

## Diversity and Composition of Herbaceous Component in Behali Reserve Forest of Biswanath District, Assam, India

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Abstract: The present paper was aimed to study the flora and composition of the herbaceous species in Behali Reserve Forest (Assam, India). For this purpose, in 2019-2020, we established nine study sites with various number of 1 × 1 m study plots per each. In total, 77 plant taxa belonging to 71 genera and 33 families were reccorded. The families Acanthaceae (7 species), Asteraceae (6 species), Poaceae (6 species), Lamiaceae (5 species) and Asparagaceae (5 species) were richest in terms of number of species. The most abundant species were *Cynodon dactylon* (235 individuals), *Piper sylvaticum* (145 individuals), *Ageratum conyzoides* (103 individuals), and *Amischotolype hookeri* (101 individuals). The same species plus *Rhaphidophora glauca* were considered as dominant in herbaceous plant communities studied in the Behali Reserve Forest. The protected area is recognized as one of the richest herbaceous flora among other Protected Areas in the Northeast India. At the same time, some "white gaps" remained in the Behali Reserve Forest. Only the establishing of dense and relatively even net of the study sites along this Protected Area will allow to obtain the complete knowledge about herbaceous flora of the Behali Reserve Forest, although the main proportion of the flora and vegetation structure will be changed insignificantly.

Keywords: Eastern Himalaya, Flora structure, Semi-evergreen forest, Species richness, Ground flora