Abstract

A factorial experiment in a quite random format with 3 repetitions was performed in the experimental condition in the site of Pardis located in university of Zabol to study on the effect of the Humic and the Folic acid on the increase of the function of the white button mushroom and its protein.

Treatments of experiment consist of: parameter (A): Humic acid in 3 levels (0, 1/5, 3) into one thousand litre of water and parameter(B): Folic acid in 3 levels (0, 1/5, 3 litre) into one thousand litre of water. The results showed that Humic acid had a meaningful effect on the quantitative properties of the button mushroom such as: the percentage of the appearance of the messilium, the percentage of the appearance of the pin bottom, diagonal of the lid, the height of the pillar, the color of the lid, function, and the biological outcome at the level of 1 percent, and on the ratio of the lid to the pillar at the level of 5 percent. However, the qualitative properties of the button mushroom such as: the percentage of protein, the percentage of the dry matter, and the percentage of the Ash was not affected by Humic and Folic acid. Increasing Humic acid resulted in increase of the percentage of the messilium appearance, the percentage of the pin bottom, the pillar height, and the function. The impact of Folic acid on the properties of the percentage of themessilium appearance, the percentage of the pin bottom appearance, the color of the lid, the function and the biological outcome at the level of 1 percent and on the lid to pillar ratio at the level of 5 percent became meaningful, however, it didn't have any meaningful effect on the lid diagonal, the pillar height, the percentage of protein, the percentage of the dry matter, and the percentage of the Ash. The highest effect on the function of the white button mushroom was obtained at the third level of Folic acid. The mutual effect of the Humic acid and the Folic acid on the whole quantitative properties at the level of 1 percent, and on the lid diagonal at the level of 5 percent became meaningful but its effect was not meaningful on any of the qualitative properties under analysis. The mutual effect of the Humic and the Folic acid on the function of the experiment indicated that to obtain the maximum of function it would be better to use the Folic acid at the third level, and the Humic acid at the second level. Although, it seems that the organic fertilizers applied at this research had more effect on the quantitative properties of the button mushroom than its qualitative properties.

The key words: button mushroom, Humic acid, Folic acid, Crude protein.



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Title Effects of humic acid and folic acid on yield and crude proteinofbuttonmushroom

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