



Qualitative and Quantitative Phytochemical Analysis of Root, Stem and Leaf Extracts of *K. Pinnata* (Lam).

Khalid L. P., Pulate P. V., Pallavi D. Deshmukh

P.G department of Botany, Vidyabharati Mahavidyalaya Amravati, Maharashtra, India

ABSTRACT

About 250,000 higher plant species on the earth, more than 80,000 species are reported to have at least some medicinal value and around 5000 species have specific therapeutic value. Over three-quarters of the world population relies mainly on plants and plants extracts for health care. More than 30% of the entire plant species were used for medicinal purposes therefore medicinal plants are very important source for drug isolation. *Kalanchoe pinnata* (syn. *Bryophyllum pinnatum*) is a genus belonging to family Crassulaceae, the stonecrop or orpine family of perennial herbs or lower shrubs. *K. pinnata* is used in ethno-botany for the treatment of earache, burns, abscesses, ulcers, insect bites, whitlow and diarrhea. This shrub is used to facilitate the dropping placenta of new born baby. The lightly roasted leaves are used externally for skin fungus. Phytochemical analysis of dried root, stem and leaves of Methanol, Ethanol and chloroform extracts of *Kalanchoe pinnata* were carried out by using standard procedure. The preliminary phytochemical screening of leaves methanol, ethanol and chloroform extract showed the presence of tannins, alkaloid, flavonoid, carbohydrates, steroid, protein, phenols & tannin, anthraquinone and quinine. The stem methanol, ethanol and chloroform extract revealed the presence of alkaloid, carbohydrate, phenol & tannin, steroid, saponin, protein, cardiac glycoside flavonoid, anthraquinone and oil. Root extract of ethanol, methanol and chloroform analysis showed the presence of alkaloid, carbohydrate & glycosides, steroid, saponin, phenol & tannin, protein, anthraquinone, cardiac glycosides, flavonoid and quinine. *K. pinnata* also contain some secondary metabolites like alkaloid, flavonoid and saponin, stem having alkaloid(1.43gm), flavonoid(1.51gm), saponin(2.35gm), leaf having alkaloid (1.32gm), flavonoid (1.26gm), saponin (2.65gm) and root contain alkaloid (1.1gm), flavonoid (1.87gm) and saponin (2.29gm).So, according to ethno-botanical view *K. pinnata* contain many constituent which having medicinal value.

Keywords: *K. pinnata*, phytochemical analysis, qualitative and quantitative analysis.