

Biodiversity of ferns and fern allies at Magal Ganga river banks at Maliboda

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Ferns and fern allies present an important component of the understory of the rain forest. Although Pteridophytes of the world consist of about 12,000 species, about 360 species are represented in Sri Lanka. Maliboda is one of the hydrologically important and biologically richest places in Adam's Peak range in Sri Lanka. Almost all biodiversity assessments have been largely based on flowering plants and fauna. Although biodiversity of ferns and fern allies are high in rain forest, very little information is available on such plant category. Consequently, a systematic study on biodiversity of ferns and fern allies was initiated at Magal Ganga banks in Maliboda with the specific objectives of identifying ferns and fern allies at species level, preferable habitats, their uses and threats to ferns, and preparation of a check list of ferns and fern allies found in Maliboda area.

Forty seven species of ferns and its allies belongs to 18 families were identified from Magal Ganga stream banks in Maliboda, of which 15% and 11% are classified as endemic and threatened species, respectively in Sri Lanka. All the species of ferns and fern allies were observed on epiphytic, lithophytic and terrestrial, which include open area, streamside banks and roadside bank habitats. Eleven, thirteen and twenty-three species of ferns and fern allies were identified as lithophytic, epiphytic and terrestrial respectively. Communities living at Magal Ganga area use these ferns for ornamental purpose, preparation of the medicinal products and curries, and protection of crops. They have also been subjected to various threats. Over exploitation, habitat loss and vandalism were identified as threats on ferns and fern allies at that area. A check list of ferns and fern allies was prepared whilst depositing preserved specimens in national herbarium at Royal Botanical Garden. Implications of finding of the study are discussed with respect to conservation and sustainable use of ferns and fern allies.

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