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Antifungal effects of Thyme oil on *Candida albicans* and *Aspergillus fumigatus*

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Spoilage and poisoning of foods by fungi is a major problem, especially in developing countries. *Aspergillus* is the most important fungi causing spoilage of foodstuffs. *Candida albicans* as a yeast is the most important problem in local and mucosal opportunistic infections. The effects of growth inhibition of Thyme oil on *Candida albicans* and *Aspergillus fumigatus* were studied in invitro. The disc diffusion method was used to evaluate the zone of fungal growth inhibition. Minimal Inhibitory Concentration (MIC) of the oil was used as broth dilution method and Minimal Fungicidal Concentration (MFC) of the oil was determined by agar surface culture method and compared with each other. The formaline was used as positive control and normal saline was used as negative control. Zone of inhibition of Thyme on *Aspergillus fumigatus* was 34mm and on *Candida albicans* was 35 mm. Minimal Inhibition Concentration (MIC) of the oil on *Aspergillus fumigatus* was 7 μ lit/ml and Minimal Inhibition Concentration (MIC) of the oil on *Candida albicans* was 250 μ lit/ml. The Thyme oil was found to be strongly fungistatistical agent against *Candida Albicans* and *Aspergillus fumigatus*, were studied in invitro.

Keywords: Essential oils, Antifungal, *Aspergillus fumigates*, *Candida albicans*, Thyme

Antihelminic Effects of *Echinacea purpurea* in rat

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Echinacea, also known as the purple coneflower, is an herbal medicine that has been used for centuries, customarily as a treatment for the common cold, coughs, bronchitis, upper respiratory infections, and some inflammatory conditions. Although a body of literature exists about the effects of different part of this herb on immune system to author's knowledge there is a few reports available about antihelminic effects of *Echinacea purpurea*. So, this study was carried out to evaluate the antihelminic effects of this herb in rat. In the present study, 60 Rats were divided randomly into three groups. Group 1 and 2 were given 1% and 5% dried powdered *Echinacea purpurea* for 15 days, respectively. Groups 3 were used as controls groups. Stool samples were collected on days 0 (before trial) and 16. The results showed significant reduction in the OPG between test groups compared to control group and between day 16 compared to day 0 ($P < 0.05$). There was no significant differences between two test group ($P > 0.05$). In conclusion, these results indicate that *Echinacea purpurea* has antihelminic effects in rat.

Keywords: *Echinacea purpurea*, Antihelminic, rat, herb