

A new concept for controlling aquatic weeds

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Chemical control of floating aquatic weeds demands the application of floating herbicides which spread rapidly over water and plant surfaces.

The new concept proposed is based on the incorporation of surface active agents into hydrophobic oils with or without herbicidal additives for application to water and plant surfaces for the killing of floating water plants by wetting, sinking and phytotoxic action.

An example of this type of formulation is AF 101 developed at the Sir Alan Fletcher Research Station, Department of Lands, Sherwood, Queensland. It is based on kerosene, hydrophobic surfactants and diuron. It is a very active and efficient herbicidal mixture for the control of salvinia (*Salvinia molesta*), water lettuce (*Pistia* sp.) and red azolla (*Azolla* sp.).

There are numerous advantages of a hydrophobic formulation over a hydrophilic one. It is used in low volume applications from the land, water or air. Being oil-based it has natural swath marking properties to indicate sprayed areas. The rapid herbicidal action has a very desirable psychological effect on spray operators who can see immediate results.

This new approach has been used successfully in the control of salvinia on Tinaroo Dam and Lake Moondarra in northern Queensland and on Sandgate Lagoon in southern Queensland.