

Evaluation of Effects of Essential Oil of Three Species Thymus on E.coli, Pesudomonas Aeruginosa, Staphylococcus Aureus and Candida Albicans And Compare Effect of Antimicrobial Species Thymus With Ampicillin And Gentamicin

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Background & Objectives: Thymus used as a medicinally plant from 16 century. Important effective material in the thymus is compounds phenoly of thymol and carvacrol. Essential oil of thymus is a yellow or purple liquid with pleasant smell and hot taste. In this study investigate properties of antimicrobial on E.coli, Pesudomonas aeruginosa, staphylococcus aureus and candida albicans. Thymus has disinfect effects that can use of it essential oil as effective medicines in medicine of Veterinary .

Methods: For compare thymus antimicrobial agents with antibiotics, after to prepare essential oil of thymus with use of way of disk diffusion for bacterial and fungal, compare result of strains antibiogram. We put on disks of antibiogram on culture media and it incubated in 24 hours at 37°C. Then We report Inhibitory Zone to mm.

Results: of this study showed that Inhibitory Zone in essential oil Thymus transcaspicus for E.coli, Pesudomonas aeruginosa, staphylococcus aureus and candida albicans in order to 17, 24, 10, and 26 mm, Thymus daenesis for E.coli, Pesudomonas aeruginosa, staphylococcus aureus and candida albicans in order to 24,31, 20 and 34. Thymus kotschyanus E.coli, Pesudomonas aeruginosa, staphylococcus aureus and candida albicans in order to 38, 0, 32 and 22 mm. Ampicillin antibiotic for E.coli, Pesudomonas aeruginosa and staphylococcus aureus in order to 18, 29 and 0 mm. Gentamicin antibiotic for E.coli, Pesudomonas aeruginosa and staphylococcus aureus in order to 21, 18 and 16 mm.

Conclusion: This essential oils had good antibacterial effect on E.coli, Staphylococcus aureus and candida albicans, but this essential oils not much effect on the Pesudomonas aeruginosa.

Keywords: Thymus; Antibacterial Activity; Disk Diffusion