Proceedings of the 25th Anniversary Scientific Conference of NARA on Tropical Aquatic Research Towards Sustainable Development

Distribution of Aquatic weeds and its impact on selected natural water bodies in the Polonnaruwa and Ampara districts

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Key words : aquatic weeds, aquatic plants, invasive aquatic plants

Abstract

Aquatic plant distribution in Polonnaruwa and Ampara districts were surveyed. A total of 417 reservoirs and 202 sampling sites in irrigation canals & streams in the Polonnaruwa district, and 142 reservoirs and 57 sites in irrigation canals & streams in the Ampara district were studied.

The major aquatic weeds recorded from the Polonnaruwa district were Salvinia, Eichornia, and Hydrilla . Forty two percent contained the weed. Sixty four percent of the seasonal reservoirs and 21% of the perennial reservoirs contained Eichornia. The other major weeds observed were Najas, Typha Ceratophyllum, Hydrilla and Pistia . Hydrilla and Potamogeton were the major weeds observed in irrigation canals while Valisneria and Pistia were also observed in some areas. Typha was found in 28% of the reservoirs, while 2% were covered with Typha and 38%

reservoirs contained Najas with 3 covered with Najas sp.

In the Amapara district, the major weeds observed were *Eichornia* and *Hydrilla*. *Eichornia* was found in 40% of the reservoirs while *Hydrilla* was found in 22% reservoirs. *Salvinia* was recorded from 18% reservoirs. The major problems were caused by the invasion of *Nelumbium* in the seasonal and perennial reservoirs of the Ampara district. It had totally covered 5% of the small irrigation reservoirs and partially covered 3% major irrigation reservoirs. The other weeds observed in the district were *Azolla, Pistia* and *Najas*. In the irrigation canals, *Hydrilla* was the major weed in 60% of the sites and *Potamogeton* was found in 7% of the canal sites visited.

The aquatic plant diversity including weed diversity was high in the Polonnaruwa district compared to Ampara district. The irrigation canals of both districts were affected by the *Hydrilla* hindering the natural water flow in some places of these canals.

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