

The optimal culture conditions for the production of fruit body of *Pleurotus nebrodensis* Inzenga on sawdust medium

김현옥, Ji-Lu Ding, 남현근, 심현재, 박상신¹, 차월석*
조선대학교 생명화학공학과;
¹동국대학교 경주캠퍼스 자연과학대학 생명공학과
(wscha@chosun.ac.kr*)

Pleurotus nebrodensis Inzenga is a flavorful edible mushroom found throughout the northern temperature zone. This study reported the optimum condition of the production of the mushroom as well as productivity and contamination ratio on sawdust medium. *P. nebrodensis* Inzenga was obtained from culture group of Kaya-Backsong (Chungnam, Korea). Sawdust culture medium was made by mixing 4 kinds of sawdust and rice bran in the ratio of 70:30, 75:25, 80:20, 85:15, 90:10, and 100:0 (v/v) with the water content of 60%. An amount of 680g of solid medium was put into 1,100 mL polypropylene bottle and then autoclaved for 60 min in 121°C and 1.2 Kg/cm². After inoculation, the bottle was incubated at 20°C for 25 days. Average hypha length of the fruit body was 32–40 mm when yeast extract and potato extract were added. The hypha condition was satisfactory for edible product. The optimum temperature for the growth was 25°C. The average contamination percentage was 1.9–2.3% depending on the experiment. The average incidence rate (number of bottle produced the fruit body/total number of culture bottle×100) was 3.24–8.0% depending on the frequency of the experiments.