

Enhancing Food and Nutrition Security through Oyster Mushroom Cultivation and Value Addition

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Abstract

Edible mushrooms are an ancient food consumed widely in Asia, Europe, Africa and America due to its beneficial effects on human health. Oyster mushrooms traditionally collected from the forests and now domesticated and cultivated in mushroom houses have become the emerging products of the agricultural sector. More small scale farmers in Kenya are now engaged in the cultivation, processing and marketing of oyster mushrooms using clean agricultural residues and waste. It is grown for their nutritional values and medicinal attributes and, as well as a source of income. Mushrooms are fast yielding compared to other crops, it is cost effective and involves minimal input. In addition, mushrooms are economically viable as they require relatively small space for cultivation and are adaptable to climate change, ideal for regions with scarce land. This paper describes the growth of oyster mushroom cultivation, its value addition, and its contribution to food and nutrition security. Small scale farmers were first trained on simple techniques in mushroom cultivation. After training, the farmers were assisted in obtaining the mushroom spawn for their initial cultivation. Since the oyster mushroom is highly perishable, the farmers were also trained to preserve oyster mushrooms by drying for value addition. Oyster mushroom is potentially very important in future food supplies and a new dimension of enhanced food security and sustainable agriculture. Institutions and professionals are encouraged to increase awareness of the nutritional values of mushrooms and to continue expanding conscious mushroom cultivation and consumption as an asset for food and nutrition security.

Keywords: *Food Security, Oyster, Agricultural Waste, Sustainable Agriculture*