Abstract


Antiinflammatory effect of mace, aril of Myristica fragrans Houtt., and its active principles.

Ozaki Y¹, Soedigdo S, Wattimena YR, Suganda AG.

Author information

Abstract

Mace which is the aril of the fruit of Myristica fragrans HOUTT, has been used in Indonesian folk medicine as aromatic stomachics, analgesics, a medicine for rheumatism, etc. The present study was carried out to elucidate the antiinflammatory effect of methanol extract obtained from Mace and its active principles. The methanol extract was extracted with ether, and then the ether soluble fraction was extracted with n-hexane. The n-hexane soluble fraction was fractionated by silica gel column chromatography (Fr-I-Fr-V), and the active principle was isolated from Fr-II by thin layer chromatography (Fr-VI-Fr-VII). The antiinflammatory activity of these fractions was investigated on carrageenin-induced edema in rats and acetic acid-induced vascular permeability in mice. All fractions and indomethacin were suspended in 2% C.M.C. solution and administered p.o. The methanol extract (1.5 g/kg), ether fraction (0.9 g/kg), n-hexane fraction (0.5 g/kg), Fr-II (0.19 g/kg) and Fr-VI (0.17 g/kg) showed a lasting antiinflammatory activity, and the potencies of these fractions were approximately the same as that of indomethacin (10 mg/kg). Fr-VI was determined to be myristicin. These results suggest that the antiinflammatory action of Mace is due to the myristicin that it contains.
