ANTIINFLAMMATORY 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 *tinctoria* leaves) are topically used in cases of eye irritation or discomfort due to various causes (smoky atmosphere, sustained visual effort, sea or swimming pool bathes, 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 mecanism 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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Qualitative and quantitative microbiological quality of spray dried pharmaceutical plant extracts.

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Spray dried plant extracts are usually analysed regarding their chemical content and their physical properties but their microbial quality remains poorly documented. 82 spray dried pharmaceutical plant extracts were analysed with the method described in the pharmacopeae to determine the profile of their microbial contamination.

The most identified species were Gram-positive rods 56/82. Intestinal bacteria like enterococci and group D streptococci were isolated from 20/82 samples, but we never displayed enterobacteria. This profile of contamination seems to be qualitatively similar to that of the raw plant powders described in the literature.
Quantitatively spray dried extracts were less contaminated, but the total viable bacterial aerobic count remained relatively high, exceeding 10^3CFU/g in 35 samples.

According to the observed profile of contamination the original plant seems to be the essential