

Horticultural Development Company

New Project

HNS 176

Novel methods of algal control in aquatic plant production tanks Project Number: HNS 176

Title: Novel methods of algal control in aquatic plant production tanks

Start and end dates: 1 April 2009 to 31 March 2010 (1 year)

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Project Co-ordinator: Debbie Edwards (Paul Bromfield Aquatics)

Location: ADAS Boxworth & Paul Bromfield Aquatics, Gosmore, Hitchin, Herts

Background and project objectives

Algal (in particular, blanketweed) contamination of aquatic plants is a major issue on nurseries - most growers wash plants in water and hand-remove visible contamination. However, small amounts of algae can remain and multiply rapidly. Algae can build up during display for sale and cause customer rejection of the plants. The move to conserve water and use rainwater and run-off water, rather than only mains or bore-hole supplies, is likely to lead to algae in water supplied to plants. Algae threads can block filters, while fragments and unicells may pass into aquatic plant trays and tanks. Algae may also increase on pots grown out of water. Algal growth in drainage channels and on pots encourages shore flies which can lead to plant rejection by purchasers. Additionally shore flies transmit fungal pathogens such as Pythium species. Blanketweed contamination has increased because the threads are not dying back during the recent warmer winters and so there is earlier build up in the following year. The herbicide Terbutryn was previously available to control filamentous algae without usually affecting water lilies but UK approval was lost in 2007.

This project will test the effectiveness of products available to control algae (including blanketweed) in water. These will include microbial, "natural chemical" tank additives, and ultrasound. Ultrasound has been tested in reservoirs, but this project will investigate the effectiveness of ultrasound in the shallower tanks used in aquatic plant production. Any phytotoxic effects of the products will be recorded. Further information

Email the HDC office (hdc@hdc.org.uk), quoting your HDC number, alternatively contact the HDC at the address below.

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