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(57) Abstract :
A METHOD OF PREPARATION OF A MYCELIAL BIO-COMPOSITE ABSTRACT A method (200) of preparation of a mycelial bio-composite is provided. The method includes using (202) straw (an agricultural waste) and used coffee ground (an urban waste) as a lignocellulosic source or a substrate. The method further 5 includes adding (204) a simple sugar to speed up initial mycelial growth and sterilizing and inoculating the substrate with mushroom spawn. The mycelia utilize the natural ability of fungi to break down the lignocellulosic materials creating a web-like hyphal network. The method further includes packing (206) the inoculated substrate into a mould of a de10 sired shape and incubating at room temperature and aeration. The method further includes demoulding (208) and allowing the substrate to grow out of the mould for a predetermined number of days to get a smooth outer texture after the mycelium completely colonizes the substrate to prepare a mycelial bio-composite. 15 [FIG. 2]

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