Enicostemma littorale Blume- Scientific Monograph

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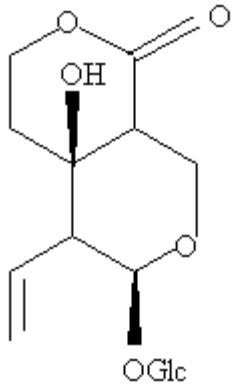
Family: Gentiaceae

Ayurvedic Name: Nahi, Maja-makka booti.

Habitat: It is found throughout India up to height of 1500 feet.

Botany: E. littorale is a perennial herb attaining height of 5-20 inches. It produces yellow or white coloured flowers, which are arranged in clusters.

Chemistry: Bitter principle (swertimarine), two alkaloids (one gentianine and other‘s name not confirmed), ophelic acid and tannins.



Structure of Swertimarin

Pharmacology: Hypoglycemic.

In a study, Maroo and workers have shown hypoglycemic and antioxidant activity of methanol extract of E. littorale Blume. Administration of methanol extracts (2.5 g/kg body weight/day) to diabetic rats for 20 days reduced blood glucose levels from 466.50± 37.07 to 237.20± 28.22. The extract not only raised the serum insulin levels but improved the antioxidant status of the rats also.

In another study, Maroo and workers studied the dose dependent blood glucose lowering effect of aqueous extract of E. littorale Blume in alloxan diabetic rats. 1.5 G dry plant caused significant decrease in glycosylated hemoglobin, liver glucose-6-phosphataseactivity and significant increase in serum insulin levels of the diabetic rat.

References:

1. Jyoti Maroo, Arna Ghosh, Rajni Mathur, Vihas T.Vasu and Sarita Gupta. Antidiabetic Efficacy of Enicostemma littorale Methanol Extract in Alloxan-Induced Diabetic Rats. *Pharmaceutical Biology* 2003, Vol. 41, No.5, pp. 388-91.
2. Maroo, J. Vasu, V.T.Gupta, S.Dose dependent hypoglycemic effect of aqueous extract of Enicostemma littorale Blume in alloxan induced diabetic rats. *Phytomedicine: International Journal of Phytotherapy & Phytopharmacology*, March 01, 2003.