



Peat-free substrate for horticulture and mushroom

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Personal Information

Contact Name: Linda Meyer

Organisation/Business Name: MABU Casing Soils (Pty) Ltd

Organisation Type: SMME

Web Address: linda@mabucasing.co.za

Location: Gauteng

Type of Industry: Agriculture

Technical Area: Manufacturing

Technology Offer Description

Technology Maturity: Commercialised

Proof of Concept: Yes, prototype tests

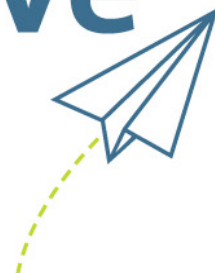
Intellectual Property: Yes. (2010/08305)

Desired Relationship: Customers

Summary:



This process has been developed whereby pith from sugar cane bagasse can be used as a substitute for peat moss in the cultivation of mushrooms, and as seedling and plant growth mediums. MABU Casing Soils offers a cost-effective, environmentally-friendly and 100% natural alternative product to peat for mushroom and horticultural industries. For the first time ever, it makes sustainable mushroom farming possible.



Detailed Description:

Peat soil, used on 80% of SA button mushroom farms, is a non-renewable fossil fuel and is imported to South Africa at high cost from the northern hemisphere. There has been considerable environmental pressure against extracting peat for use in the horticultural and mushroom industries. Furthermore, the wetlands and peat bogs of the world sequester more than 550 gigatons of carbon – double that of the world's forest biomass. When peat is excavated, the organic carbon that has built up and has been stored there for thousands of years, changes into CO₂, and masses thereof is being released into the atmosphere. This has a direct effect on atmospheric greenhouse gas levels, and subsequent global warming and climate change. Peat accumulates very slowly at about 1mm per year. Sustainable mushroom farming is not possible with the use of peat as a casing substrate.

Pith mushroom casing, as an effective and sustainable alternative to peat soil, has been developed and patented after extensive research at the University of Pretoria. Casing is topdressing applied to the spawn-run compost on which the mushrooms eventually form. Local production creates jobs, adds value to a waste product, and reduces transport costs - and ultimately input costs - to the mushroom farming industry. MABU created and continues to develop technology that is a world first for both the local and international mushroom market.

Team and Related Experience:

Linda Meyer (PhD Plant Pathology): Linda has nine years' experience in the mushroom industry, including mushroom diseases; molecular disease detection; casing soil dynamics; general mushroom growing; project management and marketing.

Ané van Heerden (MSc Microbiology): Ané has three years' experience in the mushroom industry and three years' experience in the agricultural industry in the field of biological control of various commercial crops. Her expertise includes HACCP and quality control.

Pierre Prinsloo: Pierre is the site- and process manager for MABU. He has eighteen months' experience as operational manager, first at Sola Fidei Manufacturing, and now managing MABU processing.

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