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## Pharmacognostic and physicochemical analysis of the seeds of *Citrullus lanatus* L

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The main objective of the present study was to evaluate pharmacognostic properties including macroscopic, microscopic and physicochemical characters of the seeds of *Citrullus lanatus*. *Citrullus lanatus* seeds used for this study were purchased from Srisu Agrichem Private Ltd., Kalyanpuri, Uppal and authenticated by Botanist Dr. Madhava Chetty, Herbarium Keeper, Department of Botany, Sri Venkateswara University, Tirupati, India and a specimen (Specimen No:640) has been deposited in Department of Botany, Sri Venkateswara University, Tirupati, India. Seeds were allowed for shade drying (except for microscopic studies) and seeds were subjected for pharmacognostic study including microscopic and macroscopic characters of the seed and seed powder, physicochemical parameters such as total ash value, acid insoluble ash, water soluble ash, alcohol soluble extractive, water soluble extractive value, pH, moisture content, foreign matter present, foaming index, swelling index, etc. Above mentioned parameters were carried out by following standard methods. Fluorescence analysis of the seeds was conducted. Preliminary phytochemical studies were also conducted. Microscopic studies revealed the presence of thick walled trichomatous epidermis with mucilaginous hairs, sclerenchymatous hypodermis and wide circular parenchymatous inner seed coat. Physicochemical parameters had shown characteristic results such as total ash value of 3.5% and pH ranging from 6.5-6.55 for 1% solution and 5.90 to 5.95 for 10% solution. Preliminary phytochemical studies revealed the presence of carbohydrates, tannins, glycosides, steroids, saponins, flavonoids and oils and fats. The present study i.e., pharmacognostic studies of *Citrullus lanatus* is helpful in the characterization of the crude drug.

### Biography

D Prasanthi has completed her BPharm and MPharm from Dr. H.L.T. College of Pharmacy, Kengal, Channapatna, Bangalore rural district, Karnataka. He/She is currently pursuing his/her PhD as a fulltime Research Scholar under the guidance of Professor A Sreedevi in the Institute of Pharmaceutical Technology, Sri Padmavati Mahila Visvavidyalayam, Tirupati, Andhra Pradesh. He/She is a Principal Investigator of DST-WOS-A Project and he/she has three articles published in reputed journals and attended 2 international and 14 national conferences.

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