Evaluation of different media, spawn and substrates for the cultivation of *Pleurotus ostreatus* in Muzaffarabad

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**Abstract**

Potato dextrose agar (PDA), corn meal agar (CMA), malt extract agar (MEA) and potato dextrose ispghol (PDI) media were used for the mycelial growth of *Pleurotus ostreatus* at different temperatures in light/dark. The results showed that the best medium for the growth of fungus was potato dextrose agar at 25°C in dark condition. The fast mycelial growth was noted on sorghum, significantly different from wheat and corn seeds. Mushrooms were grown on wheat straw (WS), maize stem (MS) and mixed wild grasses (MWG). The best mushroom growth was observed on WS+MS (1:1). The highest biological efficiency was found to be 72.1% on WS+MS (1:1) followed by 62% on WS+MS (3:1). Minimum biological efficiency of 25% was obtained when WS+MWG (1:3) was used as substrata.

**Key words:** *Pleurotus ostreatus*, media, spawn, cereal straw, growth, biological efficiency.