Some Studies On *Fusarium oxysporum* .f.sp. *fabae* Isolated From Vicia Faba Seeds

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Dedication

To my father and mother
To all members of my family
And every one who helped me to successfully finish this study

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ABSTRACT

Three samples of faba bean seeds of season 2001-2002 were collected from El-hudaiba research station .The samples were tested by dry inspection ;blotter test, growing on test, .The dry inspection revealed some impurities and discolored seed malformation and damage. In blotter test the fungus *Fusarium oxysporum* f.sp *fabae* was detected in high percentage hudaiba 93, Selaim and Bassabair seed samples. Other fungi detected in this test were *Drechslera specfier, Curvularia lunata, Alternaria alternata, Aspergillus spp, Penicilium sp* and *Cladosporum sp.* The pathogenicity test of the fungus *Fusaruim oxysporum* f.sp *fabae* showed that the fungus has affected of the seedling stands, shoots and roots of the three samples of faba bean seedling using soil inoculation method.

Soil dilution test revealed fungi of *Fusarium sp, Aspergillus spp, Penicilium sp, Cladosporum. sp* growing on test showed systemic infection by *Fusarium oxysporum* f.sp *fabae.*

The optimum temperature for the growth of the fungus *Fusarium oxysporum* f.sp *fabae* was found to be 28°C followed by 35,40and minimum growth attained at 4°C.Potato dexstroe agar (PDA) was found to be the best medium or the growth of the fungus. There was no a significant difference between four carbon sources used.

In vitro Tilt, Benlate and Antrocol 70% were found to be effective in inhibiting the growth of *Fusaruim oxysporum* f.sp *fabae*.

Also biological control was carried out using the fungus *Trichoderma viridae* and was found to be effective in inhibiting the growth of the fungus.

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