

## PHYTOCHEMICAL SCREENING OF PLANT OF *ENICOSTEMMA AXILLARE*

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### ABSTRACT

The plant is bitter tonic, stomachic and laxative. The whole plant is dried and powdered and given with honey as blood purifier and dropsy, rheumatism, abdominal ulcers, hernia, swellings, itches and insect poisoning. It is used as substitute for chiretta and reported to be effective against malaria, its administration is not accompanied by any ill effects, such as nausea, headache, ringing in ears (tinnitus). A bitter glycoside has been isolated from the plant. The plant contains ophelic acid.

The present study summarizes the preliminary phytochemical screening study of plant of *Enicostemma axillare*

**KEYWORDS:** Gentianaceae, Phytochemical, *Enicostemma axillare*

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### INTRODUCTION

*Enicostemma axillare* is glabrous perennial herb in high found throughout the greater part of India up to an altitude of 1500 ft common in coastal area. Leaves opposite, decussate, sessile, elliptical-lanceolate, flowers white or bluish, in whorled auxiliary clusters.

The plant is bitter tonic, stomachic and laxative. The whole plant is dried and powdered and given with honey as blood purifier and dropsy, rheumatism, abdominal ulcers, hernia, swellings, itches and insect poisoning. It is used as substitute for chiretta and reported to be effective against malaria, its administration is not accompanied by any ill effects, such as nausea, headache, ringing in ears (tinnitus). A bitter glycoside has been isolated from the plant. The plant contains ophelic acid<sup>1</sup>.

Plant was used as antihyperlipidemic in poloxamer -407-induced rats<sup>2</sup>. Antihyperlipidemic and antioxidant activity was observed in Dihar polyherbal ayurvedic formulation which contains *Enicostemma axillare*<sup>3</sup>. Different polyherbal formulations containing plant show Antidiabetic activity<sup>4</sup>. Methanolic extract was used on Dalton's Ascitic Lymphoma<sup>5</sup>. Antiinflammatory activity along with Mollugo carviama was observed<sup>6</sup>.

### MATERIALS AND MEHTODS

#### Plant material and chemicals

Collection of plant was done in the month of November 2009 and August 2010 from Majalgaon dist. Beed. The botanical identity of the plant was confirmed at the Botany department of Dr. BAMU, Aurangabad with Accession No. 0737. A voucher specimen has been deposited at the Museum of the Department of Botany, Dr. BAMU, Aurangabad. All the reagents and chemicals used were procured from Dipa laboratory, Aurangabad and of analytical grade.

#### Extraction and isolation

Plant was kept in cool place for drying to avoid direct loss of phytoconstituents from sunlight. Dried plant were ground into powder. This powder (50g) was ready for extraction process. Powder was continues Soxhlet extracted with Petroleum Ether (60-80<sup>0</sup> C) Chloroform and then with Methanol (35 hrs, 70<sup>0</sup>c) and three extracts were proceed separately. Petroleum ether extract: Solvent was evaporated to give dark green material. Chloroform extract: Solvent was evaporated to give dark green material. Methanol extract: Solvent was evaporated to give a dark green semisolid material.

#### Preliminary phytochemical screening (Table 1)

Preliminary Phytochemical screening was carried out by using standard procedures<sup>7,8</sup>.

**RESULT AND DISCUSSION**

The preliminary phytochemical test was performed on the extracts of plant of *Enicostemma axillare*. They show the presence of alkaloid, flavonoid, glycoside, tannin in extracts of Plant.

**CONCLUSION**

The preliminary phytochemical screening revealed the presence of Flavonoid, alkaloid, Tannin, Glycosides in extracts of plant of *Enicostemma axillare*. Due to the presence of active phytochemicals, plants can be used medicinally in future.

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**Table 1: Preliminary Phytochemical Test for Extracts of *Enicostemma axillare***

Extracts	Tannins	Glycosides	Alkaloids	Flavonoids
<b>Petroleum Ether</b>	-	+	+	+
<b>Chloroform</b>	-	+	+	-
<b>Methanol</b>	+	+	+	+

+ : Present - : Absent

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