ANNALS OF PHARMACY AND PHARMACEUTICAL SCIENCES
Volume 1 Issue 2 (October, 2010) Page : 80-84

● RESEARCH ARTICLE ●

Accepted : July, 2010

Phytochemical investigation of *Ficus racemosa* Bark - an Ethanomedicinal plant

NIKHIL K. SACHAN AND YATINDRA KUMAR

ABSTRACT

Ficus racemosa Linn belonging to the family moraceae occurring throughout the world. These are used by local people as folk remedies to cure the nerve weakness moreover many medicinal constituents has been isolated from this species. The medicinal values of this plant are described in ayurvedic literature in *Vanausadhi Chandroday*, it is claimed to have multiple medicinal value as antidiabetic, antipyretic, anti-inflammatory, analgesic, muscle relaxant, and several other therapeutic activities either in parts of plant itself or in combination with other herbs or minerals. Phyto-chemical investigation of the plant was done to explore the ground base of its medicinal usage. Alcoholic and ethereal extract of the plant was analysed for the presence of carbohydrates, glycosides, fixed oils and fats, proteins and fats, phenolic compounds, tannins, phytosterols, alkaloids, flavonoids, saponins, gums and mucilages.

Key words : Fig, Phyto-chemical screening, Goolar, *Ficus racemosa*

INTRODUCTION

In our country, there are several medicinal plants used traditionally for treatment of ailments but only a few of them are tapped for biological and biochemical profiling to rationalize scientifically their medicinal usage (Sachan, 2010). The plant *Ficus racemosa* is a moderate to large sized spreading laticiferous, deciduous tree without much prominent aerial roots, leaves dark green, ovate of elliptic, fruits receptacles 2 – 5 cm in diameter subglobose or pyriform in large clusters on short leafless branches arising from main trunk or large branches. Figs are smooth or rarely covered with minute soft hairs, when ripe they are orange, dull reddish or dark crimson. They have a pleasant smell resembling that of cidar apples. The bark is rusty brown with a thickness from 0.5 – 2 cm according to the age of trunk or bark. The surface is with minute separating flakes of whitish tissues, texture homogeneous leathery (Kumar, 2005). Traditionally, all parts of the plant are cooling, sweet, acrid, vulnerary, anti-dysenteric, useful in 'kapha', biliousness, diseases of vagina. The root is useful in hydrophobia. Bark is cooling, acrid; galactogogue, good for gravid uterus. The unripe fruit is acrid; astringent to bowels, tonic, styptic, allays, thirst, useful in 'kapha', biliousness, leucorrhoea and blood diseases. The ripe fruit is acrid, sweet, cooling, and useful in blood diseases, biliousness, burning sensations, fatigue and menorrhea, nose bleeding and intestinal worms. The leaves, barks and fruits are employed in native medicines. Bark is given as astringent and washes for wounds; it removes poison from wounds made by tiger or cat. Root is useful in dysentery and fluid obtained from root incision is administered as powerful tonic. The milky juice is administered in piles and diarrhea and in combination with other herbs in diabetes and urinary disease. The fresh juice of the ripe fruit is used as an adjunct to a metallic preparation which is given in diabetes and urinary diseases (Paarakh, 2009). In Bombay, the sap is a popular remedy, which is locally applied to mumps and inflammatory glandular enlargements and is used as constituent with sugar and cumin for gonorrhea. Bark is given to cattle suffering from rinderpest. It is ground with onions, cumin and coconut spathes and mixed with vinegar, it is also a very good nutraceutical (Ahmed *et al.,* 2010; Kirtikar and Basu 1984). The ayurvedic literature in '*Vanausadhi Chandroday*' also mention its usefulness in *madhumeha i.e.* diabetes (Sachan *et al.,* 2009). These ethano-medicinal usages sound the rational for different qualitative phytochemical studies to know the presence of different secondary metabolites/phytoconstituents responsible for the therapeutic values of the drug. The efficacy of the drug is directly related to percentages of active constituents present in it and it varies from plant to plant (Agrahari *et*

Nikhil K. Sachan and Yatindra Kumar (2010). Phytochemical investigation of *Ficus racemosa* Bark - an Ethanomedicinal plant, *Ann. Pharm. & Pharm. Sci.,* **2** (10) : 80-84