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Pharmacognostic Studies on Nilotpala (*Nymphaea stellata* Willd.) Floral Parts

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'Nilotpala', an Ayurvedic drug, is unanimously attributed to Nymphaea stellata Willd. (Nymphaeaceae), and has all its parts credited with some medicinal properties. However, the market samples of its flowers comprise of different floral parts including peduncles of Indiscriminately collected various species of Nymphaea. In view of this, detailed study in pharmacognosy of Nymphaea stellata flowers and a comparative physico-chemical study of market samples are carried out in the present work. Some of the salient characters are : the presence of hydropotens in epidermis, large air cavities and tricho-sclereids in parenchymatous tissues of different floral parts, 5- symmetrically arranged large air canals of almost equal size in peduncle, cuticular striations at the base of trichomes (hydropotens) and anomocytic stomata on sepals and petals, laminar or superficial placentation in carpels having anatropous ovules with funicular aril, occurrence of two vascular traces resembling those in petals at the base of filaments, 1-colpate (1-aperturate-operculate, trichotomocolpate) pollen grains with surface rugulate and granulate. All these, alongwith certain physico-chemical constants, fluorescence tests and T.L.C. patterns of various extractives provide useful parameters for help detect the substitution and adulteration.

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