THE ANTI-INFLAMMATORY EFFECT
LIQUID SMOKE OF COCONUT SHELL (Cocos nucifera L.)
IN RATTUS NORVEGICUS INDUCED BY CARRAGENAN 1%

ABSTRACT

Background: Mechanism of drug which can be used to reduce inflammation is by inhibit activity of conversing arachidonic acid into prostaglandin. One of active ingredients in liquid smoke coconut shell grade 2 is 2-Methoxyphenol (guaiakol). 2-Methoxyphenol is one of phenolic compounds that can be used as anti-inflammatory. Liquid smoke of coconut shell grade 2 is believed to bind a component that conversing arachidonic acid into prostaglandin. Purpose: To prove the anti-inflammatory effect of liquid smoke of coconut shell grade 2. Method: The anti-inflammatory effect is determined by its peripheral pharmacological Action using Carragenan Footpad Edema on mice. The type of this research is the experimental laboratories research, conducted on 2-3 month age and 100-200 grams Weights of male Rattus norvegicus. The Rattus norvegicus divided into 4 groups, each groups consist of 7. Control group was inducted by carragenan 1 % 0,1 ml via intraplantar injection then was directly given 0,1 ml aquades topically. Other groups were given liquid smoke of coconut shell grade 2 by concentration of 100%, 50%, and 25%. The recording of footpad edema was done every 30 minutes during 120 minutes. Result: There are no differences of footpad edema which given liquid smoke of coconut shell with significany 0.314, (p< 0.05) by the concentration of 100%, 50%, and 25%. Conclusion: Topically delivered liquid smoke of coconut shell grade 2 has no anti-inflammatory effect on carragenan 1% induced Rattus norvegicus.

Keywords: anti-inflammatory effect, liquid smoke coconut shell, carragenan