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## THE ROLE OF ELEPHANT (*Elephas maximus*) AS A SEED DISPERSAL AGENT

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The Sri Lankan elephant can be classified as a generalist herbivore as it feeds on a large number of plant species. Although, leaves and bark makeup bulk of the plant matter consumed by elephants, fruits are also eaten by elephants when available. Therefore, they may play a role in seed dispersal of such plant species. Aim of this investigation was to ascertain the role of elephants as a seed dispersal agent.

This investigation was conducted from January 1998 to December 1999 in the North Western region of Sri Lanka. A total of 500 dung samples were collected from different areas within the region. Dung boli were separated by hand and seeds present were identified by comparing with a reference seed collection. The number of seeds present were also recorded. Part of the seeds were removed from dung and their germination potential was determined while the remaining seeds were left in the dung. These dung piles were monitored and the number of seeds germinated were recorded.

Analysis of dung revealed 36 species of wild plants and 17 species of cultivated plants. Of the Wild plants most commonly found plant species were *Mimosa pudica*, *Panicum maximum* and *Tamarindus indica*. Among the cultivated varieties, *Eleusine coracana*, *cucurbita maxima*, *Cucumis melo* and *Oryza sativa* were commonest species observed. The seeds found in the dung boli germinated well after removal. However, when left in dung the germination potential was very low. This indicates that elephants do not play a key role in seed dispersal of wild plants.