



USES AND AWARENESS ABOUT FRESHWATER PLANT SPECIES IN UVA PROVINCE, SRI LANKA - A PRELIMINARY STUDY

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Abstract

Nearly 370 freshwater plant species are found in Sri Lanka, of which 12% are endemic. While certain freshwater plant species have been identified taxonomically, the uses of most of the species have not been fully studied. Hence, a pilot survey was conducted with randomly selected 110 individuals from four age groups (below 18; 18-35; 35-55 and above 55) and seven occupation categories (student, teacher, ayurvedic doctor, farmer, private sector, Other government and other) in Uva Province from August to January in 2019. The main objective of the study was to identify the awareness and uses of the aquatic plants in Uva province, Sri Lanka. The collected information included the utilization (human food, medicine, ornamental plants in fish keeping tanks, ornamental plants in gardens, fertilizer, soil conservation, water purification, religious activities, handicraft production, and beauty therapy activities) of 41 selected freshwater plants. Descriptive statistics and probit regression were used to analyze the data quantitatively. The result showed that 58% of the plants were utilized as ornamental plants in gardens, 46% for medicinal purposes, 44% as human food, 38 % as ornamental plants in fish keeping tanks, 24% for fertilizer production, and 16% for water purification. It was found that some of the aquatic plants were misidentified with other species' names. The identification ability and use of exotic species were more prevalent with the lower age groups (below 35 years). In contrast, endemic aquatic plant species (such as *Cyrtocoryne* spp, *Lagenandra* spp, and *Aponogeton* spp.) and indigenous species (such as *Rhynchoglossum notonianum*) were more familiar with the higher age groups. Following this pilot study, it is recommended that this type of survey be extended to all the provinces in Sri Lanka to understand the awareness among different age groups and the importance of freshwater aquatic plants at the national scale.

Keywords: Biodiversity, Sustainable utilization, Conservation, Aquatic plants, Freshwater