



## **Pharmacognostic, physicochemical analysis and phytochemical screening of the leaves of *W. trilobata* L.**

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**Abstract : Objective:** To evaluate the pharmacognostic properties, including the macroscopic, microscopic, physicochemical characteristics and phytochemical screening of the leaves of *Wedeliatrilobata* (*W.trilobata*) **Methods:** Microscopic and macroscopic characteristics of fresh and dried leaf samples were analyzed. Organoleptic evaluations and physicochemical studies were performed using WHO-recommended parameters, and fluorescence behavior of the leaf samples was also analyzed. The serial exhaustive extraction was done with various solvents: Aqueous, Chloroforms, Ethanol, Methanol, Acetone, Benzene, Petroleum ether with increasing polarity using soxhlet apparatus. The phytochemical analysis was done by using the standard procedure. **Results:** Microscopic studies revealed the presence of three-lobate leaves, with the arrangements of spongy and palisade tissues. Physicochemical parameters such as foreign matter, moisture content, extractive values, ash content, pH, and fluorescence behavior of leaf powder were also determined. The results revealed that the leaves extracts contain Flavonoids, Terpenoids, Tannins, Phlobatannins, Saponins, Cardiac glycosides, Carbohydrate, Protein and Anthraquinones in major proportion. **Conclusions:** This is the first report on the pharmacognostic studies of *W.trilobata* and helpful in the characterization of the crude drug. Further phytochemical research is needed to identify the active product of *S. alata* may serve as leads in the development of new pharmaceuticals.

**Keywords :** *W.trilobata*, Fluorescence behavior, Pharmacognostic, Physicochemical, phytochemical screening.

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