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PHARMACO-ANATOMICAL STUDIES IN Pergularia daemia (Forsk.) Chiov

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The present day study brings out the pharmaco-anatomical investigations in Pergularia daemia (Forsk) Chiov. (Asclepiadaceae) an important medicinal plant. An aqueous extract of the leaves shows antibacterial activity against Micrococcus pyogenes var. aureus and E. coli. The vine is credited with emetic, expectorant and anthelmintic properties. The leaves have a peculiar odour; a decoction of the leaves is given to children for asthma and their juice in infantile diarrhoea. Combined with lime, leaf juice is applied to rheumatic swelling. Leaf juice is also used in the preparation of purgative medicinal oil given in rheumatism, amenorrhoea, and dysmenorrhoea. The roots bark is also used as a purgative in rheumatic cases. The plant extract has a stimulating action on uterine and other involuntary muscles.

The plant is a twining pubescent, leaves, simple, base cordate, lobes imbricate, apex acute, flowers foetid. The micromorphological features such as foliar epidermal cell size, cell number, stomatal number, stomatal index, stomatal size, types, percentage, palisade ratio, vein-islet number, veinlet termination number, trichomes number, size and transsection of leaf, petiole and stem have been studied, which are of immense value in the identification of crude drug of the species. Stomata mostly anomocytic, stem with broken or continuous cylinder of sclerenchyma in the outer cortex, bi-collateral vascular bundle, frequent crystalliferous idioblast in the pith are of very useful characters for identification.

Keywords: Pharmaco-anatomical studies, micromorphology, macromorphology.