

## OCCURRENCE OF *OPLURUS CUVIERI* (REPTILIA, IGUANIDAE) ON GRAND COMORO, INDIAN OCEAN

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The presence of the Malagasy genus *Oplurus* on Grand Comoro was first reported by Angel (1942) and later repeated by Savage (1952), Blanc (1971, 1972, 1977) and Paulian (1978). Recently, its existence on the island was questioned by Louette (1987) on the basis of a personal communication by W. Böhme.

However, in November and December 1989, lizards of the species *O. cuvieri* were indeed found to occur at Ivouini (Goula) in the North of Grand Comoro and at M'tsamdou (or Mutsamoudou) near Itsikudzi in the North East of Grand Comoro. Here, several individuals were seen on the rim of the cliffs near the sea. Not all the cliffs around Grand Comoro have been explored, and this species may be present elsewhere in similar habitat. It is however, not present in the interior of the island.

On Moheli and Anjouan, similar dry cliff sites were visited but no *Oplurus* were observed, nor were they known by the local inhabitants. As for the distribution of *O. cuvieri comorensis* given in Savage (1952), one has to interpret 'LComoro and adjacent islands' as a slip of the pen, as there is no material to support this generalisation.

The characteristics of the two individuals captured, one from each locality, are given in Table 1. These measurements do not reveal large differences from the Madagascar population. Most dimensions are on the lower end of the variation for the Comorian population as the specimens are not full-sized. Naked-eye estimations in the field give total lengths ranging from 25-30 cm for juveniles up to 50-55 cm total length for one larger specimen.

The described difference between var. *comorensis* and the *forma typica* of *Oplurus cuvieri* (Gray, 1831) – a senior synonym of *O. sebae* Duméril & Bibron, 1837 (see Savage, 1952) – is in the dorsal coloration (Angel, 1942; Blanc, 1977). The type-material of *comorensis* was mentioned as follows: Coll. Mus. 22-298-299 (donor: Marcel Avignon) indicated as 'types' and Coll. Mus. 08-84 (donor: Humblot) being the 'co-type'. (Types were not located by us). According to Angel (1942) two of three specimens of the type series of the Comoro population completely lack the black transversal banding invariably found between the shoulders of the Madagascar specimens. The third specimen showed dark chevrons on its dorsum and a straight black band bordered by white on both sides of the neck. This band, however, was interrupted dorsally.

In the Comoro-population, no indication of a black scapular band was seen in the field nor found in the two captured specimens. These specimens were observed alive for several months; colour changes ranged up to a very dark pigmentation of the entire animal with even the venter turning grey. In the brightest colour stages (well documented by photographs), however, the venter became yellowish and the dorsum light reddish brown, with the throat and cheeks displaying a light bluish colour. A black and white chevron similar to the one described by Angel became visible, and as it was always restricted to the region just above the shoulder, this marking never formed a cross-band. On the basis of this colour difference, the existence of an endemic subspecies *comorensis* Angel 1942 is accepted here. The arrival of this lizard on Grand Comoro must be due to a natural colonisation from Madagascar. Their ecological niche and their known distribution on the island illustrate their anthropobic nature and introduction by human transport can be excluded. As evolutionary changes are already detectable in size and in colour, the colonisation by *Oplurus* of the island probably antedates human occupation.

Arnold (1976) described fossil *Oplurus* from Aldabra, another island in the Malagasy area, (100.000 – 125.000 B.P.) and stated that his material agreed best with *O. cuvieri*, but he found some appreciable differences, for instance in size, suggesting total lengths of 570-680 mm. Only the fragmentary nature of the material prevented him from describing a distinguishable taxon.

The new material from Grand Comoro, discussed here, is unfortunately far from maximal-sized (compared to the other specimens seen in the wild and if compared by head-dimensions). Based on field observation however, one can assume that lizards of the Grand Comoro population are somewhat larger than the Malagasy ones, suggesting an intermediate position with the extinct Aldabra population. A detailed comparison of the Grand Comoro specimens with Malagasy material will follow, if they can be located and become available for study.

TABLE 1. Meristic and morphological data for *Oplurus cuvieri*: new material from Grand Comoro compared with data for the Madagascar population.

	KMMA/MRAC 90-1-R-153	KMMA/MRAC 90-1-R-154	<i>O.cuvieri</i> (Paulian, 1977)
Snout Vent length	114 mm	105 mm	ref: 120-129 mm 112-150 mm 115-130 mm juv: 50-69 mm
Tail length	185 mm	39 mm +79 mm	ref: 171-191 mm 156-206 mm 166-172 mm juv: 82-99 mm
Temporal shields (on line orbit- upper part tympanum)	10	10	8-10
Denticulate shields in front of tympanum	4	2	2-4
Tail annuli (2 scales)	33	8 + regenerated	(-)
Head Length	26.0 mm (external)	24.5 mm (external)	ref: 27.5-31 mm (cranial)
Width of Head	19.0 mm (external)	17.5 mm (external)	ref: 20.0-21.5 mm (cranial)

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