

Effect of methanol extract of *Berberis lyceum* Royle on growth rate of *Sclerotium rolfsii* Sacc.

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Abstract

The medicinal plant *Berberis lyceum* Royle was collected along with root from Rawalakot Azad Kashmir, Pakistan. The antifungal effect of root, stem and leaf extract of *B. lyceum* was studied against the pathogen *Sclerotium rolfsii* Sacc., under different conditions. All the extracts tested in various concentrations reduced linear mycelial growth and biomass of *S. rolfsii* as compared to control. The root extract was found more effective as compared to stem and leaf extracts. *S. rolfsii* showed fastest growth in the extracts when supplemented with urea and KNO₃ as compared to glucose and fructose supplemented extracts. The maximum production of sclerotia was recorded in control whereas number of Sclerotia was produced at 20 and 25% extract concentrations of root, stem and leaf. Results indicated that decrease in mycelial growth, biomass and sclerotia production with increase in extract concentrations of all parts of *B. lyceum*.

Key words: *Berberis lyceum*, Extract, *Sclerotium rolfsii*, Mycellial growth.