New Project

M 53

Mushrooms: Developing new sustainable mushroom casings in relation to supply of raw materials, and mushroom cropping and quality

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Project Number:	M 53
Title:	Mushrooms: Developing new sustainable mushroom casings in relation to supply of raw materials, and mushroom cropping and quality
Start and end dates:	1 April 2011 to 30 September 2012
Project Leader:	Prof Ralph Noble, East Malling Research
Industry Representative:	Richard Gaze
Location:	East Malling Research, New Road, East Malling, Kent, ME19 6BJ
HDC Cost:	£18,316

Project Summary:

• Investigate new materials which can be beneficially added to casing to substitute wet-dug peat and sugar beet lime, and suppress diseases.
• Compare a range of existing commercial casings based on wet deep-dug peat and SBL with new casing materials in terms of mushroom crop husbandry, yield and quality in experimental and commercial facilities.
• Explore the use of recycled casing, separated from compost, as a component in new casing.
• Conduct physical, chemical and microbial analyses on new and existing casing ingredients and blended mixes which relate to subsequent performance in terms of mushroom initiation, yield and quality.

Aims & Objectives:

Commercial Objectives

- Investigate new materials which can be beneficially added to casing to substitute wet-dug peat and sugar beet lime, and suppress diseases.

- Compare a range of existing commercial casings based on wet deep-dug peat and SBL with new casing materials and blends in terms of mushroom crop husbandry, yield, and quality.

- Explore the use of recycled casing, separated from the compost, as a component in new casing.

- Conduct physical, chemical and microbial analyses on new and existing casing ingredients and blended mixes which relate to subsequent performance in terms of mushroom initiation, yield and quality.

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Benefits to the industry

- Less reliance on wet dug peat, SBL and imported casing materials.
- Potential use of recycled casing from SMC.
- Substitution of peat in casing with recycled materials, improving environmental performance over imported mushrooms grown entirely on peat.
- Identification of properties of new and existing casing materials that relate to mushroom cropping performance.
- Potential suppressive effect of new casing materials on bacterial and fungal pathogens.

Further information

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

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