

**EFEK ANTI-INFLAMASI
LIQUID SMOKE TEMPURUNG KELAPA (*Cocos nucifera L.*) GRADE 2
PADA TIKUS PUTIH (*Rattus norvegicus*) GALUR WISTAR YANG
DIINDUKSI KARAGENAN 1%**

**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 induced 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 significancy 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