ANTI-INFLAMMATORY ACTIVITY OF CENTAUREA CYANUS FLOWERS.

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In European traditional medicine, aqueous extracts of some plants (Anthemis nobilis flowers, Centaurea cyanus flowers, Chamomilla recutita flowers, Euphrasia officinalis aerial parts, Hamamelis virginiana leaves, Malva sylvestris flowers, Malva sylvestris leaves, Melilotus officinalis flowering tops, Plantago lanceolata leaves, Vitis vinifera var inctoria leaves) are topically used in cases of eye irritation or discomfort due to various causes (smoky atmosphere, sustained visual effort, sea or swimming pool baths, etc.).

In this work, the antiinflammatory properties of these plants were examined on carrageenan-induced oedema in the rat paw after i.p. administration.

The results show that the effect of the aqueous extract of Centaurea cyanus (CCE) is one of the most pronounced. Indeed, CCE produced an important dose-dependent antiinflammatory activity in the carrageenan model (about 30 % and 60 % reduction of oedema at respectively 100 and 250 mg/kg). Heat sterilization did not decrease this activity.

According to our experiments, CCE activity is mainly due to its mucilage that forms with water a viscous colloidal solution. However, additional studies are required to establish the accurate structure of the mucilage, and to elucidate its mechanism of action.

It may be concluded that folk ocular application of Centaurea cyanus can at least be partially explained by the presence of water-soluble antiinflammatory polysaccharide(s).

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