

Exploration of Aquatic Weeds in Nagbhid Tehsil of Chandrapur District

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Abstract--Aquatic ecosystems throughout the world are threatened by the presence of invasive aquatic plants, both floating and submerged. Some of the aquatic species, such as water hyacinth *Eichhornia crassipes* Solms, *Hydrilla verticillata*, *Nymphaea odorata*, *Salvinia molesta*, alligator weed. Despite being relatively minor problems in their native range, have become major invaders of aquatic habitats in other part of the world after having escaped from their natural enemies. Unchecked growth of aquatic vegetation is generally undesirable and reduces the value of the water resource. Despite adopting all control options including manual, mechanical, chemical and classical biological, the problem persists. The Current weed management is oriented towards finding approaches that are effective in controlling the weed and reducing environmental contamination from herbicides. This paper discusses some of the major microbial agents associated with aquatic weeds and their increasing role in integrated weed management.

I. INTRODUCTION

The term aquatic weeds refer to the macroscopic forms of aquatic vegetation and encompass macro algae. These are classified into emergent weeds, floating, submerged and free floating weeds (Wetzel, 1975). Aquatic macrophytic plants are those species which normally stand in water and must grow for at least a part of their life cycle in water, either completely submerged or emerged (Muenscher, 1944). Aquatic weeds are considered as important component of the aquatic ecosystem not only as food source for aquatic invertebrates, but also act as an efficient accumulator of heavy metals (Devlin, 1967; Chung and Jeng, 1974). Aquatic plants are important as they supply food and shelter for many aquatic organisms. They serve as substratum to different Micro and macro fauna (Raut and Pejawar, 2005). Aquatic plants constitute an integral component of an aquatic ecosystem. They may serve as good source of food to the mankind, a palatable feed to the water birds and animals thus forming a base for aquatic wildlife conservation practices. They also serve as a potential source of energy (Majid, 1986). Aquatic weeds also respond to the changes in water quality and have been used as indicator of pollution in several cases (Best, 1982). Weeds are important component and play a major role in primary productivity of the aquatic ecosystem. Aquatic weeds used nutrient and thus influences water quality. It also controls water quality by exuding various organic and mineral components. Aquatic communities reflect anthropogenic influence and are very useful to detect and assess human impacts (Solak et al., 2012). Aquatic weeds referred to as Weeds constitute an important component of aquatic ecosystem. Their diversity and biomass influence primary productivity and complexities of trophic states (Kumar and Singh, 1987). Weeds serve as a link between the sediment, water, and sometimes atmosphere in wetlands, lakes, and rivers. However, weeds are also involved in ecosystem processes such as bio mineralization, transpiration, sedimentation, elemental cycling, materials transformation, and release of biogenic trace