

Tracking the Invasion Pathway: Assessment of α -Diversity and Invasiveness of Alien Ornamental Plants of Srinagar(Kashmir, J&K), India

Exotic, alien, ornamental flora, Kashmir, Himalayas, New records

1. Department of Botany, University of Kashmir, Srinagar, J& K, India 190006 2. Department of Botany, Islamia college of Science and Commerce, Srinagar, J& K, India 190006 3. Division of Floriculture, Medicinal and Aromatic plants, SKUAST- Kashmir, J& K, India 191121 Shabana_botany@yahoo.com; khursheedtrali@yahoo.co.in

Abstract :

The valley of Kashmir is famous for its marvellous landscape which attracts tourists from all along

the globe. The landscaping of this heavenly abode predominantly involves alien ornamental plants. The present study puts on record the alien ornamental flora of Srinagar Kashmir, and thus, is a first compilation of alien ornamental flora of the region. The study enlists the occurrence of 271 exotic ornamental species distributed in 187 genera, belonging to 85 families, therefore piling up the total number of alien plant species in the Kashmir Himalayas to 704. The taxonomic composition analysis of alien ornamental flora of the region revealed that dicots are represented by 223 species (82%) belonging to 151 genera and 65 families while as monocots comprised of 39 species (15%) dispersed in 28 genera and 13 families. Gymnosperms are represented by 9 species (3%), 8 genera and 7 families. Asteraceae (11.07%), Rosaceae (9.59%), Oleaceae (4.79%) are the largest families of exotic ornamental plants introduced into the Kashmir Himalayas. Out of 85 families, 42 are represented by a single genus and single species. The highest number of alien ornamental species have come from the continent Asia (31%) followed by Europe (30%) and North America (20%). The study reports the occurrence of 133 alien ornamental species for the first time from Kashmir Himalayas. Our analysis of alien species establishment and invasion is not in consonance with Williamson's tens rule and proposes that human

assisted species selection, introduction and establishment change the entire dimensions of tens rule to maximum values in invasion biology. [Nature and Science 2010;8(3):79-95]. (ISSN: 1545-0740).

Key Word :

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