Effects of climatic conditions and substrates on the production of Pleurotus sajor-caju in Tripura.

Abstract:

The oyster mushroom, Pleurotus sajor-caju (Fr.) Singer, developed fruit bodies in every month through out the year, while, cultivated under in house condition at ICAR Research farm in Tripura during the period w.e.f. January, 2004 to December, 2005. However, of the years, the period from August to February was more favourable for fructification with optimum production of fruit bodies (BE 85.8 to 95.7%) during November to January. The meteorological parameter, monthly average of daily maximum temperature, was the most fit ($r^2 = 0.59$ and $r = -0.77$) to correlate the yield in the regression equation, $Y = 2524 - 64X$. The agricultural residues like, black gram pod shell, pea haulms, rice straw, sesame residue and toria residue were more or less equally effective to produce P. sajor-caju mushroom, although, pea haulms required the shortest period of time for fruit body production. Saw dusts of 8 woody plant species produced fruit bodies and amongst those, Trema orientalis and Gmelina arborea were the most and least effective ones, respectively. The mushroom production on saw dust was increased maximum, while, that supplemented with 2% kuro (rice bran and husk mixture used as fodder of cattle) on dry weight basis.

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