

Influence of Invasive Alien Plants on Vegetation of Hailakandi District, Assam, North-East, India

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Abstract: The invasive alien plants are introduced to an ecosystem and extend their geographical occupancy with the potential to perturb the native vegetation. Aim of the present study was to study the vegetation analysis of Katlicherra block in the Hailakandi district (Barak valley) of North-East (NE) India to assess the diversity of invasive alien plants (IAPs). In this study, the vegetation analysis was done in agriculture systems, roadside, and railway side to delineate the impacts of anthropogenic disturbance on phytosociology. In vegetation analysis random quadrat methods were used. Phyto-sociological analysis revealed that the recorded plants belonged to 23 different families, 36 genera and 44 species. Further, habitat-wise, 27 herbs and 17 shrubs were recorded and the Asteraceae was noted as the dominant family. Among the recorded plants *Ageratum conyzoides, Chromolaena odorata, Lantana camara* and *Mikania micrantha* were noted as the aggressive and noxious invaders. Therefore, further ecological investigations are warranted to provide an insight into underlying invasion mechanisms. The results of such invasive-native interactions are prerequisite for formulating management strategies to safeguard the biodiversity of this study area lying in an Indo-Burma hotspot region.

Keywords: Invasive alien plants, Ageratum conyzoides, Chromolaena odorata, Lantana camara, Mikania micrantha