

TREE SPECIES COMPOSITION, REGENERATION AND DIVERSITY STATUS OF MISCELLANEOUS FOREST IN TARAI REGION OF KUMAON HIMALAYA

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Abstract: The study deals with the tree species composition, regeneration status and plant diversity of miscellaneous forest in tarai region of Kumaon Himalaya. The total tree basal area ranged from 2325.0 to 2974.7 cm² and density from 4.7 to 7.0 plants 100m⁻² for tree layer, 8.0 to 18.4 individuals 100m⁻² for saplings and 58.8 to 146.3 individuals 100m⁻² for seedlings. Shannon-Wiener Index (diversity) values for tree layer ranged 2.408 to 2.862, concentration of dominance ranged 0.163 to 0.205 and equitability between 8.58 and 11.23. On the basis of data on population structure, a total of four patterns were recognized, *Mallotus philipinensis*, showed expanding population structure. Absence of lower girth classes of *Dalbergia sissoo* indicates that this early successional species is failing to regenerate with increasing density of forest cover. *Tectona grandis*, *Cassia fistula* were represented only by seedlings indicating they have invaded recently. Rest of the species exhibit accidental population structure.

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