

**Abstract:**

The main aim of the study was to ascertain the analgesic properties of *Vernonia hymenolepis* leaves to validate its use for the treatment of toothache. The plant is widely used as a traditional herb by communities in Trans Nzoia County, Kenya for treatment of various infections including toothache. However its efficacy has not been established. Leaves of the plant were collected from Trans Nzoia County, Kenya and identified at University of Nairobi Herbarium. An aqueous extraction of leaves was prepared. Formalin test was carried out using 30 male albino wister mice to determine antinociceptive effect and the painful response at 0 – 10 min (Early) and 15 – 60 min (late phase). Acetylsalicylate at dose of 100 mg/Kg was used as a positive control. The dose significantly ( $p < 0.05$ ) reduced the time spent in pain behavior in both phases hence indicating that the plant posses antinociceptive activity. It's concluded that *Vernonia hymenolepis* possesses analgesic property.

Keywords: *Vernonia hymenolepis*, Analgesic, Anti-inflammatory, Antinociceptive.