



# CULTIVATION OF *PLEUROTUS PULMONARIUS* ON SUBSTRATES TREATED BY IMMERSION IN ALKALINE WATER IN GUERRERO, MEXICO

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## ABSTRACT

*Pleurotus pulmonarius* was cultivated on dry banana leaves (*Musa paradisiaca*) or dry “palmareca” leaves (*Chrysalidocarpus lutescens*), using two substrate treatments. Substrates were immersed in water containing 2% lime for 24 h and used for mushroom cultivation, in comparison with the method of immersing substrates in hot water at  $\pm 80$  C for 1 h. The highest mushroom production was obtained on banana leaves immersed in alkaline water, reaching 120.1% of biological efficiency in a period of 61 days. Biological efficiency in the other treatments varied between 41.4-81.2%. Substrates and treatments studied are suitable for low-cost and small-scale production of oyster mushrooms.

**Key words:** Agricultural by-products, mushroom cultivation, *Pleurotus pulmonarius*, alkaline substrate treatment.

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