

Studies on Antifungal Activity of *Datura stramonium* L Extract on Inhibition of Spore Germination of *Puccinia triticina* Eriks

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Abstract: Inhibition of spore germination of *Puccinia triticina* was tested using aqueous extract of *Datura stramonium*. Many plants show antifungal activity against many pathogens. These plant contents alkaloids, phenols, steroids, tannins etc. as a chemical compound. The experiment was carried out to check the effect of *Datura stramonium* against inhibition of spore germination of *Puccinia triticina*. The aqueous extracts of leaf, stem, root and flower of *Datura stramonium* were tested under laboratory condition against spore germination by hanging drop technique. Hexaconazole (0.05%) used as a standard check and distilled water as a control. Aqueous leaf extract (2% and 3%) showed superior inhibition of spore germination than the extracts of root, stem and flower. Maximum inhibition was recorded 86.89 and 82.27% % over control in 2% and 3% leaf extract. Rest of the treatments showed better inhibition than the control. The *Datura stramonium* is a possible source of fungicide to manage many pathogenic fungi.

Keywords: *Datura*, Aqueous extract, Spore inhibition, Alkaloids, Hexaconazole

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