

## Antifungal activity of leaf extracts of some medicinal herbs against *Aspergilli*

Rukhsana Bajwa<sup>1</sup> and Sadia Ramzan<sup>2</sup>

<sup>1</sup>*Department of Mycology & Plant Pathology,* <sup>2</sup>*Department of Botany, University of the Punjab, Quaid-e-Azam Campus, Lahore 54590, Pakistan*

### **Abstract**

Fungicides are being successfully used as a key component in controlling fungal pathogens of economically important crops. However, in view of the increasing concerns and hazards against the use of chemicals, much attention is being focused on alternative methods of fungal control. In recent years, several plant-derived compounds are being tested for biological control of pathogens. In the present study the antifungal potential of aqueous extract of two medicinal plants viz. *Cannabis sativa* and *Ocimum basilicum* was evaluated against three pathogenic fungal species of the genus *Aspergillus* namely *A. niger*, *A. oryzae* and, *A. terreus*. The test fungal species were grown in liquid malt extract medium containing aqueous leaf extracts of 10, 20, 30, 40, 50 and 60 % of the test medicinal plant species. Each treatment flask contained 80 ml of malt extract. Data was recorded after 7 and 14 days of incubation. The growth response of different test fungal species to various aqueous extract treatments was measured in terms of fungal dry biomass production. Aqueous extracts of both the medicinal plants exhibited antifungal potential and suppressed the growth of all the three test fungi significantly. Increase in extract concentration led to further increase in effectiveness of the extracts. *C. sativa* in general exhibited more pronounced antifungal activity as compared to *O. basilicum*. *A. terreus* was more susceptible to extracts of *C. sativa* while *O. basilicum* had more effect on growth of *A. niger*.