Horticultural
Development
Company

New Project

M 50

Trichoderma aggressivum f. europaeum (Th2): Epidemiology in bulk Phase 3 systems

Project Number: M 50

Title: *Trichoderma aggressivum f. europaeum* (Th2): Epidemiology in bulk Phase 3 systems

Start and end dates: 1 October 2009 to 31 December 2010 (15 months)

Project Leader: Dr. Helen Grogan, Teagasc R&D Centre, Kinsealy, Dublin 17, Ireland

Project Co-ordinator: Richard Gaze, Sussex

Location: Teagasc R&D Centre, Kinsealy, Warwick HRI and FERA (previously CSL), York

Background and project objectives

Trichoderma harzianum type Th2 (now called *T. aggressivum f. europeaum)* is an aggressive compost mould that predominantly infects phase 2 compost at spawning. It has started to appear in bulk phase 3 facilities across Europe in recent years where hygiene levels are generally much higher than on smaller, less technologically advanced, facilities. This raises the following questions:
Can *T. aggressivum* (Th2) exploit weaknesses in the bulk phase 3 system?
Does poor or patchy pasteurisation of *Trichoderma*-infected Phase 2 offer a window of opportunity to *T. aggressivum* (Th2) to bypass all hygiene measures in place in bulk phase 3 spawning halls?

T. aggressivum (Th2) is known to derive the bulk of its nutrition from the starchy grains used in the manufacture of mushroom spawn. With the increased dependence on bulk phase 3 there is a need to determine whether non grain-based mushroom spawn products offer a control strategy for bulk phase 3 systems of production. The commercial objectives of this project are therefore:
To enhance our understanding of how *T. aggressivum* (Th2) may behave in bulk Phase 3 systems of production
To identify the eradication conditions for *T. aggressivum* (Th2) during the pasteurisation phase
Investigate the potential of non-grain-based mushroom spawn as a control strategy for *T. aggressivum*

Remedial action may incur additional costs, such as higher spawn costs, and changes to compost pasteurisation facilities and practices. These are likely to be relatively small and would be justified if used either prophylactically or in the event of a *Trichoderma* outbreak.

Further information

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

Horticultural Development Company
Tithe Barn
Bradbourne House
East Malling
Kent
ME19 6DZ

Tel: 01732 848 383
Fax: 01732 848 498