

Effect of magnetic fields on the growth of *Pleurotus eryngi* and *Pleurotus citrinopileatus* Mycelia

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Abstract: The effect of 4 different degrees of magnetic fields (2 mT, 25 mT, 50 mT and 100 mT) and 3 different exposure periods (5, 15, 30 minutes) were studied on the growth of two species of mushroom (*Pleurotus eryngi* and *P. citrinopileatus*) grown on the potato dextrose agar (PDA). The PDA medium was sterilized in autoclave for half an hour at 121 °C and then poured into the petri dishes at a rate of approximately 30 ml per dish. The dishes were vaccinated with mycelium of fungi that loaded on wheat grain. One grain of wheat was placed in the center of each dish and then an adhesive parafilm tape was placed around the edge of each dish to prevent contamination. The experiment was carried out in sterile conditions with five replicates per treatment and a total of 260 dishes. The effect of the magnetic field on the growth of the previously mentioned fungi was studied by measuring the average diameter of the fungal colony every two days for a period of 20 days. The data were analyzed using the one-way analysis of variance (ANOVA) and Student's t-test.

Keywords: *Pleurotus* sp., Magnetic fields, Mycelium