Studies on the effect of some chemical compounds on mycelial growth of white button mushroom in Vitro

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Food has been the most important problem of the mankind from the ancient times. Edible mushrooms are important as a food and medicinal source and have introduced by F.A.O. as an important source of protien in developing countries which are depended to the cereals and legumes. The white button mushroom [Agricus bisporus (Lange) Singer] is one of the most important ones and is being faced to different pests and diseases which cause the major qualitative and quantitative losses in the yield. one of the major methods for the control of these destrative factors is the chemical vontrol with different fungicides. There are so many studies which carried out in different parts of the world on these fungicides. Two common ones are the Benomyl and Carbendazim that are used for different diseases such as Trichoderma green moulds, dry bubble, brown and yellow moulds. Correct use of these fungicides generally causes different side effects such as resistance in pathogen and yield losses. Unfortunately, there is no study on the suitable use and application of these compounds in Iran. In this study, the effects of three fungicides namely Benomyl, Carbendazim and Bitertanol as well as another mineral compound, i.e. the NaCl on mycilial growth of A.bisporus in Vitro were investigated. We used NaCl based on another study on inhibitory effects of Lithium chloride on mycelial growth of some fungi such as Trichoderma, so we used the similar mineral salt in chemical structure, i.e. Sodium chloride(Nacl).

In this study, the chemical compounds used in different concentrations as