

**D215**

**Feeding behavior of elephants in the northwestern region of Sri Lanka**

Studies on feeding behavior of Sri Lanka elephant have shown that they consume a large quantity of food and that they spend a major portion of their time budget on feeding. Furthermore, these studies show that elephants have a wide diet breadth. However, all

these studies have been done in protected areas. Yet a large number of elephants occupy habitats outside protected areas and it is important to understand the availability of food for these elephants in order to properly manage this population. Aim of this investigation is to identify the food preferences of elephants that range outside protected areas as a initial step in evaluating the food availability to elephants that range outside protected areas.

Feeding behavior of elephants were determined using direct observations and three indirect techniques, the food trail method, macroscopic and microscopic analysis of dung. A total of 130 plant species belonging to 34 families were eaten by elephants including 30 species of cultivated plants. In many species they feed on bark alone. Their food also comprise a large number of thorny plants. Seeds belonging to 26 plant species have been identified from elephant dung including seeds of 12 cultivated plant species have been identified from elephant dung including seeds f 12 cultivated plant species. Microscopic analysis of dung showed that monocot: dicot ratio in the food is highly variable within habitats, between habitats, and between different individuals of the same herd indicating that they are highly opportunistic in selection of food. High preference shown towards ark and thomy plants could be an attempt to avoid chemical toxins.