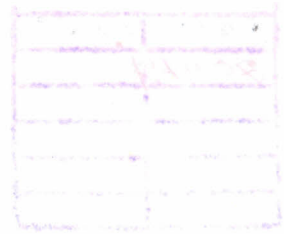


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**THE STUDY OF FLORISTIC DIVERSITY OF
WOODY PERENNIALS IN THE HAKGALA STRICT
NATURE RESERVE**

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ABSTRACT

This study focuses on the floristic diversity of woody perennials of the Hakgala Strict Nature Reserve which aims to evaluate its conservation value in terms of diversity, rarity, naturalness, size and representativeness. The vegetation was classified into three classes namely seedlings, saplings and trees to ease the survey. Gradsect sampling technique was adopted to sample the vegetation.

As far as floral composition is concerned this natural reserve consists of 88 plant species, 65 genera and 36 families. At the same time, there was no evidence on single species dominance in trees. There were 3 dominant species in sapling vegetation namely *Psychotria zeylanica*, *Maesa perrottetiana* and *Lasianthes oliganthes*. *Psychotria zeylanica* appeared to be the most dominant single species in seedling vegetation. Lauraceae and Myrtaceae were the most dominating families in trees of this Strict Nature Reserve. On the other hand, Rubiaceae and Myrsinaceae families dominate the saplings. Anacardiaceae was the most dominating family in the seedlings. At the same time, there were no major communities observed at lower elevations. However there was a community of *Syzygium umbrosum*, *Eugenia mabaeoides* and *Calophyllum walkeri* in the peak at the canopy level.

It has a high species diversity. It is rich in endemic woody flora and endemism rises up to 45% of the species enumerated. So it can be considered as a unique place of species richness. It is also an ecologically critical area due to the presence of two endangered plant species, two vulnerable species, seven rare species, four intermediate species and a single intermediate or rare species of woody flora. Therefore, Hakgala Strict Nature Reserve has a very high conservation value. The contribution of this vegetation to hydrology and watershed enhances this conservation value. However its small size and isolation may jeopardise its long term viability.

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