

Effect of aqueous leaf extract of *Ficus benghalensis* on nociception and sedation in Rats

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Abstract

The aim of this study was to investigate the effects of aqueous leaf extract (WE), of *Ficus benghalensis* Linn. (Family: Moraceae) on nociception and sedation using male rats. Different doses of the WE (0,125, 250, 500 or 1000 mg/kg) were orally administered and one hour later the effects on nociception and sedation were determined using hot plate and tail flick test and rat hole board technique. The WE had no analgesic or sedative effect but exhibited marked hyperalgesic action determined in the hot plate test indicating that this effect was mediated supraspinally. The hyperalgesic activity was dose-dependent with an ED₅₀ value of 585.7 mg/kg. The WE extract was well tolerated even after subacute treatment; with no signs of overt toxicity, hepatotoxicity, haematotoxicity, stress or motor impairments. Further, WE did not induce any aversive behaviour characteristic of pain-like syndrome.

Key words: *Ficus benghalensis*, nociception, hyperalgesia, analgesia, sedation

1. Introduction

Sri Lanka with its great diversity of flora possesses many plants species of medicinal value. Many of the medicines used today are derived straight from plants and quite a few of the prescription drugs are from tropical forest species. The plant kingdom represents a virtually untapped reservoir of new and exciting chemical compounds, many of them extraordinarily biodynamic.