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Pharmacognostic studies of leaf of Oxystelma esculentunm R Br

G Prabhakar, P Kamalakar and **K Shailaja** Osmania University, India

Oxystelma esculentunm R Br is belongs to the family Asclepiadaceae. Commonly known as 'Jaldudhi' or 'Dudhlata' and is found near water logged areas. The leaves are used as medicine in diuretic, galactagogue, anthelmintic, antiulcer, laxative and antiperiodic. The plant is also used in throat infections, skin diseases and jaundice. The leaves are simple, linear-lanceolate. The sides of epidermal cells of leaf in surface view are straight, few curved on the adaxial side and mostly straight to curved, few curved to wavy on the abaxial side. Stomata are few, mostly tetracytic and few anomocytic near to the veins on adaxial side and common, all over except on veins on abaxial side. Trichomes are absent on either sides. In Transverse Section (TS), the leaf at midvein is slightly ribbed on adaxial and ribbed an abaxial side. Epidermis is single layered interspersed with stomata on either sides, curved by thick cuticle. Mesophyll dorsiventral, differentiated in to 1-2 layered palisade and 3-5 layered spongy tissue. Ground tissue of mid-vein consists of collenchyma and parenchyma tissues. Vascular tissue of mid-vein consists of a large crescent shaped vascular bundle at centre, conjoint, bicollateral, endarch. Various physicochemical parameters were established. From the phytochemical screening, the leaves were found to contain cardenolides, flavonoids, phenolics and sugars which were estimated by their respective procedures. The present work can serve as a useful tool in the identification, authentication and standardization of the plant material.

Biography

G Prabhakar is currently pursuing PhD in Botany, Plant Anatomy and Taxonomy Laboratory, Department of Botany, Osmania University, Hyderabad.

gajulaprabhakar@gmail.com

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