peatless

IPM strategies in button mushroom cultivation

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The problem

Pests and diseases can significantly **reduce mushroom yield and quality.** Important fungal diseases include Dry and Wet Bubble, and Cobweb. Sciarid and phorid flies can further increase disease pressure by **spreading these pathogens.** Managing both pests and diseases is becoming increasingly challenging due to the limited availability of crop protection products and the emergence of **resistant pest and pathogen populations.**

The solution

Effective IPM relies on **good cultivation practices, strict hygiene, exclusion measures, regular monitoring, staff training and continuous evaluation** of farm procedures. When transitioning towards peat alternatives, the same high standards remain essential.

Benefits

Effective IPM supports the **successful adoption of peat alternatives** and limits pest and disease pressure. This improves crop quality and minimizes yield losses.

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Practical Recommendations

- Monitor pest and disease levels regularly.
- Prevent contamination of casing materials and equipment.
- Maintain strict hygiene for workers, clothing and tools.
- Train workers regularly in hygiene, pest and disease management.
- Use filters, traps and exclusion measures to prevent fly entry.
- Control disease outbreaks promptly and before watering.
- Remove compost, casing and crop residues.
- Follow hygiene measures when moving between crops.
- Use authorised crop protection products when appropriate.
- Clean, disinfect and cook-out growing rooms between crops.
- Review and update the IPM programme regularly.

IPM is most effective when prevention, monitoring and continuous improvement are combined throughout the cultivation cycle.

About PEATLESS and this Practice Abstract

This practice abstract was elaborated in the framework of the PEATLESS project, based on the EIP AGRI practice abstract format. © 2023
Project dates: from May 2025 to April 2028.
Goal: To characterise sectorial needs at selected systems towards tailoring PEATLESS alternative substrate blends to overcome identified barriers for peat reduction in horticulture.

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