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### Pharmacognostical and preliminary phytochemical studies on stem and leaves of *Alysicarpus monilifer*

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*Alysicarpus monilifer* DC. (Leguminosae) is a small herb which is well known for its medicinal properties and widely used worldwide. *A. monilifer* is an important plant of Indian Ayurvedic System of Medicine which is routinely used to treat certain ailments like inflammation, stomach ache and jaundice. The present study is intended to evaluate the pharmacognostical and preliminary phytochemical characterization of the leaves and stem of *Alysicarpus monilifer*. Since fewer reports are available in this taxon, detailed microscopical and phytochemical studies of this plant were undertaken. All the parameters were studied as per the WHO and pharmacopoeial guidelines. Various parameters like fluorescence analysis and physicochemical constant were also studied. The anatomy of the leaf reveals that adaxial epidermis is stomatiferous and contains prismatic type of calcium oxalate crystals; stomata are paracytic; trichomes are both glandular and non-glandular. The stem shows the presence of hollow vascular cylinder which comprises several independent wedge shaped vascular bundle; xylem elements are surrounded by thick walled fibres. This observation would be immense value in the botanical identification and standardization of the drug in the crude form. This study is used to distinguish the plant from its closely related species. The pharmacognostic characters and phytochemical values reported in this work could be used as a diagnostic tool for the standardization of this medicinal plant. Adulterants if any can be easily identified by adopting fluorescence analysis. The microscopic characters could help in laying down micro-morphological standards as per WHO guidelines for authentication of the drug.

#### Biography

P Mehalingam completed his PhD Degree from Madurai Kamaraj University, Madurai. Currently he is working as Assistant Professor in Botany, VHNSN College (Autonomous), Virudhunagar, Tamilnadu (India). He has been selected for UGC Research Award Scheme. He has participated and presented his research papers in International Conferences held in The Netherlands, Malaysia and Thailand. He has been engaged in research on Ethnobotany, Pharmacognosy, Pharmacology and Phytochemistry.

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