

## ABSTRACT

**Comparison of Antiinflammatory Potension of  
(E)-3-(4-methoxyphenyl)-N-(phenylcarbamothioyl)acrylamide and (E)-3-(4-methoxyphenyl)-N-(4-methoxyphenylcarbamothioyl)acrylamide**

This study was designed to compare antiinflammatory potension of (E)-3-(4-methoxyphenyl)-N-(phenylcarbamothioyl)acrylamide and (E)-3-(4-methoxyphenyl)-N-(4-methoxyphenylcarbamothioyl)acrylamide that modified from APMS.

A model of inflammatory pain-like state was induced by intraplantar injection of Complete Freund's Adjuvant (CFA). Then, either compound (E)-3-(4-methoxyphenyl)-N-(phenylcarbamothioyl)acrylamide or (E)-3-(4-methoxyphenyl)-N-(4-methoxyphenylcarbamothioyl)acrylamide were administered orally once daily for 7 consecutive at 50, 100, 200 mg/kg doses. Administration starting on day 7 to day 13 after injection CFA. Hyperalgesia was measured on day 0, 1, 3, 5, 7, 8, 10, 12, 14, and 21 after CFA injection. The result is paw-licking or jumping. Besides hyperalgesia, parameter used in inflammatory pain-like state was ipsilateral sites of paw thickness.

(E)-3-(4-methoxyphenyl)-N-(phenylcarbamothioyl)acrylamide and (E)-3-(4-methoxyphenyl)-N-(4-methoxyphenylcarbamothioyl)acrylamide at dose 50, 100, 200 mg/kg which were given in CFA injection group could increase mice's latency on heat stimulation and reduce paw thickness compared with placebo significantly ( $p < 0.001$ ). Whereas, both activity of (E)-3-(4-methoxyphenyl)-N-(phenylcarbamothioyl)acrylamide and (E)-3-(4-methoxyphenyl)-N-(4-methoxyphenylcarbamothioyl)acrylamide have no significantly different to increase mice's latency on heat stimulation and reduce paw thickness ( $p > 0.05$ ).

The conclusion of this experiment is both of (E)-3-(4-methoxyphenyl)-N-(phenylcarbamothioyl)acrylamide and (E)-3-(4-methoxyphenyl)-N-(4-methoxyphenylcarbamothioyl)acrylamide have antiinflammatory activity, effective in decreasing hyperalgesia of the inflammatory pain-like state and both of them doesn't have any significant difference.

**Keyword : Antiinflammatory activity, (E)-3-(4-methoxyphenyl)-N-(phenylcarbamothioyl)acrylamide, (E)-3-(4-methoxyphenyl)-N-(4-methoxyphenylcarbamothioyl)acrylamide, APMS, CFA**