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EVALUATION THE EFFECTIVENESS OF SULFONAMIDE COMPOUNDS AGAINST PATHOGENIC PLANT FUNGI

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ABSTRACT

The influence of nine sulfonamide compounds on mycelia growth and reduction of artificial infection of *Botrytis Fabae* the causative of brown spots on faba bean plants. In vitro tests showed variable effect of sulfonamide compounds on *A.niger*; *B.Fabae*; *F.oxgsporium* and *Rh. solani*. Most sulfonamide compounds reduced the colony diameter of the fungus. The high reduction in colony diameter of pathogenic fungi was recorded with sulfonamide compounds No 1, 2 and 3. On the contrary sulfonamide compounds No, 6. And 9 recorded low reduction in diameter colony ones. While compounds No, 4,5,7 and 8 revealed very low reduction compared with anther compounds All sulfonamide compounds were decreased necrotic area (brown spots) of *B.fabae* on faba bean leaves. Higher efficiency to reduce the necrotic area (brown spots) found when using sulfonamide compounds No 1,4,6,9 Followed by compound, No 2, 3, 7 and compounds No 5 and 8.

Key words: Chemical inducers, Acquire resistance, Fungal disease, Cops Disease severity, Pathogen fungi

INTRODUCTION

Faba bean (*Vicia Faba.L*) plants are subjected to attack by several fungal disease in Egypt. *B fabae*. The causative of leave brown spot disease considered serious and destructive disease of faba bean and spread in many areas in Egypt (**Mousa 2009 and Metwali et al 2009**). Surfactants are microbicidal component, which have fungicidal effect as well as bactericidal i.e cetyltrimetyl ammonium salts; monalkylated glycine salts, didecyl ammonium chloride etc. where mixed to give a