Abstract

This year cultivation of five kinds of mushroom was investigated, using a mixture of shochu lees and starch waste as a medium. It was apparent that the medium was good for cultivation of monkey head mushroom and oyster mushroom on the basis of cultivation period and yield. Medium containing shochu lees and starch waste improved some food qualities of mushrooms. The waste medium was confirmed to be safe in feeding test of chicken. Compared with raw waste medium, the waste medium after lactate fermentation was better feedstuff, and familiar to the animal taste. Further feces when fed with the waste medium could be used as a fertilizer.

Economic effect was estimated by production of mushrooms with high commercial value and reduction of feed cost using mushroom waste medium as feedstuff. Taken together, it is practicable to construct a Simultaneous Economic and Material Circulation System Centering on the Use of the Shochu Lees and Starch Waste as Functional Food: linkage of steps of mushroom (food) production, change of the waste medium to feedstuff, animal feeding, and change of feces to fertilizer, started from utilization of shochu lees and starch waste as medium for mushroom cultivation.

Keywords: shochu lees, starch waste, Hericium erinaceum, recycling system, livestock feed