

Floristic diversity assessment and Vegetation analysis of the upper altitudinal ranges of Morni Hills, Panchkula, Haryana, India

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ABSTRACT

A field experiment was conducted in the forests of Morni Hills, Panchkula which form a part of lower Shiwalik range in North-east Haryana. The vegetational data was analysed for two different altitudinal ranges i.e. 800-1000 m AMSL (Range-1) and 1000-1200 m AMSL (Range-2), and parameters observed like floristic composition, phytosociology and diversity indices such as Shannon Wiener index (H'), Simpson index of dominance (C_d) and Pielou index for equitability (E). The data was collected in the months of Feb-Mar, 2019. For sampling of vegetation, 15 large plots were selected in each altitudinal range at random places. A total of 96 plant species (27 trees, 16 shrubs, 46 herbs and 7 climbers) were recorded in Range-1 while a total of 88 plant species (22 trees, 18 shrubs, 42 herbs and 6 climbers) were recorded in Range-2. The explored area was found to be colonized by various invasive plant species, which is an indicator of the area being under acute anthropogenic pressure. It was due to human intercessions; like land clearing for cultivation, construction activities and tourism, etc. Therefore, it is concluded that the site in discussion needs some immediate conservation efforts to prevent ongoing stress and degradation.

Key words: Floristic Composition, Phytosociology, IVI (Important Value Index), Conservation, Anthropogenic Pressure, Species diversity indices.

