Broad-leaf weeds in rice

Factsheets for Rice Production, East Africa

Water hyacinth (*Eichhornia crassipes*)

Description

- Water hyacinth is a free floating perennial water weed.
- The weed grow up to 3 feet above water level, with thick, waxy dark green leave.
- The leaf blade is kidney shaped and about 1.5-5 inches in diameter.
- The petioles (leaf stalks) are swollen, spongy and bulbous enabling them float on water.
- Flowers are light purple and produced in clusters of 8-15.
- Water hyacinth has a fibrous root system which is black to brown in colour and feather-like.
- The weed multiplies rapidly under favourable conditions, and can double its population in just a few days, in water bodies enriched with nutrients.
- Water hyacinth propagates by seed and vegetative means.
- The seeds settle at the bottom of the water where they remain viable for up to 30 years and become source of infection for apparently clean areas.
- In vegetative reproduction daughter plants are produced from the mother plants and are attached by stolons, which break off allowing the daughter plants to spread to new areas. The daughter plants are dispersed by wind and human activities such boating, flooding.
- Vegetative multiplication is responsible for rapid spread of the weed in water.

Geographical distribution

- Water hyacinth is found in drainage canals and rice fields in all the irrigation schemes in East Africa.

Crop losses and associated damage

- The water hyacinth mats clog the drainage canals leading to difficulties in irrigating rice fields.
- Obstruction of the irrigation canals may lead to water deficiency resulting into losses associated with water deficiency in rice.
- Water hyacinth grows quickly and outcompetes rice for space, nutrients and light leading to total loss in yields.

Fig 1. Water hyacinth plant
Source:Julien, M. (2013). ISBN 978 1 74256 585 9

Fig 2. Water hyacinth growing in an irrigation canal
Source: M.D. Thuranira.

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