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First record of *Acanthodactylus opeodurus* ARNOLD, 1980, and *Coluber ventromaculatus* GRAY, 1834 (Squamata: Lacertidae, Colubridae) from the United Arab Emirates

Erstnachweis von *Acanthodactylus opeodurus* ARNOLD, 1980 und *Coluber ventromaculatus* GRAY, 1834 (Squamata: Lacertidae, Colubridae) aus den Vereinigten Arabischen Emiraten

FRANZ TIEDEMANN

KURZFASSUNG: Das Vorkommen von *Acanthodactylus opeodurus* ARNOLD, 1980 und von *Coluber ventromaculatus* GRAY, 1834 wird erstmals aus dem Emirat Abudhabi und damit auch aus den Vereinigten Arabischen Emiraten gemeldet. *A. opeodurus* konnte am Fuße des Jebel Hafit, südlich von Al Ain, nachgewiesen werden. Das nächstgelegene bekannte Vorkommen befindet sich ungefähr 500 km westlich davon in Saudi Arabien. Weiters erwies sich eine Natter von der Insel Sir Bani Yas als *C. ventromaculatus*. Dieser Fund erweitert das bisher bekannte Verbreitungsgebiet dieser Schlange auf der Arabischen Halbinsel um etwa 280 km in Richtung Südosten.

ABSTRACT: *Acanthodactylus opeodurus* ARNOLD, 1980 and *Coluber ventromaculatus* GRAY, 1834 are recorded for the first time from the Arab Emirate of Abudhabi. *A. opeodurus* was found at the foot of Jebel Hafit, south of Al Ain, which is approximately 500 km west of the nearest known record in Saudi Arabia. Furthermore, a snake from Sir Bani Yas Island turned out to be *C. ventromaculatus*. This extends the Arabian range of this species some 280 km to the southeast.

KEYWORDS: *Acanthodactylus opeodurus*, *Coluber ventromaculatus*; United Arab Emirates; new records

The examination of material collected during a study trip to the United Arab Emirates between 12.7.1989 and 1.8.1990 revealed two reptile species which represent first records for this area.

Abbreviations: NMW - Naturhistorisches Museum Wien; BM - British Museum (Natural History) London; UAE - United Arab Emirates

Acanthodactylus opheodurus ARNOLD, 1980 (Fig. 1)

NMW 32193:1-6; Ayn al Faydah, at the foot of Jebel Hafit, Emirate Abudhabi; TIEDEMANN leg. 12.11.1989.

In 1980 ARNOLD described three *Acanthodactylus* species (*opheodurus*, *felicis*, *masirae*) and subsequently (1983) arranged them within an *A. opheodurus*-group. The late discovery of these Arabian representatives of the genus *Acanthodactylus* must be attributed to their great superficial similarity with *A. boskianus* (SALVADOR 1982) as well as to their sympatry with this species.

The description of the new species *opheodurus* was based on 67 specimens from Jordan, Oman, South Yemen, North Yemen, Saudi Arabia, Kuwait, Iraq, and Palestine (Fig. 2); the holotype originates from the locality "Jazir coast" in the Sultanate of Oman.

The present specimens (NMW 32193: 1-6) from the foot of the 1180 m high Jebel Hafit near Ayn al Faydah in the Emirate of Abudhabi are separated, according to our present state of knowledge, from the nearest known occurrence in Saudi Arabia and Oman by a gap of approximately 500 km (Fig. 2).

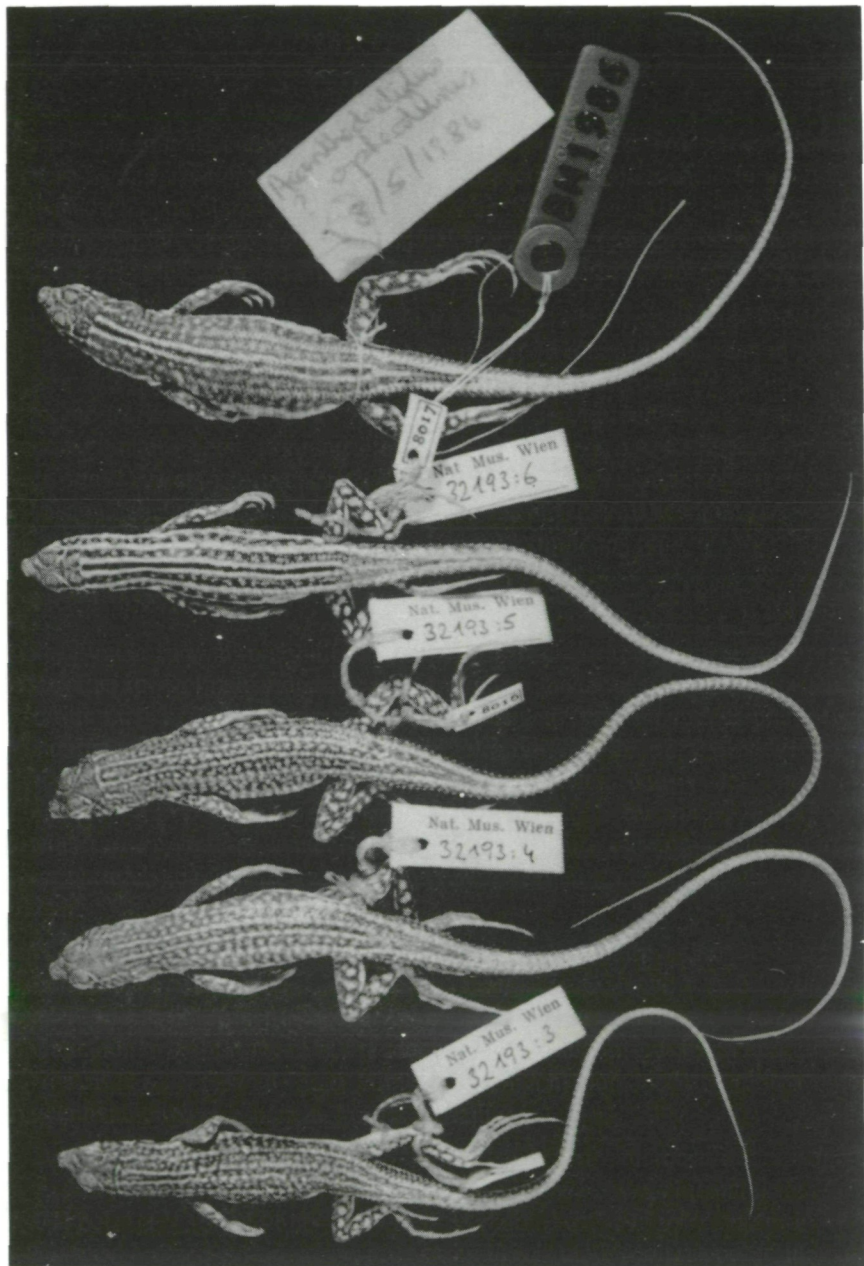
The external characters of these 6 specimens fall within the range of variability of the species as discussed in detail in ARNOLD's (1980) original description. In table 1 these features are compared with ARNOLD's data on character variability in the northern and southern populations.

As one can see from table 1, the pholidosis of the specimens from the United Arab Emirates largely corresponds with that of ARNOLD's (1980) "northern population". Snout-vent-lengths, tail-lengths, and the relative tail-lengths are listed in table 2.

The tail-length is 1.92 - 2.32 (mean 2.17) that of the snout-vent- length (Table 2).

Fig. 1: *Acanthodactylus opheodurus* from Ayn al Faydah (NMW 32193: 3-6) and a specimen from Shaib Thumamah, Saudi Arabia (BM 1986-346).

Abb. 1: *Acanthodactylus opheodurus* von Ayn al Faydah (NMW 32193: 3-6) und ein Exemplar aus Shaib Thumamah, Saudi Arabien (BM 1986-346).



FRANZ TIEDEMANN

Table 1: Pholidosis of the northern and southern populations of *Acanthodactylus ophiodurus* (according to ARNOLD 1980) compared with the data of the Jebel Hafit specimens (UAE).

Tab. 1: Pholidosedaten nördlicher und südlicher Populationen von *Acanthodactylus ophiodurus* (nach ARNOLD 1980) im Vergleich zu den entsprechenden Werten der Exemplare vom Jebel Hafit (VAE).

	northern pop.	southern pop.	UAE (NMW 32193: 1-6)
Gular scales	25-30 (32)	25-33	26-31
Collar scales	8-13	8-11	9-13
Dorsal scales	25-38	25-35	32-38

Table 2: Snout-vent-lengths (SVL, mm), tail-lengths (TL, mm), and relative tail-lengths (TL/SVL) of the *Acanthodactylus ophiodurus* specimens from Jebel Hafit.

Tab. 2: Kopf-Rumpf-Längen (SVL, mm), Schwanzlängen (TL, mm) und relative Schwanzlängen (TL/SVL) der *Acanthodactylus ophiodurus*-Exemplare vom Jebel Hafit.

Inventory No.	SVL	TL	TL/SVL
NMW 23193:1	46	104	2.26
NMW 23193:2	49	112	2.29
NMW 23193:3	45	93	2.07
NMW 23193:4	48	104	2.17
NMW 23193:5	50	116	2.32
NMW 23193:6	48	92	1.92

The colors and color patterns generally correspond to those in the original description. The basic color of the animals is grey with a dark occipital stripe and three lateral stripes. The occipital stripe ends at the level of the origin of the posterior leg. The contrast between the stripe color and the grey basic coloration is weak, being distinct in only a single individual (NMW 32193:6,

Fig. 2: Known distribution (empty triangles) of *Acanthodactylus ophiodurus* (according to ARNOLD 1980) and the new locality record at Ayn al Faydah (filled triangle). Known distribution (circles) of *Coluber ventromaculatus* (according to GASPARETTI 1988) and the new locality record at Sir Bani Yas Island (black dot with dart).

Abb. 2: Bisher bekannte Verbreitung (leere Dreiecke) von *Acanthodactylus ophiodurus* (nach ARNOLD 1980) und der neue Fundort bei Ayn al Faydah (volles Dreieck). Bisher bekannte Verbreitung (Kreise) von *Coluber ventromaculatus* (nach GASPARETTI 1988) und der neue Fundort auf Sir Bani Yas Island (voller Kreis mit Pfeil).

First records from the United Arab Emirates

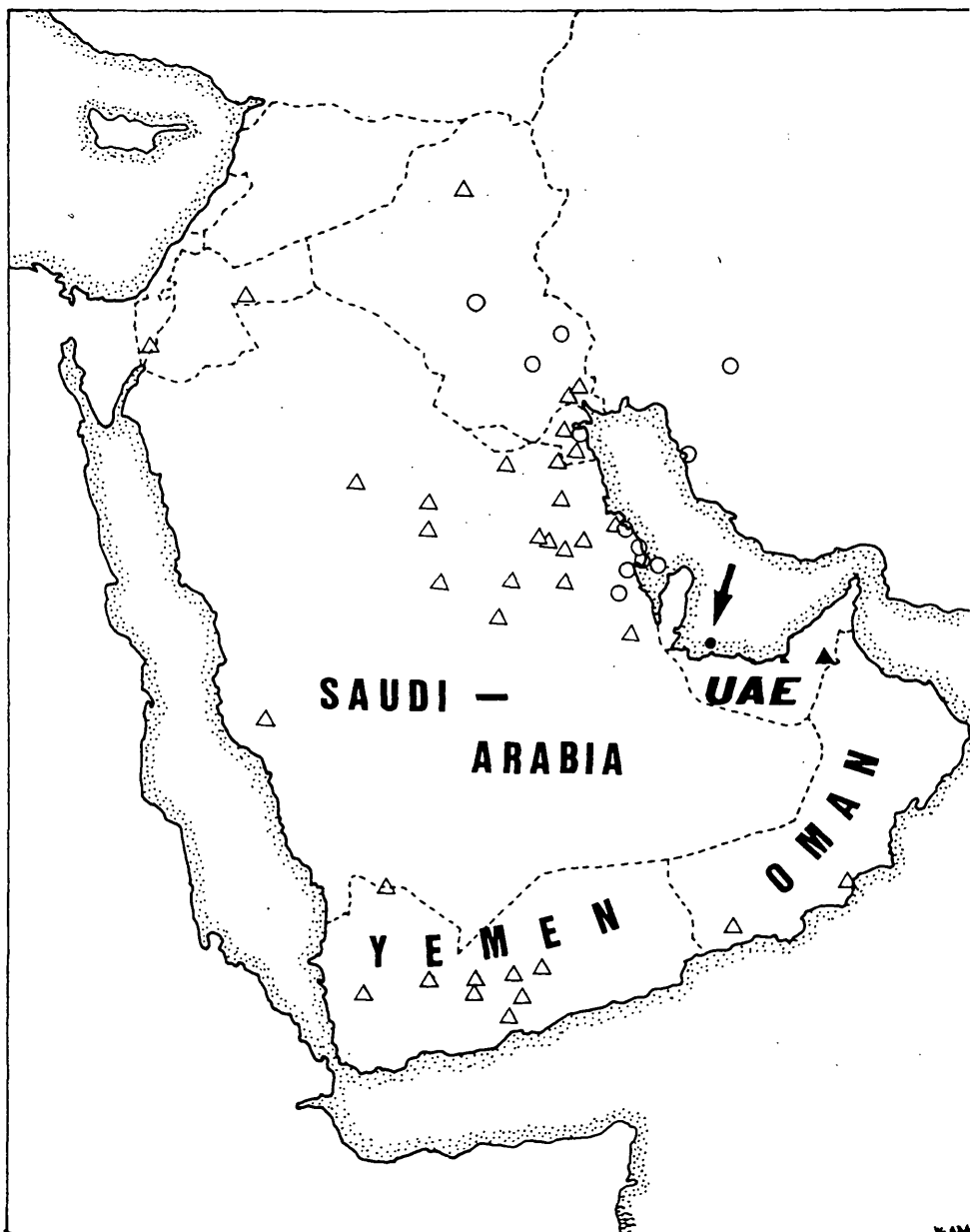


Fig. 2). All stripes are perforated with numerous ocelli. Large ocelli are also located on the upper side of the extremities. In most cases the maxillary stripe is distinctly present. The ventral sides and throats are whitish. In specimen NMW 32193:3 the underside of the tail is red even in the preserved state.

A. boskianus, which inhabits the same region, is clearly distinguished from *A. ophiodurus* in being much more robust and having 19-25 rows of dorsal scales as well as a several centimeter longer snout-vent-length.

Little is known about the biotope requirements of *A. ophiodurus*. According to ARNOLD (1980), *A. ophiodurus* seems to be specialized neither for true sand habitats (soft sand) nor for relatively hard substrata (based on the moderately developed lamellae on the digits and the moderate complement of fringe-like processes on the eyelids). The type specimens from the Province of Dhofar (Sultanate of Oman) were collected from plains with relatively hard sand cover as well as from low hills covered by dense bushes. In addition, *A. ophiodurus* was observed to inhabit coarse sands in the brush of the flood plains of Wadi Adam, and the steep slopes near Dhu'ay (GALLAGHER & ARNOLD 1988).

The *A. ophiodurus* locality south of the rest house complex of al Faydah along the road to Sih Za Bah is situated on the edge of an *Acacia* plantation with a firm sand surface, several hectares in size. The 1-2 m high dunes directly adjoining to the west are exclusively inhabited by *A. boskianus*. A syntopic occurrence of the two species could not be determined. With regard to a co-occurrence of both species, ARNOLD (1980), merely briefly states about *A. ophiodurus* that "they occurred alongside *A. boskianus*".

When *A. ophiodurus* pauses during flight, the sideways twisting of the ventrally distinctly reddish tail is conspicuous; this behavior was also observed by ARNOLD (1980).

Coluber ventromaculatus GRAY, 1834 (Fig. 3)

NMW 32192; Sir Bani Yas Island, Emirate of Abudhabi; Bish BROWN don. 1.2.1989.

Coluber ventromaculatus chiefly inhabits coastal regions on the Arabian Peninsula and has been reported there to date from the oasis areas of Quatif



Fig. 3: *Coluber ventromaculatus* from Sir Bani Yas Island (UAE), NMW 32192.

Abb. 3: *Coluber ventromaculatus* von der Insel Sir Bani Yas (VAE), NMW 32192.

and Hufuf (Saudi Arabia; HAAS 1961) as well as from Bahrain (GALLAGHER 1971) and Kuwait (EISSA & EL ASSY 1975).

The new find on the nearshore island Sir Bani Yas expands the known range of this snake by approximately 280 km in a southeasterly direction (Fig. 2).

With regard to pholidosis and coloration, the specimen from Sir Bani Yas lies within the range of variability given for the species by GASPARETTI (1988).

Longitudinal series of dorsal scales: 19; ventral scales: 207; subcaudal scales 95/95; 4th and 5th supralabial scale touch the eye; snout-vent-length: 63.3 cm; tail-length: 21.5 cm.

Color and color pattern: Upper surface grey with 82 dark transverse bars. In the neck region, 2 parallel narrow dark middorsal lines which merge into the first transverse bar in the region of the 5th dorsal scale row. A series of dark spots on each side of the belly. Trace of a dark transverse bar between the eyes.

Specimen NMW 32192 was captured by villagers and brought to Bish BROWN at the Centre of Documentation in Abudhabi; he was unfamiliar with the occurrence of this species in the United Arab Emirates and preserved the animal.

While visiting the island of Sir Bani Yas in early May 1991, Bish BROWN discovered additional specimens of *C. ventromaculatus* in the freezer at the local administration building. It is possible that the natives regard this snake as being venomous and thus kill it. This species by no means appears to be rare on the island.

It seems reasonable to assume that *C. ventromaculatus* also occurs on the mainland (for example in the area of Jebel Dhanna - 350 km west of Abudhabi; Bish BROWN, pers. comm.).

The Island of Sir Bani Yas is the private property of His Highness Sheikh Zayed Bin Sultan Al Nahyan, the president of the United Arab Emirates, and partially serves as a wildlife refuge for gazelles; in addition, various fruits are being planted there on a trial basis.

On Sir Bani Yas, *C. ventromaculatus* inhabits date palm plantations and prefers the environs of human settlements and water bodies; it feeds predominantly on small mammals such as rats.

ACKNOWLEDGEMENTS: My special thanks for providing the specimen goes to Bish BROWN, who was unfamiliar with the occurrence of *C. ventromaculatus* in the UAE and therefore stored this snake for future study at the museum of Abudhabi. I also wish to thank N. ARNOLD (London) for making available the comparative specimens of *A. opheodurus*. I am also grateful to Dr. JONGBLOED and Dr. MÜLLER (Zoological Garden of Al Ain) for the friendly reception and care during my study trip, and to W. ADAM (Vienna) for drawing the chart.

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