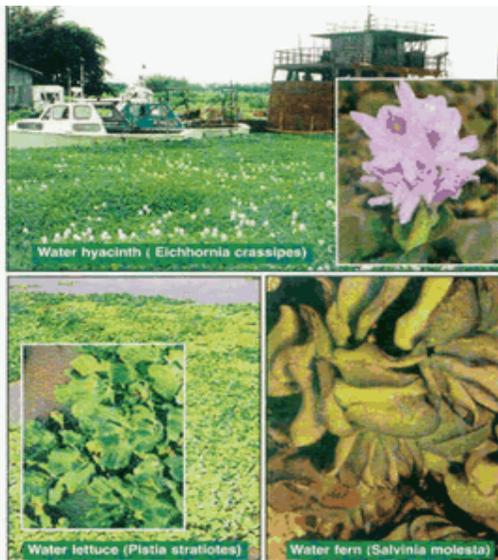


Deadly Floating Aquatic Weeds in Kenyan Waterways



Water Hyacinth (*Eichhornia crassipes*)

Water hyacinth is a free floating aquatic weed belonging to the family Pontederiaceae. The plant produces an inflorescence with slowly blue/white to violet flowers. Up to 400 minute seeds may be produced from fruiting capsules which develop from the inflorescence.

These seeds usually sink and remain dormant in periods of stress i.e. drought. Upon flooding the seeds germinate. However, production is mainly through vegetative propagation and growth is greatly enhanced by high nitrogen, phosphorus and potassium levels. Water Hyacinth may double its mass in as few as 6-15 days.

Water hyacinth grows over a wide variety of wetland types. Wind movements and current help disperse the plant throughout the waterways. The weed has its origins in South America. It was first recorded growing as an ornamental plant in Kenya in 1957.

Water hyacinth is currently found in Lake Victoria, Lake Naivasha, Nairobi Dam and other water bodies such as those at the Bamburi Cement Factory, Mombasa and the sewage plant at the Carnivore Restaurant in Nairobi.

The growing and cultivation of this plant in Kenya is prohibited





Water lettuce infestations in a drainage in Kisumu District

Water hyacinth infestations in Lake Naivasha

Water Fern (*Salvinia molesta*)

Water Fern is a free-floating aquatic fern in the plant Family Salviniaceae and originates from South Eastern Brazil. *Salvinia* is a sterile plant and Multiplies purely by branching and fragmentation.

Salvinia is generally found in still fresh water areas such as ponds, lakes, canals and drainage ditches. In Kenya, it is currently known to infest the Lake 01 Bolossat, Ewaso Nyiro (North) River, Ewaso Narok River, Ramisi River, Naivasha and several dams and aquaria in Central and Rift Valley Provinces of Kenya.



Water hyacinth growing in nairobi Dam

Extensve *Salvinia* infestation in Lake Naivasha

Water Lettuce (*Pistia stratiotes*)

Water lettuce or Nile cabbage is a member of the Family Araceae and is thought to be indigenous to South America. Water lettuce is a spongy plant consisting of a shell-like rosette of light yellowgreen leaves. The leaves, which are spirally arranged around a central axis, are 10-20 cm long and make the plant appear like a floating open head of a lettuce. Reproduction is predominantly by branching, either from the main plant or from stolons.

Water lettuce grows best in still water or areas of minimal flow. In Kenya, the plant has been reported in Lake Naivasha, Lake Victoria, Lake Baringo, Marsabit Forest, Shimba Hills, the Tana

River Delta and most recently in the Kiambere and Kamburu Hydroelectric Power Reservoirs of the Kenya Electricity Generating Company Limited.

**Problems caused by Water Fern,
Water Hyacinth and Water Lettuce**

Water lettuce, water fern and water hyacinth may cause very serious problems in waterways, wetlands and hydroelectric power reservoirs.

These include:

* Impeding:

- boat transport
- fishing activities
- touristic activities

* Causing increased:

- sedimentation and flooding

* Damage to:

- dams,
- bridges,
- hydroelectric plants,

* Adverse effects on water quality

* Reduction in biodiversity

* Harboring vectors of animal and

* human diseases.

These problems ultimately lead to a decline in the social economic and health standards of entire communities.

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