



Horticultural  
Development  
Company

# New Project

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## BOF 70

Narcissus: Chlorine dioxide - a potential biocide for use in hot-water treatment and cold dips

**Project Number:** BOF 70

**Title:** Narcissus: Chlorine dioxide - a potential biocide for use in hot-water treatment and cold dips

**Start and end dates:** 01 May 2010 – 31 December 2010

**Project Leader:** Gordon Hanks

**Project Co-ordinator:** Adrian Jansen

**Location:** Lincolnshire

**Background and project objectives:**

Chlorine dioxide is a biocide used a great deal in the food, water and many other industries. In research in the USA, it has been shown to have potentially wide application for the control of plant pathogens (including the base rot pathogen), in addition to its general biocidal activity. Chlorine dioxide has many advantages, including on-site generation as required, tolerance of organic contamination, human safety and lack of harmful waste.

Chlorine dioxide therefore appears to be a good candidate for general disinfectant use in narcissus growing, and in this project it would be tested in narcissus HWT and cold-dipping. Its effects on bacterial load and subsequent bulb growth would be assessed, along with practical aspects of its use on farm. Its effect on base rot spores and stem nematodes would be determined *in vitro*.

The full project would run in six stages, and the present proposal is for stages 1 to 3 over the period May to December 2010.

In this document product names are used for the sake of accurate reporting. The mention of a product does not imply an endorsement of it nor a recommendation to use it; nor does omission of the mention of a product imply criticism of it.

#### Further information

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