

# FROM TROPICAL TO TEMPERATE: FIRST DISTRIBUTION RECORD OF *AMARANTHUS DEFLEXUS* L. (AMARANTHACEAE) AS AN ALIEN SPECIES TO KASHMIR HIMALAYA

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Climate change and land use transformation are triggering the shift in species ranges, causing tropicalization of temperate floras and consequently impacting the endemic biodiversity of temperate zones. Therefore, early documentation of such floristic changes is essential for implementing effective management strategies to mitigate the loss of endemic biodiversity. Here we report *Amaranthus deflexus* L. of tropical origin for the first time from the temperate Kashmir Himalaya, India. Based on the sparse plant populations and recent reports, *A. deflexus* is categorized as a casual alien species for the study region. The taxonomic identification of species was confirmed on the basis of diagnostic floral characters. This study provides a comprehensive micro- and macromorphological description, photographic illustrations, and a comparison of diagnostic characters of *A. deflexus* with closely related species *A. viridis* L. and a distribution map to support the scientific validity of the plant record in this Himalayan region.

**Keywords:** alien species, climate change, range shift, Himalaya, biodiversity, diagnostic characters

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