

## Use of Different Plant Extracts in Fungal Disease Management of Onion (*Allium cepa*. L)

**Authors :** Shobha U. Jadhav

**Abstract :** Onion is most important vegetable crop grown throughout the world. Onion suffers from pest and fungal diseases but these fungicides cause pollution and disturb microbial balance of soil. Under integrated fungal disease management programme cost effective and eco- friendly component like plant extract are used to control plant pathogens. *Alternaria porri*, *Fusarium oxysporium*, *Stemphylium vesicarium* are soil-borne pathogens of onion. Effect of three different plant extracts (*Ocimum sanctum* L., *Xanthium strumarium* B. and *H. Withania somnifera* Dunal) at five different concentration Viz, 10, 25, 50, 75, and 100 percentage on these pathogens was studied by food poisoning technique. *Ocimum sanctum* gave 84.21% growth of *Alternaria porri* at 10% extract concentration and 10.52% growth in 100% extract concentration. As compared to *Fusarium oxysporium* and *Stemphylium vesicarium*, *Alternaria porri* give good inhibitory response. In *Xanthium strumarium* B. and *H.* at 10% extract concentration 46.42% growth and at 100% extract concentration 28.57% growth of *Fusarium oxysporum* was observed. *Fusarium oxysporum* give good inhibitory response as compared to *Alternaria porri* and *Stemphylium vesicarium*. In *Withania somnifera* Dunal in 10% extract concentration 84.21% growth and in 100% extract concentration 21.05% growth of *Stemphylium vesicarium* was recorded. *Stemphylium vesicarium* give good inhibitory response as compared to *Alternaria porri* and *Fusarium oxysporum*.

**Keywords :** pathogen, onion, plant, extract

**Conference Title :** ICSOC 2015 : International Conference on Service Oriented Computing

**Conference Location :** Singapore, Singapore

**Conference Dates :** January 08-09, 2015