RESEARCH COMMUNICATION

EVALUTION OF DIFFERENT ANTIFUNGAL COMPOUNDS AGAINST *RHIZOCTONIA SOLANI* CAUSING AERIAL BLIGHT OF SOYBEAN

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Abstrct: Soybean (*Glycine max* (L.) Merrill) is one of the most important oil seed crop of India . Soybean aerial blight caused by *Rhizoctonia solani* is a most important oilseed disease. The disease appears July-August and is characterized by sudden and complete death of the plants. Antifungal activity of different medicinal plant leaf extracts, oils and *Trichoderma spp* were studies under *in vitro* condition. The Out of fifteen medicinal plants leaf extracts, studies, the extract of Butch significantly inhibited the mycelial growth of *Rhizoctonia solani* under *in vitro* conditions. Among the medicinal oils, Eucalyptus and Neem oils were found to significantly inhibit the mycelial growth of *Rhizoctonia solani* at 5% concentrations. Among the antagonists, maximum mycelial growth inhibition was observed by *Trichoderma harzianum* (74.81%) followed by *Trichoderma viride* (67.40%) while *Trichoderma spp.* (mushroom isolates) was least effective against *Rhizoctonia solani*.

Keywords: Aerial blight of soybean, *Rhizoctonia solani*, Antifungal compound, *Trichoderma spp.*

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