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كليـــــة العـــــلوم

دراسة التأثير المضاد لبعض المستخلصات النباتية على طفيلي الزحار الأميبي *Entamoeba histolytica* في الفئران المصابة مختبرياً

رسالة مقدمة إلى

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من قبل الطـــالبـــة

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بإشراف

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تموز

Abstract

Moreover this study was conducted in order to investigate the possibility of development of the parasite *E. histolytica* in appropriate medium and estimate the time for this parasite to remain alive in this medium. In this study , hot aqueous and alcoholic extracts from epicarp and pith of *Punica granatum* (pomegranate) fruits and leaves of *Thymus vulgaris* (thyme) were used as a killer for *E. histolytica* . The stool samples containing the parasite were obtained from AL-Samawa General Hospital and AL- Rumaitha General Hospital, to bring the infection in mice. The infection with *E. histolytica* which is the latest in mice cause cell loss in the cavity of intestine and the occurrence of intestinal necrosis in the surface of the mucous layer, atrophy of the villi and severe crash in the glandular mucosa and the occurrence of inflammatory cell infiltration. Three concentrations of each extract (500,1000, and 2000 mg\kg) were used .The lowest concentration (500 mg/ kg) was mixed with (125 mg \ kg) of drug Filagel (Metronidazole). The infected mice with *E. histolytica* were orally treated with the both extracts at each of the concentration mentioned early . Extracts under study proved their efficiency in eliminating the parasite *E. histolytica* , Generally , the time required to kill parasite was found to be reversely proportional with the increase in hot aqueous and alcoholic extracts concentrations.Hot aqueous and alcoholic extracts from epicarp and pith of *Punica granatum* fruits and leaves of *Thymus vulgaris* (thyme) with concentration of (2000 mg / kg) was successfully affective against *E. histolytica* within a period less than that required to kill this parasite by using (500,1000 and 500 mg/ kg +125 mg \ kg) of drug Filagel (1 , 2 days) for extracts from epicarp and pith of *Punica granatum* fruits and (3 days) for extracts from leaves of *Thymus vulgaris* . proved

statistical analysis by using the F-test to significant differences between all the concentrations used in every type of extracts . proved the comparison between the results obtained from the histological study of the experimental mice , the thyme extracts were the most efficient from the pomegranate extracts in the treatment of tissue changes resulting from the parasite. Hot aqueous and alcoholic extracts from epicarp and pith of *Punica granatum* fruits and leaves of *Thymus vulgaris* had clear effect (indicated by before and after treatment) on the mice weights .Significant differences were noted by using the two concentrations (2000 mg / kg and mixed concentrations).The Liver infusion agar medium which was used in the current study proved successful in the growth of parasite *E.histolytica*. which the trophozoite remains 8days while cyst remains 15 days.

The chemical tests performed on plant extracts have shown the presence of active substances like Alkaloids , Glycosides , Coumarin , saponins , Resins ,Tannins , Phenols , flavonoids and Terpenes .