



Antinociceptive Activity of Acetylbergenin in Mice

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SUMMARY. *Endopleura uchi* (Huber) Cuatrec. (Humiriaceae), a Brazilian Amazon plant, is used in folk medicine for the treatment of arthritis. Bergenin, one of the chemical constituents of *E. uchi*, has several biological activities, including anti-inflammatory properties. Acetylbergenin was obtained from acetylation of bergenin to investigate the antinociceptive effect assessed in models of nociception in mice. This compound dosed at 1, 5, 10, 15 and 25 mg/kg in the writhing test reduced the abdominal constrictions in a significant manner, in 28.2 %, 52.7 %, 61.1 %, 68.3 % and 95.0 %, respectively with ED₅₀ of 6.8 mg/kg. Acetylbergenin in the hot plate test was assayed at 6.8 mg/kg producing no alterations in the latency time when compared to the control. It was tested at 6.8 mg/kg in the formalin test inhibiting significantly the second phase of the algic stimulus, in 88.3 %. These results suggest that acetylbergenin has analgesic activity, probably of peripheral origin. The mechanism involved is not completely understood, however, the results suggest that the opioid system must be involved in the antinociceptive action.

KEY WORDS: Acetylbergenin, Antinociceptive activity, Bergenin, *Endopleura uchi*.

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