

## **ANTIMICROBIAL ACTIVITY OF FRUIT EXTRACTS OF *THESPESIA POPULNEA***

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In the present study, the alcoholic and aqueous extract of *Thespesia populnea* fruits were subjected to preliminary screening for antimicrobial activity. Anti microbial activity of fruit extracts of *Thespesia populnea* were tested against organism *Staphylococcus aureus*, *Escherichia coli*, *Bacillus subtilis*, *Pseudomonas aeruginosa*, *A.niger*, *A. flavus*, *C. albicans* and *Salmonella typhi*. The plant exhibited a broad spectrum of antimicrobial activity.

### **INTRODUCTION**

Every country has traditional cures for its diseases. From homely recipes to complicated modes of treatment are found to have evolved depending on the geographical position of the country, its culture, mineral resources and such other factors. Through the ages India's myriad herbs have played a great role in the accumulation of ancient medicinal knowledge. The World Health Organization records the fact that 80% of the worlds population still relies on plant medicine .The use of medicinal plants as source of remedies for treatment of many diseases dated back to prehistory and people of all continents have this old tradition (Newman *et al.*, 2000).

*Thespesia populnea* Linn. (Family – Malvaceae) which is very popular as a medicinal plant as mentioned in the ancient text of ethnic medicine. This plant is distributed mainly along the coastal regions throughout India, often planted as avenue tree. It grows to a maximum height of 18 meters. Fruits are globose or oblong brown capsules covered with minute peltate scales, pubescent, channelled along the back (Nadkarni, 1976) . The bark is so often fibrous and fissured in nature with grey to brown in colours. The leaves are simple, alternate, long petiolate, entire, acuminate, prominent nerves 5 – 7 with peltate scales on one or both surfaces. The flowers are yellow with purple base, slowly changing to purple on withering (Warrier *et al.*, 2001) .The bark and fruits posses more curative properties. The bark is astringent and is prescribed in the Philippines for the treatment of dysentery in the form of a decoction ( Kirtikar *et al.*,1998). The poultice prepared from fruits, flowers and leaves are also found to be useful in rheumatoid arthritis( Chatterjee *et al.*,1994)

Earlier the plant has been studied for its antibacterial, antiviral, wound healing, anticancer, antisteroidogenic activity and for dermatitis (Vohora *et al.*,1998) (Johnson et

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