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Distribution Of Invasive Alien Plants Along the Banks of Sasthamkotta Lake

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Sasthamkotta lake is categorized as a Ramsar wetland, is the largest fresh water lake in Kerala, a state of India on the South of the West Coast. It meets the drinking water needs of half million people of the Kollam district. Invasive Alien species are the second biggest threat to biodiversity after habitat destruction and are a major cost to the economic wellbeing of the planet. They cause enormous and often irreversible harm to biodiversity around the world by displacing native and useful species and changing ecosystems. They are the reasons for the extinction or decline of many species and continue to pose a huge threat to many more. Invasive alien species occurring in this region were compiled based on the literature survey, field observation and discussion with local people. Invasive alien species were divided into three categories- naturalized, interfering and noxious. Self-replacing plant populations by recruitment through seeds and capable of independent growth were categorized as naturalized. Alien and native plants which impacted agriculture adversely especially on the disturbed sites were taken as noxious. The adverse impact of noxious species was in the form of competition for space with tillage or forage crops and harboring of pests or disease vectors, harmful to crops and native species. A total of 34 species of invasive aliens of the terrestrial vegetation of Sasthamkotta lake side have been documented. There are 34 alien species belonged to 23 genera under 16 families. The habit, nativity and the impact of invasive species on forest, grassland and agricultural communities were noticed to prepare a catalogue of invasive alien plant species. Habit wise analysis shows that 58% of species are herbs, 20.5% are shrubs and 20% are climbers. The four dominant families contributed 75% of the invasive alien flora of terrestrial vegetation of Sasthamkotta lake side. The present catalogue of invasive exotic species is likely to serve as basic information for future research towards conservation of native plant species of the region.

Keywords: Invasive plants, Alien flora, Exotic species, noxious species.

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