## Takydromus Daudin, 1802—Long-tailed Grass Lizards

The genus *Takydromus* is a lineage of approximately 21 species (Lue & Lin 2008; Ota *et al.* 2002) ranging across much of Asia from India to Japan and southward through Indochina to the Indo-Australian Archipelago and as far east as Java and Borneo (Arnold 1997). In regards to morphology and life style, this radiation contains some of the most extreme members of the family Lacertidae which is particularly well-illustrated by the Malaysian representative of the group. The tails of many of *Takydromus* can be over seven times the length of their body. This is advantageous for a life style where significant amounts of time are spent basking on the ends of long blades of grass or in small shrubs. The long tail helps to displace the body weight over a greater surface area and even assists lizards in moving at remarkably high speeds across such an unstable substrate. One species of *Takydromus* occurs in northern Peninsular Malaysia and although it occurs on other Sunda Shelf islands farther south, it is absent from central and southern Peninsular Malaysia and Singapore.



Fig. 429: Takydromus sexlineatus (adult male) from Baru Changlun, Kedah.

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## Takydromus sexlineatus DAUDIN, 1802

Six-lined Long-tailed Grass Lizard *Mengkarong Ular* 

*Takydromus sexlineatus* Daudin, F. M. 1802:256. Histoire Naturelle, générale et particulière des reptiles. Paris 3, 452 pp. Type locality.— not given by Daudin (1802). "Indes Orientales [East Indes]" after Guibé (1954).

**Diagnosis.**— Adult males and females reaching 65 mm SVL; pupil round; body elongate, covered dorsally with four longitudinal rows of large, square, keeled scales; keels aligned to form four, sharp, raised ridges extending from occiput to end of tail; small, keeled, juxtaposed scales on flanks; 10–14 rows of large, keeled, square ventral scales; ventral keels aligned to form raised ridges; tail 5.5–5.6 times SVL.

Description.— Head narrow, elongate, sharply pointed in dorsal profile; rostral separated from frontonasals by supranasals; nostril bordered anteriorly and dorsally by supranasal, posteriorly by large postnasal, ventrally by first supralabial; seven supralabials; fifth supralabial large, below orbit, bearing a dorsal keel; five or six thin, elongate infralabials, central series longest; three supraoculars, first two very large, last one very small; three elongate, keeled, imbricating superciliaries, central one largest; two loreals, first smaller than second; single, large, hexagonal frontonasal followed by two, trapezoidal, keeled prefrontals followed by a single, keeled, elongate frontal followed by two, weakly keeled to smooth frontoparietals, followed by a small, azygous, diamond-shaped interparietal bearing a semi-transparent eye-spot; two large, keeled parietals usually separated by interparietal and a small, azygous occipital; 2–4 large, keeled supratemporals; temporals, much smaller, keeled; mental subtriangular followed by three pairs of sublabials; anterior two pairs in complete contact medially; last pair contacting medially only anteriorly, separated posteriorly by a wedge of small, imbrictae, keeled, gular scales.

Body covered by four longitudinal rows of large, square, keeled scales; keels aligned to form four, sharp, raised ridges extending from shoulder region to end of tail; six rows of ridges on nape; small, keeled, juxtaposed scales on flanks; 10–14 rows of large, keeled, square ventral scales; ventral keels aligned to form raised ridges; scales of lateralmost, ventral row one-half size of ventrals; enlarged, smooth, azygous, precloacal scale bordered laterally by two smaller, keeled scales; two pore-bearing, preanal scales separated medially by two keeled scales lacking pores; dorsal surface of limbs covered with large, keeled, imbricate scales with keels aligned to form sharp ridges; ventral surface of brachia covered with small, imbricate, smooth to weakly keeled scales; ventral surface of forearm covered with large, flat, smooth, imbricate scales; ventral surface of hind limb covered with large, flat, smooth, imbricate scales; postfemoral region covered with small, granular to mucronate scales; palmar and plantar scales rounded, raised; 22–25 lamellae beneath fourth toe; tail long, 5.5–5.6 times SVL; cylindrical in cross-section, covered with large, keeled, imbricate scales with keels aligned to form sharp ridges; subcaudals narrower than dorsals.

Coloration.— Adult Males: the ground color of the dorsal surface of the head, body, limbs, and tail is olive to brown; occasionally there are dark spots on the top of the head; a thin, black pre- and postorbital stripe extends onto the anterior portion of the flank; the stripe is bordered ventrally in white anterior to the tympanum and yellow to light green posterior to the tympanum; a distinct, white, dorsolateral stripe extends from the poste-

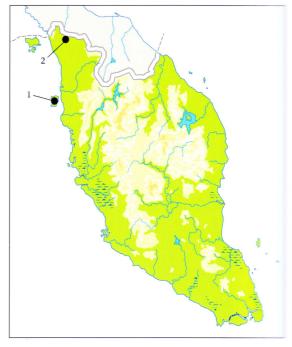


Fig. 430: Takydromus sexlineatus (adult male) from Baru Changlun, Kedah.

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rior border of the eye along the body, fading in the anterior caudal region; the stripe is edged dorsally by a thin, black line leaving an olive to brown vertebral region; the stripe is bordered below by the black to brown flanks; all the ventral surfaces are greenish white to bluish. Adult females and juveniles: same color pattern as adult males but much more pale and noticeably lacking the contrasting edging along the dorsolateral stripe.

Distribution.— Takydromus sex-lineatus ranges from India, eastward through southern China and south to the northern portion of Peninsular Malaysia and then again in Borneo (Manthey & Grossman 1997). Boulenger (1912) reports Takydromus sexlineatus as being common in the more northern parts of Malaysia as far south as Taiping, Perak although no confirmed records support his assertions. I examined a photograph taken



Distribution of *Takydromus sexlineatus*.

- 1. Pulau Pinang, Penang.
- 2. Kampung Baru Changlun, Kedah



Fig. 431: Takydromus sexlineatus from Malaysia.

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of a specimen from the back yard of a house at the base of Penang Hill on Pulau Pinang, Penang and I have seen specimens at the top of Penang Hill. A specimen from "Kelantan, Malay Peninsula" catalogued in the British Museum (BMHN 1933-7-4-1) was transferred to the Raffles Museum of Biodiversity Research but could not be located in a recent search. The only confirmed record for this species from continental Peninsular Malaysia comes from a specimen (LSUHC 9802) collected while it was crossing the highway at Kampung Baru Changlun, Kedah. I spoke with residents of this area and they say the species is common on the vegetation alongside the roads.

Life history.— *Takydromus sexlineatus* is a species that does very well in disturbed areas with grassy roadsides, gardens, fields with shrubbery, and tall grass. Outside of Peninsular Malaysia, I have observed this species basking on the ends of long blades of grass (Boulenger 1903, 1912) sometimes as high as a meter above the ground. The long tail serves to displace the body weight across the blades of grass and prevents the lizard from falling through. When lizards run across the grass it looks unnatural, as if they are being levitated. To escape detection or predation, lizards will swiftly dive down toward the base of a grass thicket (Laidlaw 1901B) or vegetation and seemingly disappear. I suspect that once they reach the base they continue to run away out of view of the observer. I have seen this species at 750 meters in elevation on Penang Hill, Pulau Pinang, Penang in highly disturbed, weedy areas along trails. Here lizards rest on the tops of the grass and in shrubbery and dive down to into the thick vegetation towards the base of the plants to escape. I also observed one specimen crossing the freeway at Kampung Baru Changlun, Kedah. Taylor (1963) reports females in southern Thailand laying 2–4 eggs.

Material examined.— Cambodia: Pursat Province, Che Teal Chrum Village LSUHC 7795, 7809, 7854, 7856–57, 7886, 7968. Malaysia: Kedah: Kampung Baru Changlun LSUHC 9802.