



# An Anthelmintic assay of fruit extracts of *Ficus glomerata*

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## Abstract

*Ficus glomerata* L (Family; Moraceae) is known as fig or Gular, a popular plant in India, which is commonly used in traditional medicine, in the treatment of many diseases such as diabetes, gastrointestinal tract, monorrhoid, and urinary incontinence. This plant is mentioned in all the ancient texts of Ayurveda, Siddha, Unani and Homeopathy. Parts of the plant such as bark, roots, leaves, fruits and latex are used as astringent, carminative, anti-helminthic and anti-inflammatory. Fruits used for diabetes mellitus, leukoderma, chills, asthma, hepatoprotection, antioxidants, antidepressants and menorrhagia. It is mainly used to relieve skin lesions, lymphadenitis, sprains and fibrositis. Therefore, this study is an attempt to provide information on phytochemical and pharmacological entities. The research was done to check the Anthelmintic activity on earthworms with different concentration of methanol, ethanol and water as control. The number of earth worms live and death recorded based on the concentration and time.

**Keywords:** diabetes mellitus; phytochemical; asthma; Homeopathy

## Introduction

The genus *Ficus* is an important group of trees there are some promising chemical components Medicinal effect. It is a Hindu sacred tree, Buddhist. Four species of this genus are a group "Narpa Malam", that is; *F.racemosa*, *F. microcarpa*, *F. benghalensis* and *F. Religius* (*Athi*, *Ithi*, *Peral*, *Arayal* all one [1]. Medicinal plants are used from time to time in almost all cultures as a source of medicine. The widespread use of herbal remedies and health preparations, as described in ancient texts such as the Vedas and the Bible, and derivatives of traditional herbs and plants that are often used, has been accompanied by the emergence of natural products with medicinal properties [2]. Traditional medicines and plants are also widely used mainly in developing countries with a legal framework to protect good

health (UNESCO, 1996). In addition, the production and production of a number of pharmaceutical drugs and chemicals at the plant in addition to the reliance on the growing use of herbal medicines in industry, as well as the traditional herbal medicine looga used in rural areas (UNESCO, 1998) [3]. The World Health Organization estimates that 80% of the world population uses herbal remedies to meet their basic health needs. Drugs have long been a medical staple in India. The drugs have healing properties due to the presence of complex chemical compounds of various components, which are found in two plant blood metabolites in one or more of these plants. *Faith Ficus (L.)*, commonly referred to as Mint of the Moraceae family, is used as an antidepressant, antibacterial, antidiabetic, for the treatment of gonorrhoea and skin diseases. *F. religiosa* was a Bo tree, the Buddha defended himself and the “truth” was shared. This review aims to update information on its phytochemical clinical activity. *Ficus racemosa Linn* (also: *Ficus glomerata Roxb.*) (Moraceae), moderate distribution at sea Tree spreading in the swamp humume India. The leaves are used for medicinal purposes Dysentery, biliary disease and oral cavity, dysentery, root chewing gum is and for diabetes. The fruit is used as a stomach, Repellent, dysentery, diarrhea and Cures diabetes. The shell is used to: Dysentery treatment. In Mumbai this herb is a common remedy for mumps and diseases, the inflammation increases again and the juice changes color. This plant is popular with traditional heaters [4-7]. However, there are no reports of anthelmintic activity of antagonists against *Pheretima posthuma* worms. Therefore, current studies have been conducted to examine the anthelmintic activity of *Ficus glomerata L* fruit juice.

### Morphological

*Ficus glomerata* (Moraceae) is about 30 meters long from an old tree. It fills the shell and is gray or white. The leaves of *Ficus glomerata* are shiny and thin, and today contain 5-7 fruits, about 1 inch long, resembling eyelids. *Ficus glomerata* is round and short. *Ficus glomerata* ripens when it is green or blue, and turns black when fruit trees float and bear fruit in the rainy season. The vascular network consists of a main nerve (middle nerve), secondary, superior, quadrant and representatives. The number of vibrations per square meter decreases from 15.5 to 2.7 and the number of vibrations with vents and veins by half is not proportional to the size or size of the leaves.

### Materials and Methods

The fruits of *Ficus glomerata* were collected in the first week of August from fruiting trees in places around Jogbani, Bihar and Nepal Border (Indo-Nepal). They were washed, air dried for a week at 30-35°C, powdered and stored in room temperature in a closed container for further experimental use.

**Plant material:** *Ficus glomerata*

### Anthelmintic Assay

For the 10 mg / mL concentration test, methanol, ethanol was evaluated, followed by 5, 10, 15 and 15 mg / mL concentrations and a reference standard (piperazine citrate). We have deigned groups of earthworms who have been treated with ethanol extract 5 mg / ml, ethanol extract 10 mg / ml, ethanol extract 15 mg / ml, methanol extract 5 mg

/ ml, methanol extract 10 mg / ml, methanol extracts 15 mg / ml, after 5 minutes, after 10 mg / ml, after 15 mg / ml and experimental control. The time spent in the life and / or death of each person was assessed within 3 hours after the assessment period. All Petri's food was taken to the fire. Life Span (L) shows when it is impossible to act if you are not motivated. Time to death (D) was recorded when no activity was observed after expiration, even when placed in hot water (45 ° C). The time required for paralysis and death was calculated.

Test	Concentration (mg/ml)	Live (in Minutes)	Death (in Minutes)
Ethanol extract	5	9.57 ± 0.5	15± 0.51
Ethanol extract	10	8.23 ± 0.4	17±0.4
Ethanol extract	15	9.16 ± 0.5	17±0.31
Methanol extract	5	11.43 ± 0.6	10.71 ± 0.5
Methanol extract	10	12.17 ± 0.5	11.56 ± 0.7
Methanol extract	15	10.41 ± 0.4	11.86 ± 0.5
Control	0	0	0

<0.05; P value was calculated by comparing with control by one-way ANOVA

### Statistical Analysis

Data was analyzed statistically by one way ANOVA followed by post hoc Scheffe's test using the SPSS software package.

### Results and Discussion:

It is recognized that gastrointestinal worms in humans have a negative impact on health standards, leading to reduced resistance to other diseases. In the search for compounds with anthelmintic activity, several substances were tested using different types of worms, such as worms, ascaris, ipistrostrongylus and Heterakis. Of all these species, worms have been widely used to evaluate compounds [8]. In vitro, in response to antibiotics, they are like congenital "worms" and are readily available. The Indian worm breed, Pheretima posthuma, has been used as an experimental worm in many anthelmintic tests because it has anatomical and physiological properties similar to human intestinal toxins (all anthelmintics have been shown to be toxic and pollute the world and search for useful toxic waste), anthelmintic. This action can lead to worm death and damage to mucopolysaccharide components [9-10]. This creates irritability and paralysis. Hyperzine citrate causes paralysis of the body by increasing the transport of the drug into the muscle tissue of the worm and leading to hypo polarization, which prevents neuromuscular transmission and reduces the pleasure that leads to muscle relaxation. Similarly, the anthelmintic action of the root can be applied. In this study, the petroleum ether and acetone profiles showed significant activity. However, more research is needed to verify the safety and efficacy of biomarkers in line with internal requirements to be validated.

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