

BIOLOGICAL CONTROL OF THE LATE WILT DISEASE OF MAIZE USING *Streptomyces griseus*

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ABSTRACT

This work was carried out during 2004 of maize growing season in two locations first at Dakahlia and the second at Gharbeia governorate.

Biological control trails against the late wilt disease caused by *Cephalosporium maydis* were conducted using actinomycetes (*Streptomyces griseus*).

Strains No. 7, 9, 15 and 40 were more and highest active against *C. maydis*. The concentration of *Streptomyces griseus* suspension a, b and c were used against the pathogen in laboratory or greenhouse conditions gave a good action antifungal with *C. maydis* and succeeded in inhibition the fungal growth. The percentage of infection decreased with the increasing of antibiotic dose.

Seed treatment with *Streptomyces griseus* suspension was effective in controlling the late wilt disease of maize caused by *Cephalosporium maydis*.

Fourty streptomycetes strains were isolated from collected soil samples. All these isolates were purified and screened for their antifungal activity against some soil pathogenic fungi especially *C. maydis*. Ten aggressive strains from *Streptomyces griseus* were selected for further studies. The antibiotics were extracted and purified. Antifungal (Antibiotics) from liquid media are very important in control of the mycotic diseases.

The need for new safe and more effective antifungal especially with the increase of infection with plant diseases.