

A - 04 **ANTIBACTERIAL ACTIVITY OF COSCINIUM FENESTRATUM AND THE RATIONALE FOR ITS USE AS A PROPHYLACTIC AGENT AGAINST TETANUS**

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Decoctions prepared with the stem of *Cosciniium fenestratum* are used by indigenous physicians in the ayurvedic, siddha and unani system of medicine for the prophylactic treatment of tetanus. A study was undertaken to determine whether there is a scientific basis for this practice.

Experiments were conducted to assess the antibacterial and anti-toxic properties of *C. fenestratum*. The aqueous extract and the hydrochloride of the major alkaloid berberine were tested. The antibacterial properties were assessed in vitro using the agar dilution method. The anti-toxic properties were conducted in vivo using albino mice. The results clearly indicate that *C. fenestratum* and its alkaloid berberine in the form of its hydrochloride have selective inhibitory action on *Clostridium tetani* and the Minimum Inhibitory Concentration (M.I.C.) value is significantly lower than that for the other organisms. Investigations into the anti-toxic properties suggest that berberine hydrochloride has neither an inhibitory action on the production of toxin nor an inactivating effect on it.