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## Assessment of growth and yield performances of *Pleurotus salmoneostramineus* mushroom grown on maize stalk supplemented with various levels of wheat bran and maize flour

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Promoting the use of local agricultural waste must be one of the environmental friendly strategies in poverty alleviation. The objective of the present study is to evaluate the growth and yield of *Pleurotus salmoneostramineus* mushroom on maize stalk supplemented with different concentrations of maize flour (MF) and wheat bran (WB). A random block design was used for the experiments with four replicate per level of treatment. The results indicated that the different rates of supplementation influenced the performance of *Pleurotus salmoneostramineus*, with 20% MF having highest contamination rate (75%) followed by 8% MF, 12% MF and 20% WB was moderate (50%). The low supplementation levels especially the control (0%) and 4% WB resulted in good mycelial growth and quicker period of colonization. The time for pinning of *Pleurotus salmoneostramineus* was significantly faster within the first flush, with the minimum of 1 day observed at 14% WB and 20% WB. Higher levels of supplementation had a better mushroom yield and biological efficiency (BE). These included 18% WB, 12% MF, 12% WB and 14% MF supplementation ratios. From these results it can be concluded that for fast mushroom production, lower or no supplementation is essential, while for improved productivity higher supplementation may be recommended to a certain limits such as 18% WB, 14% MF and 12% MF.

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