Paper with the Title

:

A STUDY OF ANALGESIC EFFECT OF STANDARDIZED JATROPHA CURCAS L. ON ANIMAL MODEL

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ABSTRACT

Introduction: *Jatropha curcas* L.(Jc) is a plant that its latex is often used by Indonesian to reduce dental pain empirically. **Objective:** The aim of this study was to evaluate scientific data on analgesic effect of standardized Jc latex. **Methods**: Analgesic effect of latex of Jc. was evaluated using writhing method on male *Mus musculus* Swiss-Webster strain. Animals were divided into five Groups (n=5), Group I was treated only with PGA 2% (negative control), Group II was treated with acetylsalisylic acids (positive control), Group III, IV, and V were treated with standardized Jc latex administered orally at doses of 250, 500, 1000mg/kg body weight respectively. Each group was treated with 0,7 % v/v acetyc acid as pain inducing agent. Analgesic activity was assessed by counting the number of writhes in five minutes interval during 60 minutes. Number of writhing, protection percentage, and percentage of effectiveness were evaluated. **Results**: It was revealed that, compared to control (negative), Jc latex at doses of 500 and 1000 mg/kg decreased the number of writhing significantly ($p< 0,05$). The protection percentage of each dose were 8,0, 47,64 and 45,82% respectively, and effectiveness percentage were 16,06, 95,62, and 91,97% respectively. **Conclusion**: The latex of *Jatropha curcas* L. has analgesic effect and effective dose of standardized Jc latex was 500 mg/kg BW.

Key words : *Jatropha curcas* L., analgesic, writhing method, protection percentage, percentage of effectiveness.