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## Water hyacinth eco-technology for wastewater treatment worldwide

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Water hyacinth eco-technology has shown a great promise in providing cost effective solutions to waste water problem in many specific areas. Water hyacinth based waste treatment was tried only in US, India, Japan, Singapore, Malaysia and India for initial 25 yrs with maximum number of studies coming from US. Successful pilot projects are documented by large number of authors. Water hyacinth has shown promise in removal of most common pollutants, toxic organic wastes, almost all the heavy metals and radioactive wastes. Design parameters for establishment of hyacinth based wastewater treatment plants developed so far need to be validated in different conditions for different kinds of wastes. Role of algae in water hyacinth systems needs to be studied. Higher efficiency through microbial augmentation/higher growth of the plant or through other processes should be achieved to reduce area requirements. Water hyacinth has shown a great promise as a low cost and efficient water purifier and its application is increasing worldwide. Traditionally it was used only for sewage treatment but its great potential is now displayed in treatment of wide range of chemical substances. It is now considered to be a great provider, which can be a solution of several needs like water supply, environment protection, energy, fertilizer and raw material for several industries especially for rural poor. It appears most of the potential of this plant is yet to be tapped.

### Biography

R K Trivedy is a former Professor and Head, Department of Environmental Sciences, University of Pune, Pune (Maharashtra). He has also held the positions of Director, Environmental Sciences and Climatology and Dean in an Akruiti Institute, Mumbai, National Business Manager, Environmental Services, Intertek, a multinational company. He has 36 years of experience in the field of fresh water ecology, aquatic weed ecology and management biomonitoring of water pollution, wastewater treatment and climate change research. He has published over 115 research papers in reputed national and international journals. He has authored/edited 33 books.

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