

# Determination of ANC of *Zhizhiphus Mauritiana* (Ethenolic Extract of Leaves)

Aman R. Momin<sup>1</sup>, Shubham S. Dere<sup>2</sup>, Nikhil J. Padwal<sup>3</sup>, Sachin M. Bhalekar<sup>4</sup>

Samarth Institute of Pharmacy, Belhe, Maharashtra, India<sup>1,2,3</sup>

Department of QAT, Samarth Institute of Pharmacy, Belhe, Maharashtra, India<sup>4</sup>

**Abstract:** *Zhizhiphus mauritiana* (Rhamnaceae), commonly known as Indian jujube, is a pharmacologically diverse medicinal plant. A plethora of active phytochemical constituents of this plant has been revealed so far, namely, berberine, quercetin, kaempferol, sitosterol, stigmaterol, lanosterol, diosgenin, and so forth. Several studies demonstrated the exploration of pharmacological potential of various parts such as fruits, leaves, and stems of the plant as antioxidant, cytotoxic, antimicrobial, anti-diarrhoeal, antidepressant, immunomodulator, and hepatoprotective. This review gives a unique summary including phytochemical screening, analytical parameters, and significant pharmacological importance of *Z. mauritiana*. The phytochemical analysis of the plant was carried out. The plant has rich source of flavonoids and ascorbic acid which has significant importance in wound healing property and can act against ulcers. The acid neutralizing property of the plant was determined by back titration method which was found useful in neutralizing the HCL. In the present study, anti microbial activity of *Zhizhiphus mauritiana* was tested with ethanol extracts against various medically important bacteria such as *Staphylococcus aureus*, and pathogenic fungi such as *Candida albicans*. The invitro anti microbial activity was performed by agar well diffusion method. The ethanol extract from *Z. mauritiana* leaves exhibited significant antibacterial and antifungal activity. In anti bacterial studies, the results revealed that significant zone of inhibition was observed in ethanol extract of *Z. mauritiana* leaf against *Staphylococcus aureus*. In anti fungal studies, ethanol leaf extract showed promising results against *Candida albicans*.

**Keywords:** *Zhizhiphus mauritiana*, phytochemical screening, acid neutralising capacity, antibacterial, antifungal activity

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