente di Feuat* [N24°58' E10°05'], *presente e abbondante sull'Akakus e sui Tassili, dove l'ho rinvenuto fino a 1500 metri di altezza.*” [= *Uromastyx acanthinurus* is absent from Gat and other surrounding oases, but occurs in the rocky wadies such as Isein, Ertà west of Feuat, occurring and abundant in the Akakus and the Tassili, where I found it up to 1500 m a.s.l.]. Apparently, there have been no further records of *Uromastyx* from SW Libya since Frynta et al. (2000: 21) that reported a damaged specimen from “Akakus Mts” at N24°41' E10°38', 790 m a.s.l., found dead on 4-5 October 1999, doubtfully identified it as *U. acanthinura*. Since this locality is very close to the place where the senior author observed *U. alfredschmidti* in 2008, the specimen likely belongs to this latter species, because sympatry between *U. alfredschmidti* and *U. acanthinura* has never been observed as yet, and the range of the latter does not extend to the Central Sahara.

Wilms and Böhme (2000) described a new species, *Uromastyx alfredschmidti*, belonging to the *U. acanthinura* complex from Central Sahara, on the basis of five



Fig. 1. *Uromastix alfredschmidti* from southern Akakus (photo by Heiner Rohrwick, without date).

museum specimens. The only precise locality known by the authors was the type locality: “*Tassili N’Ajjer, Tamrit Plateau (1600 m) [N24°38’ E9°40’], ca. 30 km nord-östlich [= north-east] von Djanet*”. The four paratypes came from vague localities: “Hoggar”, “Tassili N’Ajjer” and “Sahara”. Moreover a Libyan record from “*Südlicher Akakus*” [= southern Akakus] is reported in the map by Wilms and Böhme (2000), on the basis on a photographic record by Heiner Rohrwick (Fig. 1). During the study of the herpetological collection of the Rome University “La Sapienza” (now deposited in the Museum of Zoology of Rome municipality, MCZRV), two authors (AV and RS) found an adult specimen of an indetermined *Uromastix* (MZUR R/380, provisional collection number) collected by Giuseppe Scortecci in October 1936 in “*Fezzan Occidentale, Tassili*” [= Western Fezzan, Tassili] (Fig. 2). This specimen was identified as *U. alfredschmidti* (identification confirmed by TW) and it is the first Libyan museum specimen belonging to this species.

On 22 April 2008, an adult specimen of *Uromastix alfredschmidti* was found in the Wadi Imlal (N24° 46’ 47.5” E10° 38’ 45.3”), Akakus Mts, SW Libya, 814 m a.s.l., at about 14:00h by Cristina Grieco, Claudia Corti and Riccardo Saccardi and the senior author (RS). The locality is close to Wadi Iseien, where Scortecci (1937) reported *U. acanthinura*.

The specimen was observed eating small leaves of a thorny shrub of *Acacia* sp., and when disturbed, it took refuge under a big stone. It was captured, photographed and then



Fig. 2. *Uromastyx alfredschmidti*. MZUR R/380. Libya, “Fezzan Occidentale, Tassili”, Giuseppe Scortecchi leg., October 1936.

released at the site of capture. A photograph of this specimen was published by Sindaco and Jeremčenko (2008: 432).

Up to now *U. alfredschmidti* was quoted from less than a dozen of localities, many of which are vague (see Table 1); since precise records exist in these areas, only these have been mapped (Fig. 3). The precise localities fall in a small area, about 100 km wide, between Algerian Tassili and Libyan Akakus. From the area of the Tassili du Hoggar in southern Algeria there are only two known museum specimens (MHNP 9905, MHNP 1961.261) with vague localities (“Algeria, Hoggar”).

One of the authors (TW) examined more than 50 *Uromastyx* from southern Algeria, western Libya, northern Mali and northern Niger, deposited in 14 European museum collections (The Natural History Museum, London (BMNH), Gothenburg Museum of Natural History (GNHM), Hessisches Landesmuseum Darmstadt (HLMD), Muséum d’Histoire Naturelle, Genève (MHNG), Muséum National d’Histoire Naturelle, Paris (MNHP), Museum für Tierkunde, Dresden (MTKD), Museo Zoologico de „La Specola“, Firenze (MZUF), Zoological Museum of Rome (MZUR/MCZ-RV), Naturhistorisches Museum Wien (NMW), Naturmuseum und Forschungsinstitut Senckenberg, Frankfurt a.M. (SMF), Zoologisches Forschungsmuseum A. Koenig, Bonn (ZFMK), Museum für Naturkunde, Humboldt-Universität, Berlin (ZMB), Zoologisches Institut und Zoologisches Museum der Universität Hamburg (ZMH), and Zoologische Staatssammlung München (ZSM). All specimens from the Tassili du Hoggar (but the above mentioned two doubtful specimens) were found to belong either to *Uromastyx geyri* Müller 1922 or *U. dispar maliensis* Joger and Lambert 1996. The occurrence of the species in the Hoggar appears therefore more than doubtful, and we consider the Algerian Tassili du Hoggar as not lying within the natural distribution range of *Uromastyx alfredschmidti*.

Table 1. Known records of *U. alfredschmidti*.

Map Number	Locality	Lat	Lon	Precision	Notes	Reference
1	Tassili N'Ajjer, Tamrit Plateau	24,63	9,67	2	TYPE LOCALITY	Wilms and Böhme, 2000
2	Ertà [Uadi] W of Feuat	24,96	10,08	3	-	Scortecci, 1937
3	Akakus" at N24°41' E10°38'	24,68	10,63	2	-	Frynta et al., 2000
4	Iseien [Uadi]	24,80	10,66	3	-	Scortecci, 1937
5	"Wadi Imlal"	24,76	10,63	1	-	Present paper
6	Sefar, Tassili	24,66	9,74	3	photographic record	Wilms, 2001
7	Djanet, 40 km NE	24,79	9,76	3	photographic record	Antonini, 2004
-	"Akakus"	-	-	0	see records 3 and 4	Scortecci, 1937
-	"Südlicher Akakus"	-	-	0	see record 5; photographic record	Wilms and Böhme, 2000
-	"Tassili N'Ajjer"	-	-	0	see record 1	Wilms and Böhme, 2000
-	"Sahara"	-	-	0	Vague	Wilms and Böhme, 2000
-	"Fezzan Occidentale, Tassili"	-	-	0	see record 1; MZUR R/380	Present paper
?	"Hoggar"	-	-	0	doubtful	Wilms and Böhme, 2000

Precision: 0 = generic, not mapped; 1 = G.P.S. point; 2 = coordinates provided by authors; 3 = coordinates from gazetteers or maps.

On the basis of our new findings, the *U. acanthinurus* by Scortecci (1937) is added in the chresonymy of *U. alfredschmidti*, as well as, tentatively, the *U. acanthinura* by Frynta et al. (2000).

Furthermore, following the removal of the uncertain and inaccurate records from the known range, the distribution of *U. alfredschmidti* turns out to be restricted only to a small area between Algerian Tassili N'Ajjer and Libyan Akakus, thus being much smaller than previously thought.

This species is assessed as Near Threatened in the IUCN Red List of Threatened Species (Version 2010.4.) because its range was not much greater than 20,000 km² and it is overharvested, making it close to qualifying for Vulnerable (Joger and Böhme 2006).

This assessment should be reconsidered in light of the new interpretations presented in the present paper, since the new Extent of Occurrence (as defined by IUCN 2001) is reduced to about 1,640 kmq, the known locations are less than 10 and a continuing decline of the quality of its habitat is inferred. These criteria better fit with the IUCN threat category Vulnerable according to the IUCN criteria B2ab(iii).

In conclusion, the new findings allow to define more precisely the distribution range of *U. alfredschmidti* and to assess more correctly the species' conservation status.

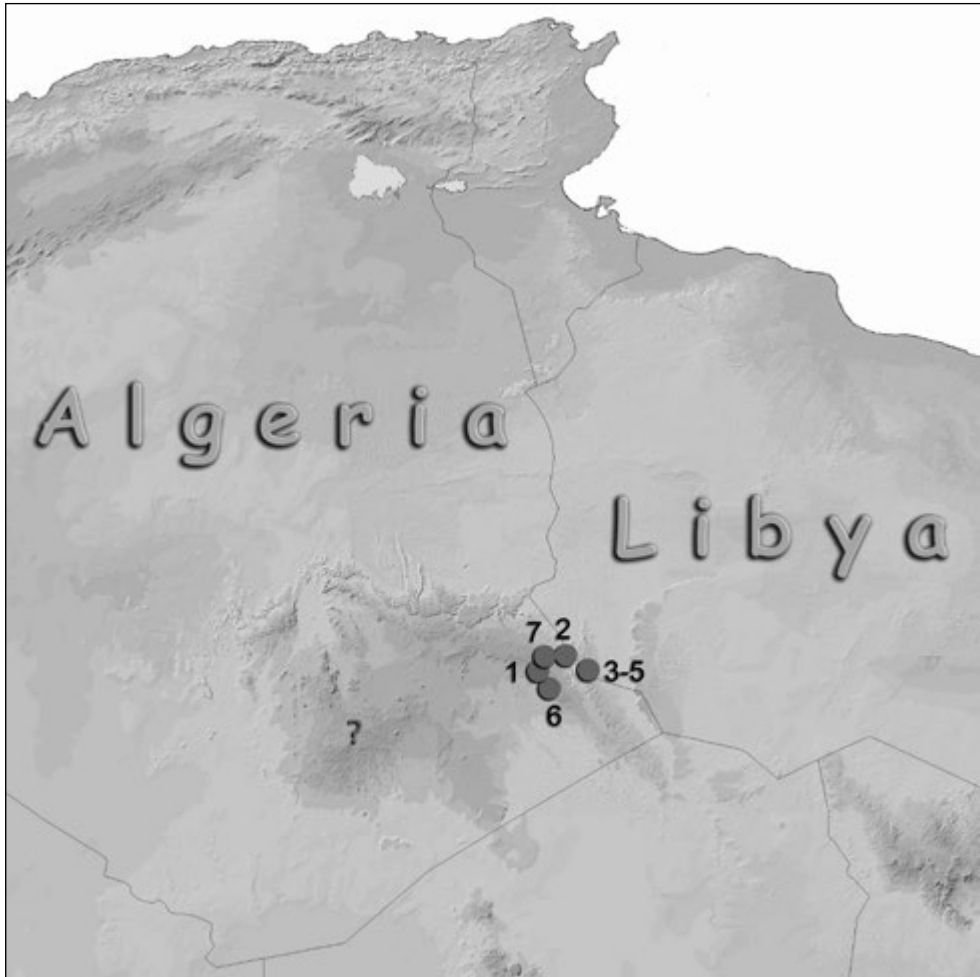


Fig. 3. Distribution of *Uromastyx alfredschmidti*.

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