The Activity of Essential Oils of *Hysopus officinalis* and *Juniperus orointalis* against *Rhizopus* spp.

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Abstract

Fungi are one of the main factors which causing big losses of agricultural products annually. One suitable method of fungal control is the use of medicinal plants. In this study we extracted the essential oils from Hyssopus officinalis and Juniperus Orointalis and investigated their antifungal activity against Rhizopus spp. A circle of colony 8 mm diameter was placed on PDA in Petri dishes and incubated at 25-28°C The concentrations of the essential oils were 1250, 2500, 3750 and 5000 ppm. The colony diameters were measured every day for 10 days. The control plates with no essential oils were covered with *Rhizopus spp* mycelium after 2 days . Generally the essential oils *Juniperus* fruit could control fungal growth better than *Hyssopus officinalis*. The most effective were 2500 and 3750 ppm *Juniperus* fruit essential oils. Therefore applying *juniperus* fruit essential oils is financially cheaper because it can control in lower concentration than *Hyssopus officinalis* essential oils.

Key words: biologic control , essential oils , *Hyssopus officinalis* , *Juniperus orointalis*