

DEPARTMENT OF BOTANY

Extension Activity 2021 – 2022

DOCUMENTATION OF INVASIVE ALIEN SPECIES OF SASTHAMCOTTA LAKE

As per the ardent demand of the current scenario and keeping importance of youth's role for sustainable environment, the department of Botany has ignited and raised the level of environment consciousness among students and made them responsible towards the conservation of Sasthamcotta lake.

Department of Botany has organized a study of Invasive alien species of Sasthamcotta Lake, under the supervision of Ms Dhanya S.R, Asst. Professor in Botany. Dr. Geethakrishnan Nair.P (H.O.D, Dept. of Botany) and Ms Lekshmy Sreekumar, Asst.Professor in Botany also extend great support to this venture. A total number of 10 students of B.Sc Final year students participated and got field experience and gained the knowledge of the impact of invasive alien species in the different areas of Sasthamcotta lake. The study was conducted from 9/1/22 to 25/2/22. Invasive Alien species are the second biggest threat to biodiversity after habit destruction and are a major cost to the economic wellbeing of the ecosystem. They cause enormous and often irreversible harm to biodiversity around the ecosystem by displacing native and useful species and changing ecosystems. They are responsible for the extinction or decline of many species. Local field trips were conducted about the invasive species in Sasthamcotta lake and the information were taken into consideration for the study.

A total of 34 species of invasive aliens of the terrestrial vegetation of Sasthamcotta lake side have been documented. Our field observation and discussion with local people indicate that there are 7 most noxious invasive plant species in this region. Some species such as *Merrimia vitifolia*, *Mikania micrantha* and *Chromolaena odorata* are harmful to native species. *Merrimia vitifolia* alters the natural growth of native plants because not only it obstructs plenty of sunlight to reach surface layer but also its allelopathic exudates cause retardation in seedling growth of native plants and destruct the natural riparian vegetation of Sasthamcotta lake.



QUADRAT SAMPLING OF INVASIVE ALIEN PLANT SPECIES



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IMPACT OF INVASIVE ALIEN PLANT SPECIES ALONG THE NATURAL VEGETATION



Report of the studies on the invasive alien plant species conducted by the students has been handed over to Wetland Authority, Government of India and Sasthamcotta Gramapanchayat.