
Abstract
The roots of Echinacea angustifolia (fam. Compositae) were used to obtain an antiphlogistic, immunostimulating and skin repairing extract. On the basis of these potential actions, the extract is used in cosmetic preparations. The aim of this study was to evaluate the anti-inflammatory activity of the extract using different irritation tests. The irritation reaction was induced by application of 0.015 ml of 0.25% croton oil in water to the ears of mice. The raw extract (Echinacina B), topically applied, inhibited oedema both at the maximum (6 hr) and in the decreasing phase (18 hr), and this effect was directly proportional to the doses used. Echinacina B was found to be more potent than the positive control, benzidamine, a topical non-steroidal anti-inflammatory drug. In addition, the extract given iv 1 hr before injection of 0.05 ml of 1% carrageenan into the hind paws of rats inhibited oedema in the histaminic and in the later phases of the phlogistic process. These data show the qualitative value of irritation tests for studying the anti-inflammatory action of a natural plant extract.