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Review Paper

Preparation and Evaluation of Herbal Tea Powder of Parijat Leaves and Flowers to Treat Dry Cough

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ABSTRACT

Nyctanthes arbor-tristis Linn. belongs to the family Oleaceae and commonly known as Parijat or Night Jasmine. It is an important medicinal plant widely used in traditional systems of medicine such as Ayurveda and Siddha. It is commonly known as harsinghar in Hindi, Parijat in Sanskrit and Night jasmine in English. It is widely grown in tropical and subtropical areas of the world. The generic name "Nyctanthes" has been coined from two Greek words, "Nykta" means "night" and "Anther" means "Flower". Although all parts of the plant exhibit therapeutic potential, the leaves have gained special attention for their diverse pharmacological properties including anti-inflammatory, antioxidant, hepatoprotective, antimalarial, antidiabetic, antimicrobial, and immunomodulatory activities. Its Leaves contain mainly benzoic acid, fructose, anthraquinone, glycosides, carotene, amorphous resins, ascorbic acid, methyl salicylate, tannic acid, oleanolic acid, flavanol glycosides. The aim of study is to prepare and evaluate herbal tea powder from leaves and flower to treat dry cough. Cough is sudden expulsion of air from its lungs through mouth, typically caused by irritation or infection in the airways. By the stimulation of mechano or chemoreceptors, afferent impulse pass to cough center, it sends efferent impulse via parasympathetic and motor nerve to diaphragm, intercostal muscle and lungs. It results in increased contraction of diaphragmatic, abdominal and intercostal(ribs) muscle and causes noisy expiration, which is nothing but "cough". It classifies as: Acute(sudden onset), Subacute(3 to 8 weeks), chronic(longer than 8 weeks). For the preparation Parijat leaves, flower and ginger grind it and then mix all the three components. Store these tea powder in airtight container. During preparation of tea, add 1-2 teaspoon of these teapowder in cup of hot water and allow to steep for 5-10 min. for sweetening effects jaggery or honey can be added. This teapowder helps to relieve dry cough because it has anti-inflammatory activity.

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INTRODUCTION

Nyctanthes arbor-tristis Linn. is ancient medical plant belonging to Oleaceae family, grown in tropical and subtropical region. N. Arbortristis is a shrub or small tree up to 10m heights with Gray or greenish rough bark with stiff whitish hair; young branches sharply quadrangular ^[1].

1.1 Botanical Description

Medicinal plants are the cornerstone of traditional medicine and continue to contribute significantly to modern drug discovery N. Arbortristis is a shrub or small tree up to 10m heights with Gray or greenish rough bark with stiff whitish hairs; young branches sharply quadrangular. *Nyctanthes arbor-tristis* Linn. commonly known as Parijat or Night Jasmine, has been revered for centuries in Indian medicine. The plant is native to South Asia and is known for its beautiful fragrant flowers and therapeutic value. Traditionally, the leaves have been used to treat fever, arthritis, cough, asthma, and various inflammatory disorders. Recent scientific studies have provided evidence supporting these ethnomedicinal claims, indicating that the leaves possess a rich profile of secondary metabolites with significant pharmacological activities ^[2].

Leaves

Leaves are opposite, 5 -10 by 2.5 – 6.3 cm, ovate, acute, or acuminate, entire or with a few large distant teeth, short bulbous hairs rounded or slight cuneate; main nerves few, conspicuous beneath; petiole 6cm long, hairy ^[3].



Fig no. 1.1 Parijat leaves

Flowers

Flowers are small, delightfully fragrant, sessile in pedunculated bracteate fascicles of 3–5; peduncles 4-angled, slender, hairy, auxiliary, and solitary and in terminal shorttrichotomous chymes bracts broadly ovate or suborbicular, 6- 10 mm long, apiculate, hairy on both sides; Calyx 6-8 mm long, narrowly campanulas', hairy outside, glabrous inside, truncate or obscurely toothed or lobed, ciliated. Corolla glabrous rather more than 13 mm long; tube 6-8 mm long, orange coloured, about equaling the limb; lobes white, unequally obcordate, cuneate ^[4].



Fig no.1.2 Parijat flowers

Fruits

Fruits are a capsule of 1-2 cm diameter, long and broad, obcordate or nearly orbicular, compressed, 2-celled, separating into 2 flat 1-seeded carpels, reticularly veined, glabrous. Seeds are

exalbuminous, Testa thick, the outer layer of large transparent cells and heavily vascularized [5].



Fig no. 1.3 Parijat fruit

1.2 Taxonomical Classification

- **Kingdom:** Plantae
- **Division:** Magnoliophyta
- **Class:** Magnoliopsida
- **Order:** Lamiales
- **Family:** Oleaceae
- **Genus:** Nyctanthes
- **Species:** arbor-tristis
- **Binomial name:** Nyctanthes arbor-tristis

Vernacular names

- **Family:** Oleaceae; Nyctanthaceae.
- **Unani:** Harasingaar.
- **Sanskrit:** Parijatha.
- **Siddha:** Pavazha mattigai. Hindi: Harsinghar
- **Ayurvedic:** Paarijaata, Shephaali, Shephaalikaa, Mandaara. English: Tree of Sorrow, Night Jasmine, Coral Jasmine.
- **Marathi:** Parijathak.
- **Kannada:** Parijatha.

1.3 Chemical constituents of *Nyctanthes arbortristis* Linn

Leaves

Leaves contain D-mannitol, β -sitosterol, Flavanol glycosides, Astragaline, Nicotiflorin, Oleanolic

acid, Nyctanthic acid, Tannic acid, Ascorbic acid, Methyl salicylate, Amorphous glycoside, Amorphous resin, Trace of volatile oil, Carotene, Friedeline, Lupeol, Lupeol, Glucose, Fructose, Iridoid glycosides, Benzoic acid [6].

Flower

Flowers contain Essential oil, Nyctanthin, d-mannitol, Tannin, Glucose, Carotenoid, Glycosides, β -monogentiobioside ester or α -crocin (or crocin-3), β -monogentiobioside, β -D monoglucoside ester or α -crocin, β -digitenobioside ester or α -crocin (or crocin-1) [7]. In recent years, there has been a growing interest in natural remedies for various health conditions, spurred by concerns over the side effects of pharmaceutical drugs and a desire for holistic approaches to healthcare. Among these remedies, herbal teas have gained popularity for their purported therapeutic effects. In this study, we investigate the potential of an herb tea powder made from Parijat leaves and flowers with ginger as a remedy for dry cough, a common ailment that can significantly impact quality of life. Parijat, also known as *Nyctanthes arbor-tristis*, is a flowering plant native to South Asia with a long history of medicinal use in traditional systems of medicine such as Ayurveda and Unani [22, 23]. Its leaves and flowers are reputed for their anti-inflammatory, analgesic, and expectorant properties. Ginger (*Zingiber officinale*) is another well-known medicinal plant renowned for its anti-inflammatory and anti-microbial properties, making it a popular ingredient in natural remedies for respiratory ailments [8].

Dry cough, characterized by a persistent, non-productive cough, is a common respiratory ailment affecting individuals of all ages worldwide. While various pharmaceutical cough remedies are available, there is a growing interest in natural and herbal alternatives due to concerns regarding the

potential side effects of conventional medications [9]. Herbal remedies, derived from plant sources, offer a promising avenue for the management of dry cough, providing both symptomatic relief and potential therapeutic benefits. Parijat (*Nyctanthes arbor-tristis*) is a medicinal plant widely recognized in traditional systems of medicine for its diverse pharmacological properties [10]. The findings of this study have the potential to inform healthcare practitioners and individuals alike about the benefits of integrating natural remedies into cough management strategies, thereby fostering a holistic approach to respiratory health and well-being.

The leaves and flowers of Parijat have been traditionally used to treat respiratory ailments, including cough and cold, owing to their anti-inflammatory, antimicrobial, and expectorant properties. Additionally, ginger (*Zingiber officinale*), a commonly used culinary spice, has been valued for its therapeutic effects on respiratory health, attributed to its anti-inflammatory and antimicrobial constituents [11].

In line with the growing interest in natural remedies, this study aims to formulate and evaluate an herbal tea powder derived from Parijat leaves and flowers combined with ginger for the treatment of dry cough. The synergistic effects of Parijat and ginger, known for their complementary pharmacological actions, are expected to provide effective relief from dry cough symptoms while promoting respiratory health [12]. The formulation of herbal tea powder offers several advantages, including ease of preparation, convenience of consumption, and potential for standardized dosing.

Furthermore, the utilization of plant-based ingredients aligns with the principles of sustainability and environmental, appealing to individuals seeking holistic and eco-friendly healthcare options [18,19]. This research endeavors to contribute to the growing body of knowledge on herbal remedies for respiratory ailments and provide evidence-based insights into the efficacy and safety of Parijat and ginger-based formulations [14].

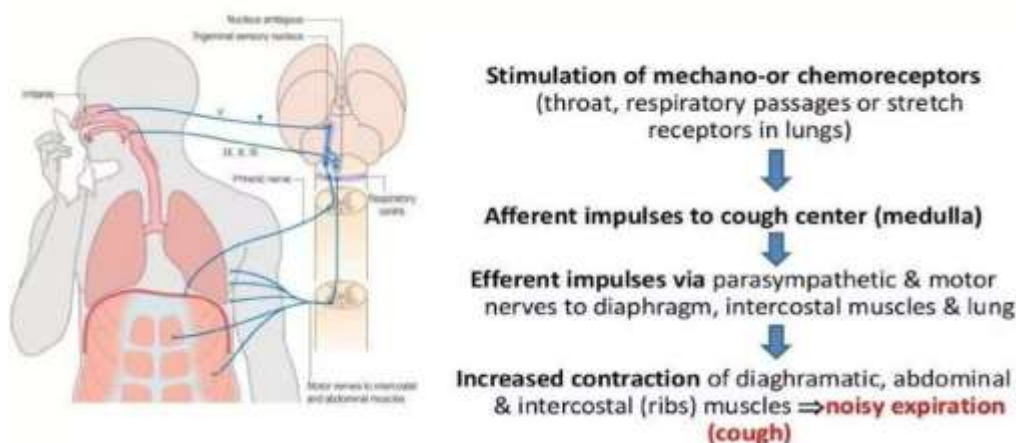


Fig no. 1.4 Mechanism of cough production.

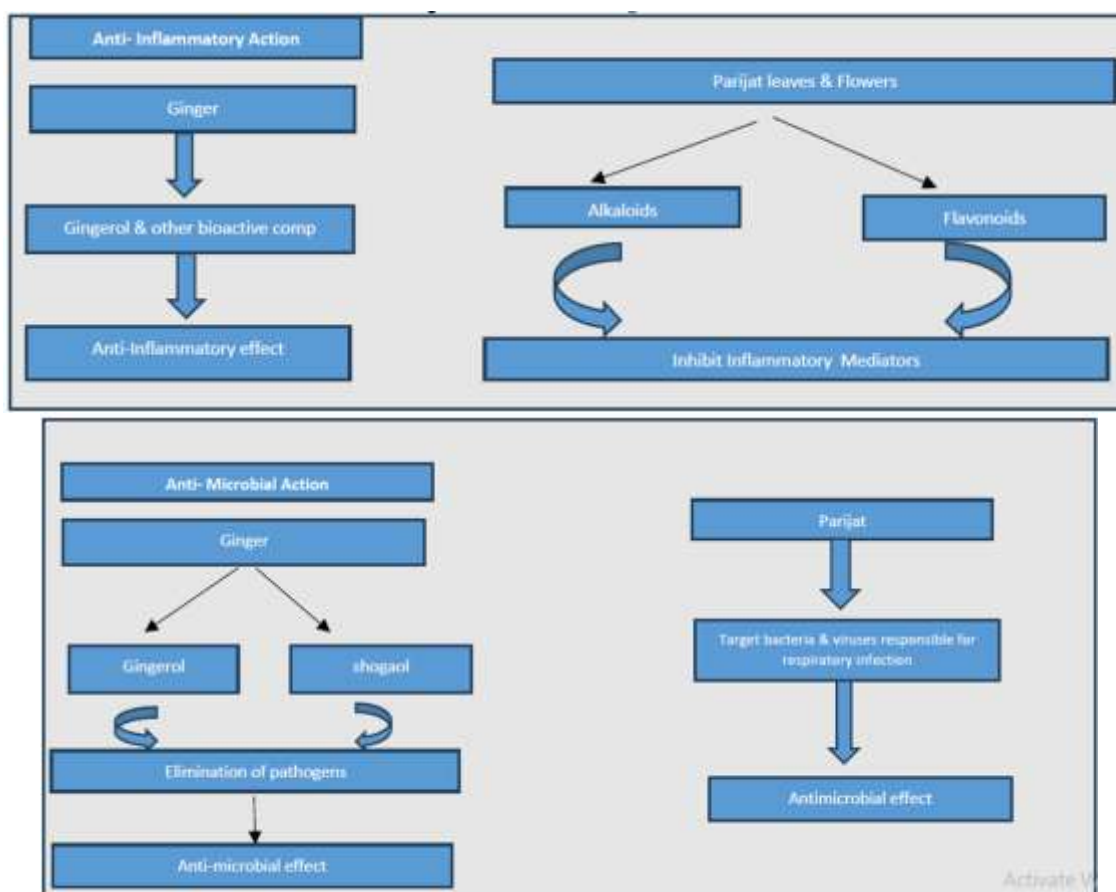


Fig no. 1.5 Mechanism of cough treatment.

1.4 Phytochemical Composition of Parijat Leaves

The leaves of *Nyctanthes arbor-tristis* are rich in diverse phytochemical compounds responsible for their medicinal properties. Preliminary phytochemical screening has revealed the presence of alkaloids, flavonoids, glycosides, tannins, saponins, triterpenoids, and steroids. The major bioactive constituents include nyctanthin, arbortristoside A, B, and C, β sitosterol, naringenin derivatives, and phenolic compounds. These compounds contribute to the antioxidant and anti-inflammatory potential of the leaves. Quantitative analyses show that methanolic and ethanolic extracts of the leaves exhibit high total phenolic and flavonoid content, indicating potent free radical scavenging capacity.

1.5 Pharmacological and Therapeutic Activities of Parijat Leaves

• Anti-inflammatory and Analgesic Activity

Leaf extracts of Parijat have demonstrated significant anti-inflammatory effects in experimental models. The ethanolic extract reduces paw edema and inflammatory mediators such as prostaglandins and cytokines. The analgesic potential is attributed to flavonoids and iridoid glycosides that inhibit cyclooxygenase and lipoxygenase pathways.

• Antipyretic and Antimalarial Activity

Traditionally used to treat malarial and chronic fevers, Parijat leaves exhibit strong antipyretic properties. Experimental studies have shown that aqueous extracts reduce elevated body

temperature and inhibit Plasmodium species in vivo. The antimalarial effect may be due to modulation of immune responses and interference with parasite metabolism.

- **Antioxidant and Hepatoprotective Activity**

Parijat leaf extracts possess notable antioxidant properties due to their high phenolic and flavonoid content. They neutralize reactive oxygen species and enhance endogenous antioxidant enzymes such as superoxide dismutase and catalase. In hepatoprotective studies, ethanolic extracts have been shown to reduce liver enzyme levels and improve histopathological profiles in toxin-induced liver damage models.

- **Antidiabetic and Hypolipidemic Activity**

The hypoglycemic effects of Parijat leaves have been reported in streptozotocin-induced diabetic rats, where administration of ethanolic extract significantly lowered blood glucose and cholesterol levels. The mechanism may involve enhanced glucose uptake and inhibition of α -glucosidase enzyme activity.

- **Antimicrobial and Immunomodulatory Activity**

Methanolic and aqueous extracts of Parijat leaves exhibit broad-spectrum antimicrobial effects against Gram-positive and Gram-negative bacteria and several fungal species. Furthermore, immunomodulatory studies reveal that the leaf extract enhances macrophage activation and lymphocyte proliferation, indicating potential benefits in immune compromised conditions.

1.6 Material and method

Collection of material

The Fresh Leaves and Flower of *Nyctanthes arborescens* (Parijat) were collected from local area of Tembhurni, Sholapur. Taxonomical identification of plant was done by using with the help of flora of Sholapur district, Maharashtra. The leaves and flowers were dried properly and stored in airtight container.

Methodology

Collect the fresh Parijat leaves and flowers from clean area. Rinse them and remove dirt. Allow them to dry. Preparation of ginger: Peel and finely chop the fresh ginger and allow to dry it.

Blending:

After fully drying of leaves and Flower grind them using blender.

Mixing:

Combine powdered Parijat leaves and flower with ginger and mix evenly.

Storage:

Store in airtight container.

To prepare tea, add 1-2 teaspoon of these teapowder in cup of hot water. Allow to steep for 5- 10 minute for sweetening effect, honey or Jaggery powder can be added.

Label



Table 1: Herbal Tea Powder of Parijat Leaves & Flowers

Ingredients : 1. Parijat Leaves powder: 20gm 2. Parijat Flowers powder: 20gm 3. Ginger powder: 10gm Net weight : 50gm Mfg. Date : April 2024 Exp. Date : April 2025	How to use: Add 1-2 teaspoon of these tea powder in cup of hot water and allow steep for 5-10 min. For sweetening effect Jaggery or Honey can be added Health Benefit: Treat Dry Cough, Anti-inflammatory, Bronchodilator. Storage : Store in Airtight Container
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Physical Parameter

$$\Theta = \tan^{-1}[h/r]$$

Angle of Repose

Where, h = Height of powder cone formed
r = Radius of powder cone formed

The funnel method is used to determine the angle of repose, which is represented by theta θ . The angle of repose was computed using the formula below. And table show flow property of powder.

Evaluation Parameter**Table 2: Chemical Parameters** [16,17]

Constituent s	Test	Procedure	Observation	Result
Alkaloid	Dragendroff's Test	Drug solution + Dragendroff's Reagents	Organish red colour	Present
	Mayer's Test	Drug Solution + Few drops of Mayer's Reagents	Creamy- white precipitate	Present
	Hager's Test	Drug solution + Few drops of Hager's reagents	Crystalline yellow precipitate	Present
	Wagner's Test	Drug Solution + Few drops of Wagner's reagent	Reddish- Brown Precipitate	Present
	Shinoda test	Test solution + Few Magnesium turning + concentrated HCl Drop wise	Red or violet colour produced	Present
Flavonoid	Alkaline Reagent Test	Test Solution+ Few drops of NaOH Solution	Yellow colour formed ; colorless on addition 2 drops of dil. acid	Present
	Leucoanthocyanidin Test	Test solution in strong medium	Red Colour	Present
	Lead Acetate Test	Test Solution + Lead Acetate Solution	Yellow Precipitate	Present

Table 3: Flow character and Angle of Repose

Flow character	angle of Repose
Excellent	25 – 30
Good	30 – 35
Fair	36 - 40
Passable	41 - 45
Poor	46 - 55
Very poor	56 – 65
Very Very Poor	>66

Bulk density

A 100 ml dried measuring cylinder was used to measure bulk density. Adding dry powder to a measuring cylinder and computing the applying the formula that follows;

Bulk Density = Mass of powder /Bulk volume of powder

Tapped density

Pouring dried powder into a 100 ml measuring cylinder allowed for the measurement of taped

density. After 100 taps, record the volume and compute using the following formula:

Tapped density= Powder weight/Volume of tapped powder

Hausner's ratio

The ratio of a powder's tapped density to its bulk density is called Hausner's ratio.

Computed using the formula that follows. Table displays the powder's flow characteristics.

Hausner's ratio= Tapped density/Bulk density

Table 4: Flow character and Hausner's Ratio

Flow character	Hausner's Ratio
Excellent	1.00 -1.11
Good	1.12- 1.18
Fair	1.19- 1.25
Passable	1.26 – 1.34
Poor	1.35- 1.45
Very poor	1.46- 1.59
Very Very Poor	>1.60

Carr's Index

The following formula determines Carr's index, often known as the compressibility index.

Powder flow property is displayed in Table below.

Carr's index= Tapped density – Bulk density / Tapped density *100



Table 5: Flow character and Carr's Index

Flow character	Carr's Index
Excellent	<10
Good	11 – 15
Fair	16 – 20
Passable	21 – 25
Poor	26 - 31
Very poor	32- 37
Very Very Poor	>38

Moisture content

The moisture content was measured described by AACC method. A two-gram sample was put in a glass Petri plate that had been prepared and weighed, and it was then dried in a hot air oven at 130 °C for two hours, or until it was solid. Glass petriplate was weighed after drying, moved to a desiccator to cool, and then weighed again. The weight loss as a percentage of moisture content was computed.

Moisture Content (%) = $\frac{W1 - W2}{\text{Weight of sample}} \times 100$

Where, W1 =Weight of sample before Drying

W2= Weight of sample after Drying

The ash content was measured, described by AACC method. A two-gram sample was put into a reweighed crucible, which was then left uncovered and burned for four hours at 820 degrees Celsius in a muffle furnace. The crucible was then cooled in a desiccator before being weighed.

Ash Content

Ash Value (%) = $\frac{\text{Weight of Ash}}{\text{Weight of sample}} \times 1$

1.7 Toxicity and Safety Profile

Toxicological studies indicate that Parijat leaf extracts are generally safe at therapeutic doses. However, excessive consumption or high-dose administration can cause gastric irritation and mild nausea due to the presence of phenolic compounds and glycosides. Acute oral toxicity studies have established LD50 values above 2000 mg/kg in rodent models, confirming a wide margin of safety.

1.8 Discussion and Future Prospects

The reviewed literature clearly supports the therapeutic importance of Parijat leaves in treating various diseases. The presence of iridoid glycosides, flavonoids, and phenolics contributes to their wide-ranging pharmacological activities. Despite promising results in preclinical studies, there remains a lack of well-designed clinical trials to validate efficacy and safety in humans. Future research should focus on the isolation of pure compounds, elucidation of molecular mechanisms, standardization of extracts, and development of novel formulations.

2. LITERATURE REVIEW

Pharmacological Studies on *Nyctanthes arbor-tristis* (Parijat) Leaves

Study / Author	Year	Extract Type	Key Findings	Phytochemicals / Mechanism
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Kumar et al.	2013	Ethanollic extract	Strong anti-inflammatory and antipyretic activity supporting traditional use in fever & arthritis	Not specified
Pundir et al. (Review)	2022	–	Comprehensive pharmacognostic and phytochemical review	Presence of iridoid glycosides (arbortristoxide A, B, C) and flavonoids responsible for antioxidant & hepatoprotective effects
Das et al.	2022	Leaf extract (in vivo)	Significant antimalarial activity; 55–65% chemosuppression against <i>Plasmodium berghei</i> in mice	Validates ethnomedicinal use for chronic fevers
Jabbar et al.	2021	Methanolic extract	Restored hepatic enzyme balance in toxin-induced liver damage; strong hepatoprotective potential	Antioxidant-related mechanisms
Rani et al.	2023	Aqueous extract	Notable antidiabetic activity via α -glucosidase inhibition; lowered blood glucose	Enzyme inhibition mechanism
Sharma & Agarwal	2019	Leaf extracts	Demonstrated antimicrobial activity against <i>E. coli</i> and <i>Staphylococcus aureus</i>	Potential for herbal antiseptics

CONCLUSION

Nyctanthes arbor-tristis leaves represent a rich source of bioactive compounds with significant medicinal potential. The pharmacological findings substantiate their traditional uses as anti-inflammatory, antioxidant, hepatoprotective, and antidiabetic agents.

The preparation and evaluation of herbal tea powder using Parijat leaves and flowers with ginger present a promising remedy for treating dry cough. Through meticulous preparation and systematic evaluation, we have demonstrated the potential of this herbal blend to provide relief from cough symptoms. The incorporation of ginger adds additional therapeutic benefits, enhancing the efficacy of the herbal tea. As evidenced by our findings, this natural remedy offers a safe and effective alternative to conventional cough treatments. Further research and clinical trials are warranted to explore its full therapeutic potential and ensure its widespread availability for individuals seeking natural remedies for dry cough. By harnessing the power of nature's

ingredients, we can continue to develop holistic approaches to healthcare that prioritize both efficacy and safety. Although the existing research demonstrates a strong therapeutic profile, clinical validation remains crucial to ensure safety and efficacy. With comprehensive pharmacological evaluation and formulation development, Parijat leaves hold great promise for future phytopharmaceutical and nutraceutical applications.

REFERENCE

1. Prashant chavan, kalshetti, Nikhil navindgikar, 2020. Formulation and evaluation of herbal tablets containing nyctanthes arbor-trists leaves. Int. J. Curr. Pharm. Res, 12, Pages 22-24. Doi: 10.22159/ijcpr.2020v12i3.38299
2. Rani s, goud, m p, et al, 2023. Extraction and evaluation of in vitro anthelmintic activity using nyctanthes arbor- tristis linn. World journal of pharmacy and pharmaceutical sciences. 10(2), Pages 485-492. Doi: 10.20959/wjpps20237-25356



3. DM K., Dhakne R B, Patil R R., 2022. Review of *Nyctanthes arbortristis* as a medicinal plant. Ind j. res. methods pharm. sci. 1(1), Pages 21-26. Doi: at: www.ijrmps.com.
4. Rajan PD, Sharma P K., 2024. A review on phytochemical and pharmacological aspects of *Nyctanthes arbortristis* . International Journal of Pharmaceutical Sciences. 2(03), Pages 1-9. Doi: 10.5281/zenodo.10886407.
5. Rawat H, Verma Y, Ayesha NS, et al, 2021. *Nyctanthes arbor-tristis*: a traditional herbal plant with miraculous potential in medicine. International Journal of botany Studies. 6, Pages 427-440.
6. Pundir S, Gautam GK, Zaidi S. A Review on Pharmacological Activity of *Nyctanthes arbor-tristis*. Res J Pharmacogn Phytochem. 2022;14(2):69-72.
7. Das L, Panigrahi AK, Biswal SB. Evaluation of In vivo Antimalarial Property of *Nyctanthes arbor-tristis* Leaves. J Ethnopharmacol. 2022.
8. Paarakh PM, Kumar PC. A Comprehensive Review of *Nyctanthes arbor-tristis* Linn. YMER. 2022.
9. Author et al. *Nyctanthes arbor-tristis* Linn.: A Critical Ethnopharmacological Review. J Ethnopharmacol. 2013;147(2):353-369.
10. Jabbar et al. Antioxidant and Hepatoprotective Properties of *Nyctanthes arbor-tristis* Leaf Extracts. J Appl Biol. 2021.
11. Hetal Bhalakiya, Nainesh R Modi. Traditional uses, phytochemical profiles and Pharmacological Activities of *Nyctanthes arbot-tristis*. Life science Informatics Publications March-April RJLBPS 5(2) page no. 1003
12. Smita Parekh, Anjali Soni *Nyctanthes arbor-tristis*, Comprehensive review on pharmacological, antioxidant and anti-cancer activities. journal of Applied Biology and Biotechnology. Volume 8 (01) P.P. 95-104 Jan-Feb 2020.
13. D. samsal, Sanjta Das and S.P. Basu Phytochemical and Therapeutics Potential of *Nyctanthes arbor- tristis* Linn. in Pharmacognosy review volume Issue 2 Jul-Dec- 2007.
14. Pushpendra Kumar Jain, Arti Pandey Wonder of Ayurvedic medicine *Nyvtanthes arbor-tristis* International Journal of Herbal Medicine 2016 ; 4(4) : 09-17
15. Indu Mittal. A Review on Holy Improving Plant *Nyctanthes arbor-tristis* Linn (Night Jasmine) with monster, therapeutic possibilities. In International Journal pf Modern Pharmaceutical Research.
16. Shinde PR, Sali VA, Patil PS and Bairagi VA Assessment of pharmacognostic, phytochemical and antibacterial potential of fruit of *Nyctanthes Arbor-tristis* Linn. Journal of Pharmacogonsy and phytochemistry 2014 2(6) 203-212
17. Suresh V. Arunachalam G Senthil KN. In vitro anthelmintic activity of *Nyctanthes Arbor-triastis* Bark, Journal of Pharmaceutical Research 2011, 4 – 283-284
18. Champa Rani, Sunaina Chawla *Nyctanthes Arbor-tristis*, Linn (Night jasmine) A scared ornamental Plant with immense medicinal Potentials. Indian Journal of Traditional Knowledge. Volume 11(3) July 2012 P.P. 427-433.
19. Rohit Kumar Bijauliya, Pushpendra kannoja Pharmacognastical and Physiochemical study on the leave of *Nyctanthes Arbor-tristis* Linn. In Journal of Drug Delivery and Therapeutics 2021 11 (4) 30-34.
20. Agrawal J, Pal AJ. *Nyctanthes arbor-tristis* Linn-a critical ethnopharmacological review. Ethnopharmacol. 2013 Apr 19;146(3):645-58.
21. Saxena RS, Gupta B, Saxena KK, Srivastava VK, Prasad DNJ. Analgesic antipyretic and

- ulcerogenic activity of *Nyctanthes arbor tristis* leaf extract. *Ethnopharmacol.* 1987 Apr;19(2):193-200.
22. Gupta M, Mazumder UK, Kumar RS, Gomathi P, Rajeshwar Y, Kakoti BB, et al. Anti-inflammatory, analgesic and antipyretic effects of methanol extract from *Bauhinia racemosa* stem bark in animal models. *Ethnopharmacol.* 2005 Apr 26;98(3):267-73.
 23. Kalyana Sundaram I, Sarangi DD, Sundararajan V, George S, Sheik Mohideen SBMC. Poly herbal formulation with anti-elastase and anti-oxidant properties for skin anti-aging. *Complement Altern Med.* 2018 Jan 29;18(1):33.
 24. Godse CS, Tathed PS, Talwalkar SS, Vaidya RA, Amonkar AJ, Vaidya AB, et al. Antiparasitic and disease-modifying activity of *Nyctanthes arbor-tristis* Linn. in malaria: An exploratory clinical study. *Ayurveda Integr Med.* 2016 Dec;7(4):238-248.
 25. Lalrinzuali K, Vabeiryureilai M, Jagetia GC. Investigation of the Anti-Inflammatory and Analgesic Activities of Ethanol Extract of Stem Bark of *Sonapatha Oroxylum indicum* in vivo. *Int J Inflam.* 2016, 8247014. doi: 10.1155/2016/8247014 Medicinal Properties of Harsingar (*Nyctanthes arbortristis* Linn.) Abha Tripathi, K.A. (P.G.) College, Prayagraj, Sanjive Kumar, A.S. (P.G.) College, Mawana, Meerut, Santosh Kumar Shrivastava, C.M.P (P.G College Pragraj).

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