

The Diet and Prey Preference of the Indian Pangolin (*Manis crassicaudata*) in a Human-Intervened Montane Landscape

Janashantha N.P.A.S.^{1*}, Perera P.K.P.¹, Karawita H.R.¹, Algewattha H.R.²

¹*Department of Forestry and Environmental Science, University of Sri Jayewardenepura, Nugegoda, Sri Lanka*

²*Department of Biological Sciences, Louisiana State University, USA*

**apekshasandeepanie67@gmail.com*

Abstract

Indian pangolin (*Manis crassicaudata*) is a solitary, elusive, and predominantly nocturnal mammal highly adapted to an insectivorous diet. It has become endangered due to hunting for bush meat and scales, illegal trafficking and poaching. Rescue and captive breeding programs for Indian pangolins have limited success due to the lack of understanding of the species' dietary preferences and foraging ecology. The stomach contents and prey preference of Indian pangolin have been less studied owing to the difficulty of acquiring suitable specimens. Such scientific information is unavailable, especially in Sri Lanka. In this study, we analyzed the stomach content of three (03) Indian pangolin specimens collected from human-intervened montane landscapes in the Kandy District, thus allowing a deeper understanding of the Indian pangolin's foraging ecology in a specific habitat. Stomach content analysis revealed that a greater proportion of the pangolin diet consists of grit which was 96.13% of the average dry mass (DM%). Plant matter (pieces of twigs, leaf particles, stems and barks) was least present, which was 0.26% of the average dry mass percentage. The plant matter is likely to be ingested while praying on arboreal insect nests, insects living under barks, and decaying logs. Insect matter consisted of ants, termites, their body parts, and wings which were 1.84% of the average dry mass and insect eggs accounted for 2.83%. A total of 13 ant species belonging to 05 subfamilies and 02 termite species of the same subfamily were identified in the stomach contents. Insect species representing terranean, subterranean, semi-arboreal and arboreal habitats were found in the stomach content. Approximately 13.97% of the insect matter belonged to the species in the terranean foraging layer, while sub-terranean, semi-arboreal and arboreal species accounted for 19.53%, 64.58% and 1.59% respectively. Accordingly, it appears that Indian pangolin in the studied montane landscape predominantly feed on semi-arboreal insects. The study further provides detailed insights into the prey preference and foraging ecology of the Indian pangolin in the montane landscape.

Keywords: Indian pangolin, Stomach content, Foraging ecology, Prey preference