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TO EVALUATE ANTI-INFLAMMATORY AND ANALGESIC ACTIVITY OF LEAF OF *GYMNOSPORA MONTANA*- A NATIVE OF GUJARAT

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ABSTRACT

Gymnosporia montana belonging to the family *Celastraceae* commonly known as Vikalo. It is a shrub or tree growing wild in dry areas and is commonly found in Gujarat. It is widely used in treating sore, ulcer, gastro-intestinal disorders, toothache, and dysentery. The dried powder of leaf of *Gymnosporia montana* was subjected to the phytochemical screening for the presence of various phytoconstituents like alkaloids, flavonoids, saponins, tannins, anthraquinones, and carbohydrates, etc. Effectiveness of methanolic extracts of leaf of *Gymnosporia montana* was evaluated (100, 200 and 300 mg/kg; p.o.) against carrageenan-induced rat paw edema, and cotton pellet-induced chronic inflammation. Further, methanolic fraction of the plant was also evaluated (200 mg/kg; p.o.) in tail flick model using rats as well as acetic acid-induced writhing response using mice. Pretreatment with methanolic fraction showed significant ($p < 0.05$) anti-inflammatory activity at 3 h when compared with the control group. Further, it also significantly ($p < 0.05$) reduced the increase in the weight of cotton pellet when compared with the control group and results were comparable with that of diclofenac (standard) treated group of animals. Pretreatment with methanolic fraction significantly ($p < 0.05$) prolonged the reaction time in rats in tail flick model as well as reduction in the number of mouse abdominal constrictions following acetic acid administration when compared with the control group. It can be thus concluded that the methanolic fraction of leaf of *Gymnosporia montana* showed significant anti-inflammatory activity and analgesic activity in experimental animals.

Keywords: *Gymnosporia montana*, anti-inflammatory, Vikalo

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