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Supplementation at casing to improve yield and quality of white button mushroom

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ABSTRACT

Supplementation of substrate at casing to increase the yield and quality of mushroom [*Agaricus bisporus* (Lange) Sing] is an important practice in commercial production of white button mushroom. This project was done to study the effects of supplementing the compost at casing with ground corn and soybean seed applied at: 0 gas control, 17, 34 and 51 g per 17 kg compost on production and harvest quality of *A. bisporus*. There were significant differences between supplemented and non-supplemented substrates. The 34 g soybean and 51 g corn treatments had the highest yield. There were significant differences in quality indices of mushroom due to the type and amount of the supplement. The 51 g soybean supplement produced higher protein compared with other substrates. The highest vitamin C, total phenol, total soluble solids and antioxidant capacity obtained of 34 and 51 g soybeans or 34 and 51 g corn, respectively. Increased production and quality of *A. bisporus* may be achieved by addition of suitable amounts of supplements.

KEYWORDS

Agaricus bisporus; Compost; Corn and Soybean

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