

ISOLATION AND IDENTIFICATION OF PHYTOSTEROLS FROM *BIGNONIA VENUSTA* (L.)

MANOJ SHARMA\*, MUKESH KUMAR KHICHAR, AGRAWAL RD

Department of Botany, Mycology and Plant Pathology Lab, University of Rajasthan, Jaipur, Rajasthan, India.

Email: manojsharma9680@gmail.com

Ref: <https://innovareacademics.in/journals/index.php/ajpcr/article/view/21009/13306>

## ABSTRACT

**Objective:** To isolate phytosterols from *Bignonia venusta* (L.) and its antimicrobial activity.

**Introduction:** *B. venusta* is an important medicinal plant known for its vast potential. It is a valuable plant which is commonly used in traditional system of medicine for relieving pain and inflammation, as well as in a number of metabolic disorders such as diabetes and obesity.

**Methods:** In the present study, phytosterols from *B. venusta* was identified and quantified *in vivo*. Phytosterols were identified using chromatographic and spectral studies.

**Results:** Trimethyl (3,3-difluoro-2-propenyl) silane, butanoic acid, 3-methyl-3-nitroso-, methyl ester, peroxide, dibutyl, and 1,2-epoxy-5,5-dimethyl-1-phenyl-3-hexyne were identified by infrared and gas chromatography-mass spectroscopy (GC-MS). GC-MS profiling showed various compounds. It is the first report on phytosterols from the experimental plant. Further, we studied antimicrobial potential of isolated compounds against clinically important microbes.

**Conclusion:** *B. venusta* (L.) is an ideal source of phytosterols and act as antimicrobial agent.

**Keywords:** *Bignonia venusta* L., Infrared, Gas chromatography-mass spectroscopy, Phytosterols.

Erratum of the manuscript no 21009 published in December 2017 issue.

## NEW CORRECTED

1. In the page no 248 in title "Extraction" stem should be replaced with bark.
2. In the page no 249 in title "Antimicrobial activity of phytosterols" stem should be replaced with bark. (Add Text) And add slightly word in text before potential activity. And *B. subtilis* showed maximum potential activity in both leaves and bark.
3. In the page no 249 titled Determination of antifungal assay, remove line no 8 from wells of 10 mm in diameter and about 7 mm apart were punctured in the culture media using sterile glass tube.
4. In the page no 250 in table 3 stem should be replaced with bark.
5. In the data of table 3 bacterial strain *B. subtilis* against leaf 2 mm should be replaced with 7 mm and bark should be replaced with 2 mm to 7 mm. and another strain *E. coli* against in leaf 8 mm to Nil.
6. In table 4 same as table 3 stem should be replaced with bark.
7. In the data of table 4 in the data against fungal strain *T. reesei* against the leaf 4 should be replaced with 7 and in bark 2 should be replaced with Nil.