

Acanthodactylus cantoris Günther, 1864

Class: Reptilia
 Order: Squamata
 Family: Lacertidae
 Genus: *Acanthodactylus*
 Species: *cantis*

English Name: Indian Fringe-toed Sand Lizard or Blue-tailed Sand Lizard

Diagnostic Features: Naris in contact with first supralabial; median dorsal scales much larger than laterals, 26–36 across midabdomen; gulars 26–38; femoral pores 32–47 (16–23 on each side of hind limb).

Description: Eyelids movable, lower lid about half scale-free and translucent; ear opening oval, vertical, about as large as eye; 3 or 4 large supraoculars; one row of granules between the supraoculars and the supraciliaries; 7 or 8, rarely 6 or 9 supralabials; 6 or 7, rarely 8 infralabials; subocular does not border mouth, separated from it by fifth and sixth supralabial; temporals keeled; anterior pectination of ear opening present; gular fold well developed, bordered anteriorly by scales larger than those of throat, 26–38 in number; dorsal scales keeled, imbricate. About twice size of laterals, 26–36 across midabdomen; ventral scales smooth, juxtaposed, rectangular to trapezoidal, arranged in 11–13 weakly oblique longitudinal row; caudal scales keeled and arranged in annuli; rows of scales on fingers; strongly pectinate toes; hind limb reaches between ear and collar in male, between collar and axilla in female; femoral pores present in both sexes, 32–47 in total; males are slightly larger than females; SVL of adult males 56–72 mm, of adult females 61–70 mm. Tail length 153–180 mm. TL/SVL 1.71–2.36.

Adults reddish brown to gray, usually speckled with white and often with traces of pale longitudinal stripes anteriorly in females; tail bluish gray; belly white.

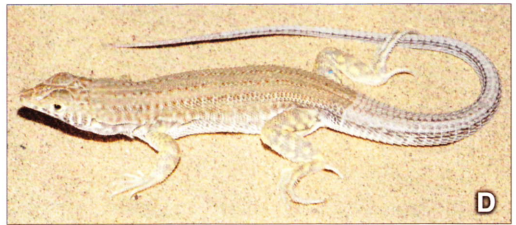


Fig. 58: *Acanthodactylus cantoris*.

Hatchlings black, with six longitudinal yellow stripes extending length of body and two onto proximal part of tail; a seventh stripe often present on neck and shoulders; distal part of tail sky blue.

In the young there are six black and white longitudinal streaks on the body that are very prominent, with five light streaks on the nape, four or five on the middle of the back and three on the base of the tail, the number on the back depending on the length of the median stripe. A light lateral, denticulated stripe starts from the ear and runs to the groin. The head has black symmetrical markings, with the upper lip provided with black vertical bars, which may extend onto the temple. Limbs with large round light spots; tail tip blue in life. The stripes may persist into adult specimens, but adult males are usually grayish to reddish brown, speckled with white or with round, dark-edged light spots corresponding with the arrangement of the light stripes, and/or with a dark network. The dark bars on the supralabials scales are often retained, but the blue on the tail tip is lost, being replaced with a reddish or pink hue. Lower parts are always white.

Juveniles from the Chagai area are brown, with small yellow spots, rather than stripes; adults are uniform khaki above (Minton 1966)

Habits and Habitat: These lizards are characteristics of sandy places such as dunes, beaches, and the beds of dry watercourses. They are very common along the seacoast, occasionally wandering to the high-tide mark. They may occur in clay and gravel desert adjacent to sandy tracts.

These sun-loving creatures emerge from the burrows an hour or so after dawn and are most active during the forenoon. There may be a brief period of activity of an hour or so before sunset. They burrow among the roots of bushes where the sand is compact. The lizard often burrows directly into the sand but may also use holes of crabs, small mammals, and other species of lizards. The fringe of flattish scales along digits enables it to move with considerable agility on loose sand. During their time of greatest activity, they usually dodge from bush to bush instead of entering a burrow. When followed in the field, the lizard occasionally jerks its long tail in a characteristic way as if to distract the attention of its pursuer from the head and body (Minton, 1966).

These are very fast moving, active, diurnal lizards. Normally only active after 09:00 or 10:00 AM (Mertens 1954a, 1954b and this study), when the sun has warmed the surface to over 20°C (Mertens 1954 a, 1954b). Most are active about 11:30 AM. They dig small burrows (up to 65 cm) in sandy soil, usually between roots of plants. Each burrow is used by a single individual (Mertens, 1954a, 1954b). During the day they are used for escape and at night for sleeping. They also use holes of crabs, mammals and other lizard species (Minton 1966). When hunting during the hottest parts of the day they wiggle their toes (and often the tail) each time they stop (equivalent to the “piano-playing” behavior of Mertens, 1954 a, 1954b). Though they are seldom abroad during the winter months, there is no real hibernation (Minton 1966, with which I agree).

This lizard feeds on a variety of insects: grasshoppers, crickets, earwigs, caterpillars, small beetles, ants, true bugs, flies, termites, antlions, spiders, and isopods (Sharma and Vazirani, 1977). Insects eaten are often large in proportion to the size of the lizard and may be shaken and battered against the ground for some time before being swallowed.

The breeding season extends from March to July; 3–5 oval eggs (10–15 by 7–9 mm) are laid from March through August. Newly hatched individuals are seen as early as June (Minton 1966), but become increasingly abundant into the fall (October, Minton 1966; September and November Biswas and Sanyal, 1977, and this study). Apparently, sexual maturity is reached in about one year.

Distribution: The species occurs from Ferozpur and Agra in Central India westward to eastern Iraq and Saudi Arabia, and north at low and moderate elevations to southern Afghanistan and Khyber-Pakhtunkhwa. This species seems to be a form of the coastal plains, desert basins, and sandy flood plains of rivers; it avoids the mountains.

It is distributed from Central Gangetic Plains of India to south central Iran (Arnold 1983), including southern Afghanistan. In Pakistan it is widely distributed (Thar, Cholistan, Nara, Chagai and Kharan deserts; Chotiari, Keenjhar, Drigh, Manchar, Hab and other lakes of Sindh). Ingoldby *in* Procter (1923) reports it to be the commonest lizard of the Indus Valley, with which I agree. Not found above 400 m (Smith, 1935). Mertens (1969) believes that Shockley's (1949) record of this species from Jiwani is probably to be referred to *Acanthodactylus blanfordii*.

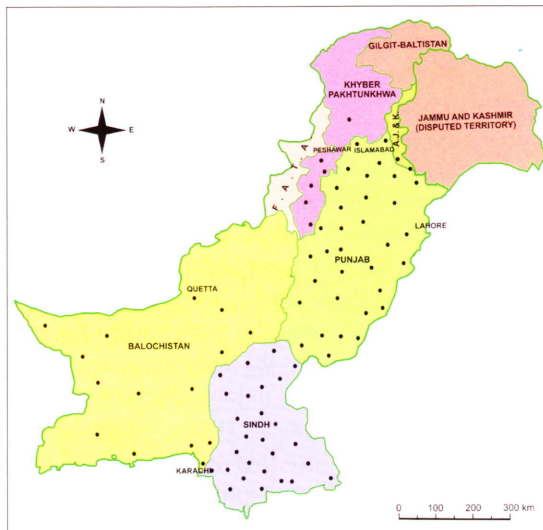


Fig. 59: Distribution of *Acanthodactylus cantoris* in Pakistan.

Remarks: Leviton (1959) shows that the number of dorsal scale rows and the number of femoral pores are sexually dimorphic, though there is no difference in coloration. Dorsal scale rows in males 38–41, in females 33–37; ventral scale rows in males 13–14, in females 12–14; femoral pores in males 21–23, in females 18–20. The hind limb reaches to between the ear and the collar in the male, and to between the collar and the axilla in the female. Femoral pores are present in both sexes.

Smith (1935) points out that there is considerable variation in the strength of the keels of the dorsal scales and in the manner in which the median scales grade into the lateral ones (abruptly or gradually). He states these variations are correlated with geographical distribution.