

## **APB INFONOTE**

## SALVINIA CONTROL

Salvinia (Salvinia molesta) is an introduced water weed, which grows successfully in both tropical and temperate climates.

Under suitable conditions it can spread explosively, forming a dense mat which completely covers the water surface.

When it dies, the mass of decaying vegetation de-oxygenates the water, killing fish and other water animals.

It also makes the water unfit for human or livestock consumption. The mass of green plant material uses water at a far greater rate than natural evaporation.

Salvinia blocks irrigation and drainage systems and is a threat to the ecology of natural rivers, lakes and wetlands.

It is declared plant throughout the state and may not be imported or kept, even in a home aquarium. Any plants found must be destroyed.

Salvinia grows in still or slowly moving water with a high nutrient content, such as drains and the shallow lakes of the Perth metropolitan area. It cannot survive in salty or brackish water. It is a free-floating water fern. It has oval leaves about 2.5 cm in diameter, covered by waxy hairs which repel water and contribute to the plant's buoyancy by holding air bubbles.

As the plant multiplies, the leaves become closely folded giving a concertina-like appearance.

It has fine leaves which act and look like roots. They hang in the water and absorb nutrients in the same way as true roots.

Salvinia is a fern, therefore it does not form seeds. Spore-bearing branches may form between the root-like leaves at times, but the spores of this salvinia species are infertile. Therefore it is spread solely by vegetative means. Parent plants divide forming daughter plants which readily break off and float away.

Under ideal conditions the number of plants may double every ten days.

Infestations are frequently caused by people who dump unwanted aquarium plants in lakes and rivers

Illustration courtesy of Tasmanian Deptment of Agriculture

## Control

**Biological** control

Biological control has been very successful where large infestations occur

Mechanical control

Aquarium and garden plants should be removed from the water, dried and burnt.

Larger infestations in ponds may be removed mechanically, but every plant must be found and destroyed. This can be very slow and tedious.

Chemical control

Herbicides may be the best control option for large infestations. Treat between November and February when the plants are actively growing.

Regione® (200g/litre) or Gramoxone®

COVER SPRAY: 5 - 10 litres per hectare water

surface

KNAPSACK: 5-10 ml/litre

Results with these chemicals have not been consistent. Several applications may be required each summer to control regrowth.

Velpar®

COVER SPRAY: 8 litres per hectare.

KNAPSACK: 8 ml per litre of water

Use a wetting agent at one part to 600 of spray

Do not use on water bodies which are used for irrigation or close to where desirable plants are growing.

This treatment may need to be repeated after an interval, to control regrowth.

Further Information

For advice on salvinia control, contact your nearest Agriculture Protection Board district officer.