

Observations on *Hemidactylus depressus*, an Endemic Gecko in the Mihintale Sanctuary

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A study was conducted on the endemic gecko, *Hemidactylus depressus* (Kandyan gecko) inhabiting the Mihintale Sanctuary. This species is identified by the 5 dark transverse markings on the dorsal side of the body and a maximum of seven bands on the tail. Regenerated tails do not have these markings, and the markings become obscure before shedding their skin.

During the survey at the Mihintale Sanctuary, 88 *Hemidactylus depressus* specimens were examined of which 53 were male and 35 female. Of these, 14 males and 8 females were sub adults. No juveniles were collected. Mean (\pm SD) weight, snout vent (SV) length and total length of the 88 specimens were 8.3 ± 3.2 g, 69.2 ± 10.6 mm and 137.9 ± 24.3 mm respectively. The mean (\pm SD) weight, SV length and total length of the 39 adult males was 10.0 ± 2.7 g, 76.6 ± 4.9 mm and 151.9 ± 14.5 mm respectively. Mean (\pm SD) weight of the 27 adult females is 9.2 ± 1.1 g and their mean (\pm SD) SV length and total length are 70.9 ± 4.6 mm and 41.0 ± 17.5 mm respectively. Stomach content was checked in 10 and faecal matter in 23 specimens collected. Faecal analysis indicated that they fed on small insects specially Lepidoptera and Orthoptera. Of the lepidopterans they avoid consuming yellow-coloured dusty moths. They consume only live prey. Eight gravid females and four eggs were collected. Females laid eggs in damp soil. The mean weight and mean length of the eggs were 0.58 ± 0.02 g and 11 ± 0.0 mm respectively. Two eggs hatched in 48 and 65 days. The mean SV length and mean weight of new born are 27 ± 1.4 mm and 1.15 ± 0.07 g respectively. Peak activity of adults is from 20 h to 23 h. Of the collected specimens 13 were infected with ectoparasites the Chiggers mite, located between the microscopic hooks in the toes, near fingers, inside nails, on sides of the abdomen and also in the tail region. Of the geckoes, 11 males and 7 females had minor injuries. Some of these injuries were bite marks. Individuals were seldom seen alone. They were mostly found in rock crevices (21), boulder surfaces (15) on ancient monuments (15) and in between two rock surfaces (10). The preferred macro-habitat was rock and rockery areas (38).

A questionnaire survey among 166 residents of the area revealed that 113 had observed *Hemidactylus depressus* and had various beliefs about this gecko. Destruction of their habitat is the major threat to this species. Pesticide use, chemicals and predators may also influence their population.

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