



CODEN [USA]: IAJ PBB

ISSN : 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES
SJIF Impact Factor: 7.187

Available online at: <http://www.iajps.com>

Review Article

A MARVEL OF NATURE: PHARMACOLOGICAL AND PHYTOCHEMICAL INSIGHTS OF MIMOSA PUDICA

Prathamesh Jayant Suryawanshi ¹, Harishkumar K Rathod ², Dr Swati P Deshmukh ³

¹ Shradhha institute of Pharmacy, Kondala Zambre , Washim 444505

² Assistant Professor , Shradhha institute of Pharmacy, Kondala Zambre , Washim 444505

³ Professor Department of Pharmacology Shradhha institute of Pharmacy, Kondala Zambre , Washim 444505

Abstract:

Mimosa pudica is a small perennial herb well known for its sensitivity to touch, earning it the popular name "Touch-me-not plant." It belongs to the family Fabaceae and is commonly found in tropical and subtropical regions of India. The plant is of great medicinal importance and has been traditionally used in Ayurveda and folk medicine.

All parts of the plant — leaves, roots, and seeds — possess significant therapeutic value. The leaves are known for their wound-healing and anti-inflammatory properties, while the roots show antimicrobial and antifertility activities. Phytochemical studies have revealed the presence of alkaloids, flavonoids, tannins, glycosides, and phenolic compounds that are responsible for its medicinal actions.

Modern research has reported that *Mimosa pudica* exhibits antioxidant, antidiabetic, hepatoprotective, and antimicrobial effects. Because of its wide range of pharmacological activities and natural availability, it has gained attention as a potential source for developing herbal medicines. Therefore, *Mimosa pudica* serves as an important medicinal plant with promising health benefits and research potential for future drug discovery.

Keywords :- *Mimosa pudica*, Touch-me-not plant, Fabaceae, medicinal plant, phytochemicals, antioxidant, antimicrobial, anti-inflammatory, antifertility, hepatoprotective, Ayurveda, herbal medicine.

Corresponding author:

Prathamesh Jayant Suryawanshi,

Shradhha institute of Pharmacy,

Kondala Zambre , Washim 444505

QR CODE



Please cite this article in press Prathamesh Jayant Suryawanshi et al., *A Marvel Of Nature: Pharmacological And Phytochemical Insights Of Mimosa Pudica*, Indo Am. J. P. Sci, 2025; 12(11).

1. INTRODUCTION :

Mimosa pudica, commonly known as the “Touch-me-not plant” or “Sensitive plant,” is member of the Fabaceae family. It is a perennial herb native to tropical and subtropical regions, including India, South America, and Africa. The plant is well known for its unique seismonastic movement — the rapid folding of its leaves when touched — which has fascinated botanists for centuries. Beyond its intriguing behaviour, *Mimosa pudica* has attracted significant scientific interest for its rich phytochemical composition and diverse pharmacological properties.



Fig. 1. *Mimosa pudica* plant

Phytochemical investigations have revealed that various parts of the plant, including leaves, roots, and seeds, contain a wide range of bioactive compounds such as alkaloids, flavonoids, tannins, glycosides, terpenoids, and steroids. These compounds contribute to its broad spectrum of therapeutic activities. The plant also contains mimosine, a unique non-protein amino acid responsible for some of its physiological effects.

Pharmacologically, *Mimosa pudica* exhibits numerous biological activities, including antimicrobial, anti-inflammatory, antioxidant, antidiabetic, antidepressant, antiasthmatic, and wound healing properties. Extracts of *Mimosa pudica* have shown potent antibacterial activity against several pathogenic microorganisms, supporting its traditional use in treating infections. Its antioxidant and anti-inflammatory activities are attributed to the presence of flavonoids and phenolic compounds, which help in neutralizing free radicals and reducing oxidative stress.

Additionally, studies have demonstrated its hepatoprotective and antidiarrheal effects, further validating its medicinal importance.

Traditionally, *Mimosa pudica* has been used in Ayurvedic and folk medicine for managing ailments such as piles, dysentery, wounds, insomnia, and urinary tract infections. The root is often used for treating dysentery and blood-related disorders, while the leaves are applied externally to heal wounds and reduce pain. In modern pharmacology, ongoing

research aims to isolate and characterize its active constituents for the development of novel therapeutic agents.

In conclusion, *Mimosa pudica* represents a valuable medicinal plant with immense potential in the field of phytomedicine. Its rich phytochemical profile and scientifically proven pharmacological actions highlight the importance of integrating traditional knowledge with modern scientific research for the discovery of new drugs.

2. PLANT PROFILE OF MIMOSA PUDICA

Mimosa pudica is a well-known medicinal and fascinating plant admired for its unique movement and healing abilities. It is popularly known as the “touch-me-not” or “sensitive plant” because its leaves fold inward when touched or shaken and reopen after a short time. This natural movement makes it one of the most interesting plants found in nature.

This plant is commonly seen in tropical and subtropical areas, growing in fields, roadsides, and gardens. It prefers moist soil and sunlight but can also grow in partial shade. Even though it looks delicate, it spreads rapidly and can survive in a wide variety of soil types.



Fig. 2. PLANT PICTURE OF MIMOSA PUDICA

For centuries, *Mimosa pudica* has been an important part of traditional medicine, especially in Ayurveda, Unani, and folk healing systems. It has been used by traditional healers for treating many health problems, and every part of the plant—leaves, roots, stems, flowers, and seeds—holds medicinal value. It is considered a complete herbal plant because of its wide range of therapeutic benefits. The plant is often used to treat ailments such as excessive bleeding, wounds, piles, skin diseases, and weakness. In traditional practice, it is said to help in balancing body energy and improving vitality. Herbal practitioners recommend it for treating conditions like bronchitis, cough, intestinal worms, menstrual problems, and urinary disorders. In rural areas, it is

commonly used as a home remedy for minor injuries and skin irritations.

2.1 Scientific classification of plant *Mimosa pudica* :-

Kingdom	Plant
Division	Magnoliophyta
Class	Mangnoliopsida
Order	Fabales
Family	Fabaceae/ Mimosaseae
Sub - Family	Mimosoideae
Species	Pudica
Genus	Mimosa

Table.1. Scientific classification of *Mimosa pudica*

Odour: Distinct

Taste: Astringent, bitter, pungent

Part of plant used: Whole plant Or roots^[6]

English and vernacular names:-

Table. 2. English and vernacular name of *Mimosa pudica*

English	Shy plant, Sensitive plant,	
Hindi	Touch-me-not plant	
Tamil	Lajwanti, Chui-mui	
Malayalam	Thottal-chinungi	
Sanskrit	Tottalvadi, Tintarmani	
Ayurveda	Lajja	
Marathi	Lajjalu,	Namaskari,
	Samangaa,	Samokchini,
	Shamipatra	
	Lajal	



**Fig.3. Part of *Mimosa pudica*
[Root,Seed,Flower]**

2.3 Parts of *Mimosa pudica*:-

Leaf: The plant has bipinnate, compound sessile five primary leaves with petiolate, stipulate, linearlanceolate. There are 10-20 pairs of secondary leaflets which are 0.6- 1.2 cm long, 0.3 0.4 cm broad. Leaves are arranged symmetrically and close after touch hence it is called a sensitive tree,

Flower: Flowers are pink, spherical in globose head arise from the leaf axils in mid-summer, 8 - 10 mm in diameter, 0.5 mm height. It shows radial symmetry and is four lobed, with four stamens, sessile ovary as well as numerous ovules. It forms blossoms in rainy seasons. Pollens have globose to ovoid heads and are circular with approximately 8 microns diameter and pollinated by insect and wind.

Root: Roots of *M. pudica* are recylindrical, tapering with secondary and tertiary branches, arising in length up to 2 cm thick. It has longitudinally wrinkled surface with hard and woody fracture, more or less rough; grayish- brown to brown.

Stem: The stem is cylindrical, branched, about 1.5 m in length and up to 2.5 cm in diameter, longitudinally grooved, external surface light brown, internal surface grey. The stem is erect in young plants, but becomes creeping with age.

Fruit: Fruits are leguminous, simple, dry, 1 -1.6 cm long, 0.4-0.5 cm broad having two to five seeds. The fruit consists of clusters of two to eight pods, these being prickly on the margins. The pods break into two to five segments and contain pale brown seeds about 2.5 mm long.⁶



Plant Movement :-

It is well recognized for its rapid plant movement, like a number of other plant Species, it undergoes variations in leaf orientation named "sleep" or nyctinastic movement. It closes during darkness and reopens with the light. This movement isn't solely a response to light; leaves also close in reaction to various stimuli, such as motion, warmth, wind, or shaking. These types of movements are classified as "seismonastic" movements.*

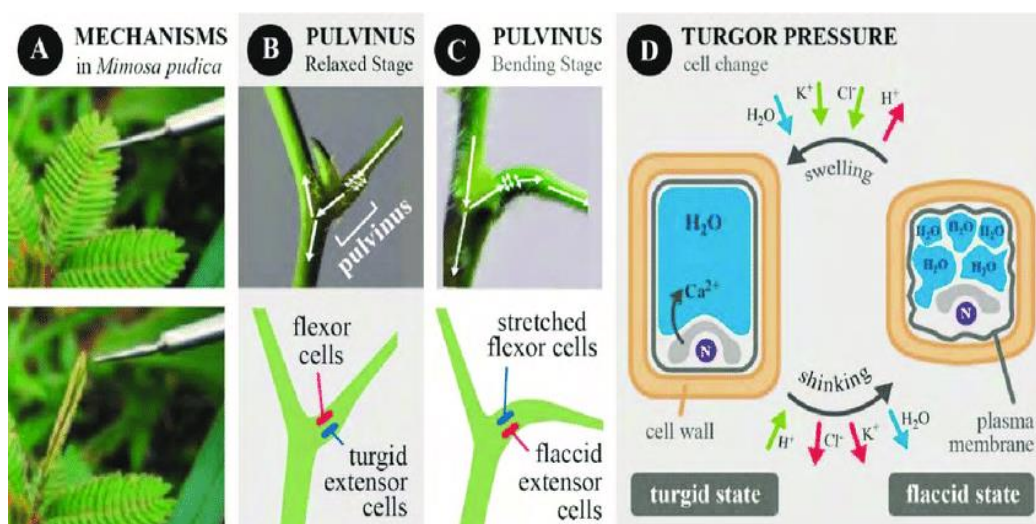


Fig. 4 . Mimosa pudica plant Movement

3. Phytochemicals of Mimosa pudica

The Mimosa pudica plant is a rich source of various bioactive phytoconstituents such as alkaloids, flavonoids, saponins, tannins, phenols, steroids, cyanogenic glycosides, and anthocyanins. These compounds are responsible for the plant's medicinal and pharmacological actions. The ethanolic extract of the whole plant has been reported to contain significant amounts of alkaloids (9.05%), flavonoids (8.23%), saponins (8.15%), steroids (2.49%), phenols (1.02%), tannins (0.083%), cyanogenic glycosides (0.122%), and anthocyanins (1.913%).

Table 3: Percentage of Chemical Constituents in Mimosa pudic

Constituents	(Mean $\pm$ SD)
Flevonide	8.23 $\pm$ 0.16
Steroids	2.49 $\pm$ 0.021
Alkaloids	9.05 $\pm$ 0.098
Saponin	8.15 $\pm$ 0.09
Phenol	1.02 $\pm$ 0.05
Tannins	0.083 $\pm$ 0.00014
Cyanogenic-glycoside	0.122 $\pm$ 0.0028
Anthocyanins	1.913 $\pm$ 0.126

Several researchers have confirmed the presence of these phytochemicals in different extracts of *Mimosa pudica*. Durgadevi and Karthika (2018) analyzed the aqueous extract of *M. pudica* leaves and reported the presence of flavonoids, alkaloids, proteins, tannins, saponins, steroids, and terpenoids, whereas sugars were absent. Quantitative analysis indicated that saponins, flavonoids, tannins, and terpenoids were found at concentrations of 0.48 mg/mL, 0.99 mg/mL, 0.80 mg/mL, and 0.39 mg/mL, respectively.

Similarly, Sheeba et al. (2015) examined methanolic extracts and observed the presence of flavonoids, phenols, and tannins, while carbohydrates and amino acids were not detected.

Parmar et al. (2015) investigated the ethanolic extract of *M. pudica* roots and confirmed the presence of tannins, alkaloids, terpenoids, flavonoids, sterols, and proteins.

Durgadevi and Karthika et al.,(2018) reported the phytochemicals of the aq. Extract of *M. pudica* leaves. A Qualitative analysis indicated the presence of flavonoids, alkaloids, proteins, steroids, annins, saponins and Terpenoids, while phlobatannins, phenols and reducing sugars were found to be absent. The quantitative Phytochemical investigation of saponins, flavonoids, tannins and terpenoids were 0.48 mg/mL, 0.99 mg/mL, 0.80 mg/mL, 0.39 mg/mL and 0.39 mg/mL of the aq. Extract recorded, respectively.¹¹

Sheeba et al .,(2015) screened the phytochemicals of the MeOH extracts of *M. pudica* leaves. The plant showed The presence of flavonoids, phenols and tannins, while alkaloids, glycosides, terpenoids, amino acids and Carbohydrates were found to be absent.¹²Parmar et al.,(2015) measured the phytochemicals of the EtOH extract of *M. pudica* roots. Extracts Showed the presence of tannins, alkaloids, terpenoids, flavonoids, sterols, phenolic compounds and proteins.¹³

4. Ayurvedic Formulation ¹⁴



Fig. 5. Ayurvedic Formulation of Mimosa Pudica plant

1. KKutajaavalecaps
2. Ural BPH capsule
3. Selip tablet and syrup
4. Samangadichurna
5. Palsineuron capsules.
6. Lakshadichuma
7. Pilocure tablet
8. SamangaadiChuma
9. Kutajavaleha,
10. PusyanugChurna,
11. BhretGangadharaChurna

Dose:^[28]**Fresh juice:** 10-20 ml.**Decoction:** 50- 100 ml in divided doses per day. 10-20 g of drug for decoction.**Capsule:** 1 - 2 capsules daily or as directed by a physician**Traditional Uses of Mimosa pudica****1. Wound healing**

Paste of leaves applied on cuts and wounds to stop bleeding and promote healing.

2. Antimicrobial activity

Extract used to treat bacterial and fungal infections.

3. Toothache relief

Root decoction used to relieve tooth pain.

4. Diabetes management

Leaf extract helps lower blood glucose levels.

5. Urinary tract infections

Decoction of plant used to treat urinary infections.

6. Liver protection

Helps detoxify and protect the liver from toxins.

7. Anxiety and insomnia

Acts as a natural sedative and calming agent.

8. Fever and cough

Used in traditional remedies for cold, cough, and fever.

9. Rheumatism and joint pain

Leaf paste or decoction used to relieve inflammation and joint pain.

10. Skin burn and rashes

Fresh leaf juice applied to soothe burns and skin irritation.

5. PHARMACOLOGICAL ACTIVITY OF MIMOSA PUDICA:-

There are various types of pharmacological activity in Mimosa pudica like antiulcer, antidiabetic. Hypolipidemic Wound healing, neuropharmacological, antivenom, diuretic, antimicrobial, anti-inflammatory, Hepatoprotective, antifungal, anti-asthmatic. Hyperglycemic, anticonvulsant, immune modulatory.

Anti-diabetic Activity

Singarapriyavardhanan et al. (2022) observed that oral administration of Mimosa pudica extract (400 mg/kg) for 21 days notably lowered blood glucose

levels in rats with streptozotocin (STZ)-induced diabetes. Similarly, Parasuraman et al^[21]

(2019) found that methanolic extract of *M. pudica* at doses up to 500 mg/kg reduced fasting blood glucose (FBG) in diabetic rats. Konsue et al. (2017) reported that both aqueous and hydroalcoholic extracts of *M. pudica* exhibited significant antihyperglycemic activity by reducing FBG in STZ-induced diabetic models^[20]

Tunna T.S. et al. (2015) further studied the methanolic extract of the aerial parts of *M. pudica* and its fractions (ethyl acetate, acetone, and methanol). These fractions inhibited the enzymes α -amylase and α -glucosidase, which are involved in carbohydrate metabolism^[19]

The extracts also showed strong antioxidant activity through DPPH radical scavenging and contained high levels of flavonoids and phenolic compounds. Overall, these findings suggest that *Mimosa pudica* is a promising natural candidate for diabetes management^[18]

Antiulcer Activity**Anti-inflammatory Effect:**

Raju K. et al. (2013) mentioned that inflammation plays a significant role in the development of ulcers, particularly those caused by *Helicobacter pylori* infection or prolonged use of NSAIDs. The anti-inflammatory potential of *Mimosa pudica* is linked to its ability to suppress the production of pro-inflammatory cytokines and to inhibit the action of enzymes like cyclooxygenase (COX) that promote inflammation.

By reducing inflammation, *Mimosa pudica* helps protect the gastric lining from damage and supports the healing of ulcers^[17]

Enhancement of Mucus Secretion:-

According to Goel et al. (2005), mucus acts as a key protective barrier that shields the stomach wall from acidic gastric secretions. The polysaccharides and flavonoids present in *Mimosa pudica* enhance mucus secretion, forming a protective coating between the gastric epithelium and the acid. This increase in mucus not only prevents ulcer formation but also aids in the recovery of gastric mucosal injuries^[18]

Antimicrobial activity:-

Lakshmibaictl et al.,(2018) investigate that *Mimosa pudica* plant extracts of this plant has some properties under the laboratory study. In recently, antimicrobial properties would result in developing eco-Friendly management of human infectious diseases by reducing side effects and the non-nutritive phytochemicals obtained from the *Mimosa pudica*

plants have some characteristics including their difference mode of action^[22]

Tomar, Shrivastava and Kaushik et al.,(2014) reported on temporary several research works are carrying out to study about the antibacterial, antifungal and insecticidal properties of the Mimosa pudica plants extracts has ability to disruption of bacterial membrane potential permeabilization and leakage of the cellular coninjurie^[23]

Wound healing activity:-

Ganesh et al.,(2009) investigated the wound healing activity of M. pudica ethanolic extracts. Mice Were used for this study and were acclimatized according to standard Laboratory protocols. Different doses of M. pudica 50, 100, 150 and 200 Mg/kg b. wt were administered to the animals for six weeks before the Creation of deep dermal excision wound. At the end of the experiment .The administration of M. pudica extracts of different concentration Increased the wound contraction In a dose-dependent manner, and Also reduction in wound healing time^[25_26]

Ganguly M, Devi N, Mahanta R and Borthakur MK et al., 2007) reported Damage in living tissue caused by a cut, blow, or other impacts is Termed S a wound. M. pudica chloroform extract possess wound Healing activity at a dose of 200 mg/kg in 5% ointment of the leaf Extracts. Wound healing is a natural process initiated by trauma and Often terminated by scar formation; the wound healing activity was Reported to be performed by using excision and incision wound Models ^[24]

Different studies have also shown that both methanolic And aqueous extracts of M. pudica in simple ointment base at a Different concentration of 0.5%(w/w), 1%(w/w) and 2%(w/w) Possess wound healing activity. Three different types of models in Rats were used, which are excision, incision and estimation of Biochemical parameters. The 2%(w/w) methanolic and aqueous Extracts exhibited significant wound healing activity probably due to Phenols constituent in M. pudica plant

Antidiabetic activity

Y upparach P and Konsue A et al., (2017) screend that diabetes 1S metabolic disorder which affects people of a all age, most Prominent in middle age and old aged people. Various complications Have been associated with diabetes such as obesity, renal Dysfunction and blood lipid abnormalities. Patient self- -management Education and continued medical care are required to prevent acute Complication and long-time effects.

Anti- diabetic effect of M. pudica Was investigated using male albino rats weighing between 150-200g,

ethanolic extracts of M. pudica was administered at a dose of 500 mg/kg. bw to diabetic rats induced with streptozotocin 65 Mg/kg. bw. The investigation lasted for eight weeks, and the Parameters obtained from the study show that M. pudica tend to Have hypoglycemic properties on fasting blood glucose level of the Experimental rats^[27]

6. ADVERSE EFFECTS :-

There is no doubting that this plant offers a number of health advantages. but it's important to remember that using anything excessively is never a tannins can be harmful. Those who intend to become pregnant should abstain from the use of this herb as it is used to prevent conception. Although wise upon injection Similarly, overdosing on the touch-me-not plant might be proven potentially lethal,. When consumed in large quantities, the plant's Mimosa pudica is usually safe to eat, even though some people could have adverse reactions including Restlessness -Drowsiness Emesis- always particularly Irritation of the skin.

While Mimosa pudica (commonly known as the touch-me-not plant) provides several medicinal and therapeutic benefits, it is important to note that excessive or improper use may lead to adverse health effects. The principle of moderation is essential when using any herbal remedy. Overconsumption of Mimosa pudica can result in toxic reactions due to the presence of certain bioactive compounds like alkaloids and tannins. In large doses, tannins found in the plant can interfere with nutrient absorption and may cause gastrointestinal discomfort such as nausea, pregnant or planning to conceive should strictly avoid its use, as it may affect fertility or harm the developing fetus. Some individuals may also experience mild allergic or hypersensitivity reactions after contact with the plant, leading to skin irritation, redness, or itching. When ingested in excess, Mimosa pudica might also cause restlessness, dizziness, or drowsiness due to its sedative-like effects. usage ensures safety while benefiting from its natural healing properties.

7. SUMMARY

medicine Additionally, prolonged or unsupervised use can lead to imbalances in the body's normal functions. Therefore, Mimosa pudica should only be consumed in recommended amounts and preferably under the guidance of a qualified healthcare professional or herbal practitioner. Responsible Mimosa pudica, commonly known as the sensitive plant, is recognized not only for its unique mechanical responses but also for its rich phytochemical profile and diverse pharmacological activities. This plant contains various bioactive compounds, including alkaloids, flavonoids, tannins, and saponins, each contributing to its

therapeutic properties. Report indicated that *Mimosa pudica* exhibits anti-inflammatory, wound healing activity, antimicrobial, antiulcer, antifertility, antidiuretic and potential antidiabetic effects, supporting its traditional medicinal uses. *Mimosa pudica* represents a promising source of natural compounds with diverse pharmacological activities, warranting further investigation to unlock its full therapeutic potential in modern

8. CONCLUSION :

Mimosa pudica is a remarkable plant that not only captivates with its unique sensitivity but also holds significant promise in the realm of phytochemistry and pharmacology. Its rich array of bioactive compounds, including alkaloids, flavonoids, tannins, and saponins, underscores its potential as a source of natural therapeutics.

The plant's demonstrated anti-inflammatory, antioxidant, antimicrobial, wound healing activity and anti diabetic properties highlight its versatility in traditional medicine and suggest a valuable role in modern healthcare.

It has been used in the various traditional system of medicine since ancient times to treat a wide range of diseases. The literature claims that this herb has significant therapeutics profile,. It can be used for developing new medicines in pharmaceutical industries as it is economical and due to its easy availability. But there is a need to give more emphasis on exploration of their natural resources like medicinal plants for the benefits of humanity.

9. REFERENCES:

- Ahmedulla M, Nayer MP Red Data Book of Indian Plants. Vol 4. Calcutta: Botanical Survey of India; 1999.
- Duke S Phytochemical and Ethnobotanical Databases. National Germplasm Resources Laboratory, Beltsville, Maryland. Available from: Published 2007.
- Viswanathan R, Gnanavel IS, Sivasaravanan KS, Karthikeyan A, Velpandian V. Clinical evaluation of thottalvadichoornam (*Mimosa*) in the management of type 2 diabetes mellitus. *World J Pharm Pharm Sci*. 2014;3(7):1612-22.
- Adurosakin OE, Iweala EJ, Otikey JO, Dike ED, Uche ME, Owanta JJ, et al. Ethnomedicinal uses, phytochemistry, pharmacological activities and toxicological effects of *Mimosa pudica* - A review. *Pharmacol Res Mod Chin Med*. 2023;7:100241
- Rajesh Singh Tomar, Vikas Shrivastava, Shuchi Kaushik, In vitro efficacy of methanol extract of *Mimosa pudica* against selected micro-organisms for its broad spectrum antimicrobial activity. *Int J Curr Microbiol App Sci*. 2014;3(1):837-8Res
- Singh M, Bhargava S, Bhadauria RS, Sharma CS. Wound healing potential of alcoholic extract of *Mimosa pudica* L. leaves. *Pharmacologyonline*. 2010;2:32-38.
- Joseph B, George J, Moha J. Pharmacology and traditional uses of *Mimosa pudica*. *Int J Pharm Sci Drug Res*. 2013;5(2):4-44
- Aarthi N, Murugan K. Antimalarial activity and phytochemical screening of ethanol leaf extracts of *Phyllanthus niruri* and *Mimosa pudica* L. 2011.
- Sharma N, Sharma A, Singh R, et al. Microscopic features of *Mimosa pudica*: A review. *J Ethnopharmacol*. 2021;268:1 13626. Doi:10.1016/j.jep.2020.1 13626.
- Durgadevi, R., & Karthika, K. (2018) Phytochemical screening of aqueous extract of *Mimosa pudica* leaves. *International Journal of Pharmacognosy and Phytochemical Research*, 10(2), 125-
- Tunna TS, Zaidul ISM, Ahmed QU, Ghafoor K, Al-Juhaimi FY, Uddin MS. Hasan M, Ferdous S. Analyses and profiling of extract and fractions of neglected weed *Mimosa pudica* Linn. Traditionally used in Southeast Asia to treat diabetes. *South Afr J Bot*. 2015;99:144-52.
- Konsue C, Picheansoonthon C, Talubmook C. Fasting blood glucose levels and hematological values in normal and streptozotocin-induced diabetic rats of *Mimosa pudica* L. extracts. *Pharmacogn J*. 2017;9(3):315-22.
- Parasuraman S, Ching TH, Leong CH, Banik U. Antidiabetic and antihyperlipidemic effects of methanolic extract of *Mimosa pudica* (Fabaceae) in diabetic rats. *Egypt Basic Appl Sci*. 2019;6(1):137-48.
- Singarapriyavardhanan ST, Timiri Shanmugam PS, Koppala Narayana SK, Ammari AA, Amran RA, Alhimaidi AR, *Mimosa pudica* alleviates streptozotocin-induced diabetes, glycemic stress, and glutathione depletion in Wistar Albino rats. *J King*;34:102037
- Lakshmibai R. Antimicrobial activity of *Mimosa pudica* thorns. 2018 Jul. doi: 10.7897/2230-8407. Saud Univ Sci. 20220961 17.
- Tomar RS, Shrivastava V, Kaushik S. In vitro efficacy of methanolic extract of *Mimosa pudica* against selected micro-organisms for its broad spectrum antimicrobial activity. *Original Research Article*;2014;3(4):780-784.
- Ganguly M, Devi N, Mahanta R, Borthakur MK, Effect of *Mimosa pudica* root extract on vaginal oestrous and serum hormones for the screening of antifertility activity in albino mice, *Contraception*. 2007;76(6):482
- Kokane DD, More RY, Kale MB, Nehete MN, Mchendale PC, Gadgoli CH. Evaluation of wound healing activity of root of *Mimosa pudica*. *J Ethnopharmacol*, 2009;124(2):31 1-5

28. Jagetia GC, Lyngdoh R, Lalramchuana, Borah BK, Mimosa pudica (Lajwanti) accelerates repair and regeneration of deep dermal excision wound in Swiss albino mice. *Int J Complement Alt Med*, 2017;9(2):00293.
29. Yupparach P, Konsue A. Hypoglycemic and hypolipidemic activities of ethanolic extract from Mimosa pudica L. in normal and Streptozotocin-induced diabetic rats. *Pharmacogn J*. 2017;9(6):834834-
30. Rizwan K, Majeed I, Bilal M, Rasheed T, Shakeel A, Iqbal S. Phytochemistry and Diverse Pharmacology of Genus Mimosa: A Review. *Biomolecules*, 2022; 12(83): 1-31.
31. Kshema Johnson, Jonathan Narasimhan and Chitra Krishnan. mimosa pudica linn- a shynessprincess: a review of its plant movement, active constituents, uses and pharmacological activity. *International Journal of Pharmaceutical Sciences and Research*, Vol. 5(12): 5104-5118,(2014).
32. M. Ganguly, N. Devi, R, Mahanta, M.K. Borthakur, Effect of Mimosa pudica root extract on vaginal estrous and serum hormones for screening of antifertility activity in albino mice, *Contraception*, 76 (6), 482-485,(2007).
33. S. Valsala, P.R. Karpagaganapathy, Effect of Mimosa pudica root powder on oestrous cycle and ovulation in cycling female albino rat, *Rattus norvegicus*, *Phytother. Res*, 16 (2), 190-192,(2002).
34. Nair PV, Bindu Latha RN. Anti-inflammatory activity of hydroalcoholic extract of Mimosa pudica whole plant in rats. *IntJ Basic Clin Pharmacol*,6:5,18-22,(2017)
35. Azam, A.F. Huda, K. Shams, Anti-inflammatory and antioxidant study of ethanolic extract of Mimosa pudica, *J. Young Pharm*,7 (3), 234-240,(2015).
36. N.K, Patel, K.K. Bhutani, Suppressive effects of mimosa pudica L.constituents on the production of LPS-induced pro-inflammatory mediators, *EXCLI J*. 13,101 1-1021,(2014).
37. Bharati B Zawarc, SR Chaudhari, and Manisha T Shinde. An Overview of Mimosa pudicalin Chemistry and Pharmacological Profile, *Research Journal of Pharmaceutical, Biological and Chemical Sciences*,(2014).
38. Baghel A, Rathore DS, Gupta VE. Valution of diuretic activity of different extracts of Mimosa pudica line Pakistan journal of biological sciences, 16(20):1223-1225,(2013)
39. Jagetia GC, Lyngdoh R, Lalramchuana, Borah BK Mimosa pudica (Lajwanti) accelerates repair and Sangma TK, Meitei UD, Sanjenbam R, Khumbongmayum S,Diuretic property of aqueous extract of Mimosa pudica on experimental albino rats. *J Nat Prod* 3.172-8,(2010).
40. Gulzar Muhammad, Muhammad Ajaz Hussain, Ibrahim Jantan, and Syed Nasir Abbas Bukhari. Mimosa pudica high value Medicinal Plant as a Source of Bioactives for Pharmaceuticals Comparshive review in Food Science and Food Safety. Vol.15,(2016).
41. Sanaye M.M, Joglekar C.S, Pagare N.P.Mimosa .A brif Overview in *Journal of pharmacognosy and, Phytochemistry* 4(2),(2015).
42. Irfan Sajid, Bijan Kumar Karmaker, Zamiul R, Islam MM, M Ekramul H, CNS depressant and antinociceptive activities of the aerial parts of Mimosa pudica. *Eur J Appl Sci*,5:127-33,(2013).
43. Hafsa Ahmad, Sakshi Sehgal, Anurag Mishra, Rajiv Gupta, Mimosa pudica L. (Laajvanti): An overview, *Department of Pharmacognosy*, Vol 6 , Issue 12,(2012).