

Knowledge and awareness of invasive wild plant, *Eichhornia crassipes* (Water Hyacinth): a case study among undergraduates of Agriculture at the University of Ruhuna, Sri Lanka

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Invasive wild plants contribute much to the life of urban and rural communities. They provide biomass, fertilizers, and animal fodder; they may be edible or act as water purification agents, etc. The water hyacinth, *Eichhornia crassipes*, has one or more parts that can be used for food, if collected at the appropriate stage of maturity and properly cooked. Knowledge regarding the water hyacinth may provide solutions for future requirements in Sri Lanka. This survey investigated the awareness and knowledge of this invasive wild plant, *Eichhornia crassipes*, among undergraduate students (n = 100) of the Faculty of Agriculture, University of Ruhuna.

Semi-structured interviews were conducted among the undergraduates representing all districts of Sri Lanka, using a pre-tested questionnaire. Focus-group discussions were conducted using five to seven students in a group. Data were analyzed descriptively and presented with appropriate descriptive tools. The survey revealed that 91.7% of respondents are aware of the water hyacinth plant. Among all respondents, more than 75% recognized the water hyacinth as an aquatic plant as well as an invasive weed (48.9%), an ornamental plant (2.13%) and an edible plant (2.13%). The survey indicated that the water hyacinth is used as an edible plant in the Vavuniya district. In the questionnaire, to the query on solutions to manage the water hyacinth, respondents suggested that it be used as a water clearing agent (90%), and as biomass for biogas production and fish feed (80%). Further, while 70% suggested that it be used as animal fodder, a substrate for mushroom production and for fertilizer, 60 % suggested that it be used for paper production, making baskets for domestic use, and edible food for humans. Awareness programmes are needed to disseminate the additional uses of water hyacinth. The survey found that it has the potential to be used as an edible plant, but further studies are required to implement this.

Keywords: Biomass, *Eichhornia crassipes*, edible, focus-group discussion