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ANTINOCICEPTIVE AND ANTI-INFLAMMATORY ACTIVITY OF COMPOUNDS ISOLATED FROM CHONDRODENDRON MICROPHYLLUM (BUTE)

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Since ancient times plants have been used for treatment of various diseases, serving as the primary therapeutic option for early populations who ingested infusions of herbs, seeds, and leaves from different species in search of relief and cure for health problems. Brazil has the greatest plant genetic biodiversity in the world, yet it is estimated that only 8% of the species within the Brazilian flora have been studied for bioactive compounds, with approximately 1,100 evaluated for their medicinal properties. *Chondrodendron microphyllum*, commonly known as buti or bute, had its roots commercialized in the English market in the mid-20th century, with therapeutic indications for the treatment of kidney stones, bladder disorders, uterine cramps, abdominal pain, and as a diuretic. 6′-Hydroxy-6,12-dimethoxy-(+)-curine was one of the compounds isolated and identified in the chloroform fraction of *C. microphyllum* roots, as reported by Silva (2018). Animals used in the study were obtained from the Multidisciplinary Health Institute/ Campus Anísio Teixeira, following approval by the Animal Ethics Committee (process No. 108/2022). Male and female adult BALB/c mice, weighing 20-30g, were used in the tests.This study aimed to assess the antinociceptive activity of the isolated root compound. 6-hydroxy-6,12-dimethoxy-curine, at concentrations of 2,5, 5, and 10 mg/kg, through abdominal contortion tests, intraplantar formalin-induced tests, and Von Frey tests, as well as to evaluate the anti-inflammatory activity of the ethanolic extract (50, 100 and 200 mg/kg) and its hexane, dichloromethane, and ethyl acetate fractions (50mg/kg). Data analyzed by ANOVA demonstrated significant activity in *in vivo* tests, highlighting the importance of *C. microphyllum* in experimental studies.

Keywords: *Medicinal plants, Chondrodendron microphyllum (bute), Antinociceptive activity, Anti-inflammatory activity, Bioactive compounds, In vivo assays.*