

Abstract

A botanical inventory and diversity of trees, shrubs (≥ 5 cm diameter at breast height [dbh]), herbs, climbers and lianas was assessed in plots (154) of 20×5 m in Mt. Marsabit forest, northern Kenya. We recorded 52 species of trees and shrubs, twelve species of herbs and six species of climbers and lianas. They belonged to 35 families and 64 genera. Rubiaceae was the richest family with nine species followed by Euphorbiaceae (six), Oleaceae (five), Rutaceae (four), Capparaceae, Labiatae and Leguminosae (three each). The rest of the families were represented by one or two species. *Rinorea convallarioides* (Bak.f.) Eyles ssp. *marsabitensis* Grey-Wilson (Violaceae), an endemic species, and *Drypetes gerrardii* Hutch. (Euphorbiaceae), were the two most important species, accounting for more than third of the combined importance value. Species diversity indices were 2.735 (Shannon–Wiener), 0.88 (Simpson's) and 0.296 (Evenness). There was a strong evidence of disturbance arising from anthropogenic and wildlife foraging activities. This inventory has affirmed Mt. Marsabit forest as a unique habitat for several endemic, rare, threatened or vulnerable plant species, which should be conserved.