EFFICIENCY OF ETHANOLIC EXTRACTS OF VEGETABLES FOR THE IN VITRO CONTROL OF THE PHYTOPATHOGENIC FUNGUS (FUSARIA

VERTICILLIOIDES)

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ABSTRACT

In the present work the efficiency of the ethanolic extracts of Allium sativum, Allium cepa and Zingiber officinale was evaluated on the mycelial growth of the fungus Fusarium verticillioides, said phytopathogen has the power to infect and cause disease in Zea mays crops. The agar dilution technique was used, 5 repetitions were made by extract and dose, which were measured in 3 different times, in addition to the two-factor ANOVA experimental design with a level of significance of α = 0.05. The ethanol extract of Allium sativum showed an inhibition in the mycelial growth of the fungus in 100% with the dose at 13% (V/v), being its lower inhibition in mycelial growth an average of 76.05% with the dose at 11% (V/v) on day 5. The ethanol extract of Allium cepa inhibited the fungus 100% with the dose at 10% (V/v) in its three days of measurement, being its lower inhibition in the average mycelial growth from 48.72% to 6% (V/v) on day 5 and the ethanolic extract of Zingiber officinale which had a better role in terms of the public effect inhibit in 100% with the dose at 8% (V/v) in Its three days of measurement, being its lower inhibition in mycelial growth average of 76.98% to 6% (V/v). The ethanolic extracts of the plants studied give the opening to a way of biological control of phytopathogenic fungi in conventional and industrialized agriculture.

KEYWORDS: Allium Sativum, Allium Cepa and Zingiber Officinale, Phytopathogen, Mycelial, Biocontrol

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