

***Acanthodactylus longipes*** Boulenger 1918 Long-footed Lizard  
(Fig. 49)

*Acanthodactylus scutellatus* var. *longipes* Boulenger 1918: 154. Type locality: "Sahara algérien". Syntypes: BMNH 1946.8.30-32, Wargala; BMNH 1946.9.3.75, Wadi El Nça to El Alia; BMNH 1946.9.3.74, El Wadi east o Tuggurt.

*Acanthodactylus scutellatus* Anderson 1898 (part)

*Acanthodactylus longipes* Bons and Girot 1964, Salvador 1982, Arnold 1983, Baha El Din 1994, Saleh 1997, Crochet et al. (2003)

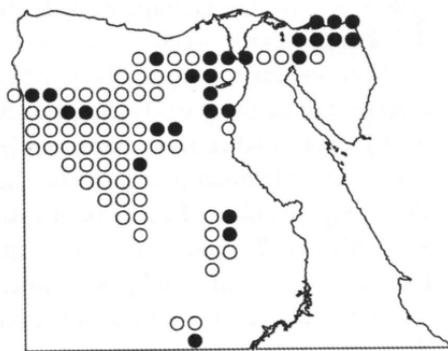
*Acanthodactylus longipes panousei* Bons and Girot 1964

*Acanthodactylus scutellatus* Marx 1968 (part)

**Arabic:** *sihliyat al-kuthban*

**Taxonomy:** Monotypic.

*Acanthodactylus longipes* was described by Boulenger (1918) as a variety of *A. scutellatus*. It was first recognized as a full species by Bons and Girot (1964), based on the fact of its sympatric occurrence with other members of the *A. scutellatus* group in various parts of its range. Both Salvador (1982)



Long-footed Lizard  
(*Acanthodactylus longipes*)

and Arnold (1983) supported the validity of this species. It was only recently reported from Egypt by Baha El Din (1994a, 1996a), previously overlooked because of its close similarity to *A. scutellatus*. Field observations made by the author during studies of lizard community structure in northern Egypt, indicated that populations traditionally referred to *A. scutellatus* (e.g., Anderson 1898, Flower 1933, Marx 1968, Werner 1982) encompassed two very similar, but consistently discernible forms. Further close examination of examples of both forms revealed that one is referable to *A. scutellatus*, while the other is referable to *A. longipes* (Baha El Din 1994a, 1996a).

**Diagnosis:** Small to medium lizard, adults up to 53 mm. Snout narrow, with rather swollen nasals; 5 supralabials anterior to the eye, subocular isolated from lip. Dorsal scales small, granular, smooth, or very slightly keeled at the mid-back. Average number of dorsals and ventrals at mid-body is 79 (range 68–90) and 14 (range 12–16), respectively; average number of femoral pores 19 (15–23) (based on a sample of 41 Egyptian specimens). Dorsal side of tibia usually covered with enlarged keeled scales. Digits with 4 rows of scales. All digits are strongly fringed, with subdigital scales more or less uncarinate.

Dorsal surfaces pale sandy, almost plain, or with faint reticulation, more obvious on the sides of the body, forming into dark lateral lines along the base of the tail. Venter is white. Males usually have larger dorsal scales and more obvious reticulation than females. Ventral side of the tail in females white even during breeding season. Tail lemon yellow in juveniles. Hemipenis with one lobe; clavula flat, simple and 'U'-shaped in cross-section.

Very similar to *A. scutellatus*. Most Egyptian populations of *A. longipes* can be fairly easily distinguished from sympatric *A. scutellatus* by their smaller size, more slender build, finer granular dorsal scales, fewer femoral pores, smaller hemipenis, and the presence of clearly keeled enlarged scales on the dorsal surface of the tibia (these are fairly small, unkeeled, and of uniform size in *A. scutellatus*). Dorsum is generally sandy with finer, less contrasting reticulation (usually more grayish with stronger pattern in *A. scutellatus*). Juvenile *A. longipes* have lemon yellow tails, becoming straw colored in adults, while juvenile *A. scutellatus* have blue tails. Juvenile *A. longipes* have a well-marked dark V on the dorsal side of the tail base, which becomes obscure in most adults, particularly males. This is not present in *A. scutellatus*. *A. longipes* preserved in alcohol retain their general sandy color, while *A. scutellatus* attain a gray to blue-gray color.

There is a fair amount of sexual dimorphism in both species, which could lead to considerable confusion as to the identity of some animals. Indeed adult male *A. longipes* are very similar in appearance to *A. scutellatus*, because of their fairly strong dorsal pattern and coarse dorsals. On average male *A. longipes* have fewer dorsals than females (average 76.13(68–84) vs. average 81.68(70–90)), while male *A. scutellatus* have more dorsals than females (average 71.4(65–78) vs. average 67.9(59–76)). Male *A. longipes* have notably larger pre-anal plates than females, while in *A. scutellatus* there is no pronounced difference between the sexes in this feature. Males in both species have stronger dorsal pattern than females, consisting of spotting or reticulation (darker shades of brown in *A. longipes*, but almost always black in *A. scutellatus*). Female *A. longipes* are white on the ventral side of the tail even in the spring.

**Variation:** There are some consistent morphological differences between Egyptian *A. longipes* and those from further west in the

Sahara, which probably deserve subspecific treatment. While external morphological characters of Egyptian *A. longipes*, as far west as Bahariya Oasis, are fairly uniform, there are some consistent differences between Egyptian animals and those from further west in the Sahara (including populations at Siwa Oasis). Many western and central Saharan animals reach larger sizes, have on average more femoral pores, finer dorsals, 16 transverse rows of ventrals (as opposed to 14 in most Egyptian *A. longipes*), and usually lack the enlarged keeled tibia scales or have them much less obviously. However, as noted also by Mellado and Olmedo (1990) for the *A. scutellatus* species-group in general, these differences appear not to occur in a clinal fashion, but rather in an irregular pattern. This makes it difficult (at least at the present time) to make any firm conclusions about relationships between Egyptian animals and those in the remainder of the species' range. Salvador (1982) did not recognize the subspecies *A. l. panousei* Bons and Girot 1964, described from southern Morocco, for the same reasons. Arnold (1983) suggested that *A. longipes* may occur in several quite isolated populations across the Sahara, because of the fragmented nature of its habitat, a situation conducive to much geographical variation. Some of the irregularity in geographical distribution of characters in Saharan specimens examined here is probably due to the sporadic and dispersed collection localities and small sample sizes, as compared with the fairly regular coverage in Egypt.

**Habitat and ecology:** A lizard of fine soft sandy habitats. It is the commonest lizard to be found in dune and undulating sand habitats. *A. longipes* is in fact one of the most prominent components of Egypt's herpetofauna, being the dominant species of most reptile communities inhabiting soft sand habitats (particularly dunes) in the northern and western parts of the country.

*Acanthodactylus longipes* is found in extensive sympatry with *A. scutellatus* throughout its Egyptian range. The latter species, however, is more widespread, occurring in a greater diversity of sandy biotopes, including dunes, firm compacted sand and gravel plains, sandy wadis, and even frequently in fairly stony desert, while *A. longipes* is largely confined to softer sand, particularly dunes. Both Scortecci (1946) and Mellado (1993) noted generally similar habitat

preference in the two species in Libya and Morocco respectively. In dune areas, where the two species are syntopic, *A. scutellatus* tends to inhabit more densely vegetated inter-dune troughs, while *A. longipes* is more regularly found on the higher parts of dunes, where the sand is finer and there is less cover. Arnold (1983) speculated that areas of sympatry among species of the *A. scutellatus* group are uncommon, because of the stringent nature of the environments, which these lizards usually inhabit. The evident extensive sympatry of *A. scutellatus* and *A. longipes* in Egypt indicates that even the most desolate of deserts might in fact be more complex than they appear. Minute differences in habitat preference (mainly ground softness and substrate mechanical composition) facilitate the coexistence of these two very similar species.

**Range:** The range of *A. longipes* is known to extend from southern Morocco and Mauritania in the west to Egypt in the east, reaching the edge of the Sahel in the south. Baha El Din (1994a, 1996a) predicted that the species extends into the sands of the western Negev, where many Saharan faunal elements have their eastern limits. Werner (1998) confirmed its occurrence in the region.

**Distribution in Egypt:** Found in areas of sand dunes in North and central Sinai, northern Eastern Desert, and throughout suitable habitats in the Western Desert, where it has been recorded from all the major oases and in the periphery of the Qattara Depression. The southernmost specimen (FMNH 171902) comes from Bir Kurayim.

**Status and conservation needs:** Common and widespread. Classified as Least Concern by IUCN (2005).