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The role and potential pharmacological uses of *Pseudarthria viscida* (L.) in the disease prevention

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ABSTRACT

Pseudarthria viscida, commonly known as salaparni, is an ethnomedicinal plant with many therapeutic properties. It has been used since ancient times for the treatment of various diseases due to the pharmacological properties of the plant like, anti-bacterial, hepatoprotective, anti-inflammatory, anti-fungal, antioxidant, anti-diabetic and wound healing, widely incorporated in the various ayurvedic preparations. All the plant parts help treat various ailments, but the roots are enormously exploited in the commercial field. Major chemical constituents present in the roots are gallic acid, caffeic acid, rutin, quercetin, ferulic acid, and phenolic compounds. Various research studies have been undertaken to determine the plant's properties and exploit its pharmacological potential in treating various diseases. The present review intends to deliver this plant's traditional and pharmacological uses.

Keywords: *Pseudarthria viscida*, Sticky Desmodium, Salaparni, Medicinal plants, Pharmacological Properties.

INTRODUCTION

Pseudarthira viscida has a sacred position in the Indian conventional system of medicine. It is known as salaparni in Sanskrit, belongs to the Fabaceae family, and is distributed in peninsular India and Sri Lanka [1]. It is among the dasamoola, a combination of roots of ten medicinal plants. It is used as a medicine for the treatment of various diseases due to its versatile nature and it is also an essential ingredient of various ayurvedic formulations such as Surasadi Thailam, Sudarsanasava, Balajeerakadhi Kashayam, Brihatyadi Kashayam, Surasadi Kashayam, Brahmarasayana [2].

Ayurvedic medicine is a traditional medicine native to India, and it is one of the most important medical systems in Kerala. Ayurvedic practitioners developed a number of medicinal preparations using medicinal plants to treat various ailments. *Pseudarthria viscida* is an herbal plant that exhibits pharmacological and therapeutic properties. It is widely used in ayurveda alone or in polyherbal formulations to treat various diseases. The whole plant is known for antipyretic, analgesic, antioxidant and anti-fungal effects. It is commercially and extensively used to treat tuberculosis, hemorrhoids, blood disorders, tumors, diabetes, hyperthermia and bronchitis [3].

The root is the economic part, which alleviates tridoshas, namely vata, pitta, and coupha. The roots are thermogenic, astringent, emollient, digestive, febrifuge and cardiotonic [4]. Major chemical compounds present in the roots are gallic acid, caffeic acid, rutin, quercetin, ferulic acid and phenolic compounds [5] and also reported with proteins, flavonoids and leucopelargonidin [6,7]. Roots are well known for anthelmintic, anti-diuretic and anti-inflammatory properties [3]. Decoction of the root is used against heart diseases, rheumatism, asthma and piles. Root juice treats headaches [2].

Pseudarthria viscida is becoming extinct from nature, and its number has been reduced drastically [8] due to the limited availability of plants, which is substituted by other leguminous trifoliate plant species such as *Desmodium pulchellum and Uraria rufescens* [1]. Therefore, it is put in the red list category. Due to scarcity of this plant requires proper management practices to exploit its therapeutic potential in the treatment of various diseases. Hence, the present review aimed to study the plant's traditional and pharmacological attributes and the attributes that are predominant in preventing and treating various diseases.

Classification

Kingdom: Plantae
Phylum: Tracheophyta
Class: Magnoliopsida

Order: Fabales

Family: Fabaceae
Genus: Pseudarthria
Species: viscida

Vernacular names

English: Sticky pod weed/Sticky Desmodium
Sanskrit: Salaparni
Malayalam: Moovila
Tamil: Nirmalli
Telugu: Nayakuponna
Kannada: AmtubeleGida

Morphology

Pseudarthria viscida is a perennial diffuse sub-shrub plant that can attain a height of one meter. Branches are slender, covered with greyish-white hairs. Leaves are trifoliate, compound and hairy [1]. Leaflets are broadly ovate and densely hairy. Petioles are half to one inch long. Flowers are small, purple and found on terminal or axillary racemes. Seeds are brownish-black in colour. Each pod contains 4 to 6 seeds. Seeds have a reniform structure [1].

Chemical composition of *Pseudarthria viscida*

Photochemical screening indicates the presence of flavonoids, alkaloids, saponins, tannins and phenolic compounds in *Pseudarthria viscida* [3]. Structurally, they are phenol groups that serve as a source of readily available hydrogen atoms such that the subsequent radicals produced can be delocalized over the phenol structure. Extracts of *Pseudarthria viscida* possess surfactant properties due to saponin, such as diosgenin [9]. Flavonoids and phenolic compounds present in the extract of *Pseudarthria viscida* help in the bioreduction of Ag^{+} to Ag^{0} [10]. Chemical constituents such as vaccenic acid, gamma sitosterol and stigma sterol were identified from the roots of *Pseudarthria viscida*. Roots of *Pseudarthria viscida* contain phytochemical constituents such as caffeic acid, gallic acid, rutin and ferulic acid [5]. Compounds such as 1, 5 dicaffeoylquinicacid, oleic acid, tetradecanoic acid and quercetin are primarily present in the roots of *Pseudarthria viscida*. Qualitative analysis reveals the presence of triterpenoids, proteins and amino acids [11]. The extract of *Pseudarthria viscida* is used to synthesize silver nanoparticles due to the presence of citric and ascorbic acids [12].

Ayurvedic properties of *Pseudarthria viscida*

According to the Ayurvedic classifications, *Pseudarthria viscida* possesses the following properties:

Dravya: Substance
Rasa: Taste
Guna: Qualities
Veerya: Potency
Vipaka: Post-digestion effect
Karma: Pharmacological activity
Prabhava: Therapeutics

Ayurvedic formulations

Surasadi Tailam, Sudarsanasava, Balajeerakhadi Kashayam, Brihatyadi Kashayam, Surasadi Kashayam

Traditional utilization of *Pseudarthria viscida*

- One of the main ingredients of laghupanchamoola used to cure painful micturition and urinary stones.
- It is also included in dasamoola used to treat asthma, heart diseases, rheumatic ailments, piles and digestive problems.
- Decoction of the root used against diarrhea, toxic bites, rheumatic ailments and digestive problems.
- It is used to support women's health, mainly during the menstrual period.
- It has properties that aid in wound healing
- It also has beneficial effects in treating the infections.
- Root juice is given as a nasal drop in case of a headache
- It is also used in the treatment of insect bites

PHARMACOLOGICAL ACTIVITIES

Anti-diabetic activity

The tribals of Madhya Pradesh use *Pseudarthria viscida* to treat diabetes [13]. The ethanol root extract of *Pseudarthria viscida* exhibited a significant reduction in diabetic activity in alloxan-induced diabetes in albino rats at a concentration of 200 mg/kg [4]. An investigation was performed on rats to study the anti-hyperglycemic potential of *Pseudarthria viscida*. The study revealed that *Pseudarthria viscida* has beneficial effects in diabetic-associated complications, and a decrease in the lipid level was also noticed [14]. There was a significant increase in the serum insulin level in chronic diabetic rats by administering an extract of Pseudarthria viscida. The literature revealed that aqueous extract of *Pseudarthria viscida* exhibited significant anti-hyperglycemic activity. This might be due to the presence of tannin and leucopelargonidin derivatives [15]. Leucopelargonidin isolated from the roots of *Pseudarthria viscida* significantly affects *in vitro* insulin secretion from the β-cells [7,16]. Aqueous root extract of *Pseudarthria viscida* was administrated at the doses of 250 and 500 mg/kg in normal and neonatal streptozotocin (n2-STZ)-induced non-insulin-dependent diabetes mellitus (NIDDM) rats for 21 days and the results showed that treatment with extract at both dose levels was found to exhibit anti-diabetic activity [15]. Treatment with aqueous extract of *Pseudarthria viscida* showed a decrease in the level of LDH, and this decrease in the anti-diabetic activity due to an increase in glucose utilization through the pentose phosphate pathway [17].

Anti-fungal activity

It was reported that *Pseudarthria viscida* has inhibitory action against some fungal pathogens such as *Aspergillus niger, Alternaria alternate, Fusarium oxysporum, Fusarium equisetti, Pythium debaryanum, Pestolosia palmera and Phytopthora infestans* which cause diseases in crop plants and stored food grains [6]. Phytochemical screening of *Pseudarthria viscida* was reported to have flavonoids, proteins, and tannins, which might increase antimicrobial activity. Extracts taken from the callus obtained from the different parts of *Pseudarthria viscida* showed significant anti-fungal activity against various microbes [6]. Different concentrations of ethanol extracts of *Pseudarthria viscida* showed anti-fungal activity against *Candida albicans* and *Aspergillus Niger*and the results showed that 100µg/ml of ethanol extract of *Pseudarthria viscida* leaf exhibited significant activity, whereas 50µg/ml and 75µg/ml showed moderate activity and 25µg/ml possess mild to moderate activity against these fungal pathogens [3]. An experiment was conducted to study the antimicrobial potential of *Pseudarthria viscida* by using petroleum ether, chloroform and ethanol extracts against six bacterial strains and four fungal strains by agar well diffusion method and the study revealed that ethanol extracts were found to be highly effective against all microbes compared to standards [18]. Methanol extracts of *Pseudarthria viscida* displayed anti-fungal activity against *Candida albicans, Monascus purpureus, Aspergillusflavus, Aspergillus terreus* and *Penicillium notatum* [19].

Neuroprotective activity

A study was conducted to find out the neuroprotective potential of ethanolic extracts of roots of *Pseudarthria viscida* against β-amyloid-induced amnesia in mice, which is a suitable animal model for Alzheimer's disease [20]. Mice were treated with EEPV at 200 and 400 mg/kg doses for 21 days. Treatment with ethanolic extracts of *Pseudarthria viscida* inhibited the neurodegeneration and enhanced the cognitive function, followed by icv injection of Aβ in mice, preventing the AChE activity and restoring the neuronal function by scavenging the ROS. It showed an increased level of antioxidant enzymes, indicating neuroprotection with increased levels of vitamin C and reduced acetylcholine levels. Therefore, the extract can be used to treat Alzheimer's and Dementia therapy [20].

Anti-bacterial activity

Anti-bacterial activity of the extracts of *Pseudarthria viscida* at different concentrations was screened by disc diffusion technique and results displayed the inhibitory activity of *Pseudarthria viscida* against *Bacillus cereus* and ds *Aeromonas hydrophylla* [19]. It was reported that the flavonoid compound (4H-Pyran-4-1,2,3-dihydro-3-5-dihydroxy-6-methyl) present in the *Pseudarthria viscida* showed antimicrobial activity [21]. The activity of *Bacillus megaterium, Escherichia coli, Bacillus subtilis, Pseudomonas aeruginosa,* and *Proteus vulgaris* was inhibited by ethanol leaf extract of *Pseudarthria viscida* at different concentrations. The results displayed that 100 µg/ml ethanol extract of *Pseudarthria viscida* leaf exhibited significant activity, whereas 50µg/ml and 75 µg/ml showed moderate activity and 25 µg/ml possessed mild to moderate activity against these microbes [3].

Wound healing activity

An investigation was conducted to study the wound-healing activity of *Pseudarthria viscida* by excision wound model in Wistar rats for 12 days [22]. Ethanol extract of *Pseudarthria viscida* applied in the form of ointment (5% and 10% w/w) showed a significant effect on wound healing properties by decreasing the surface area of the wound [22]. High skin-breaking strength, high wound contraction rate and decreased period for epithelialisation were found in the treated rats compared to the control group [22].

Anti-inflammatory activity

Ethanol root extracts of *Pseudarthria viscida* showed significant anti-inflammatory activity against experimentally induced paw edema in rats and this might be due to the presence of active phytoconstituents [22]. An investigation was conducted to evaluate the anti-inflammatory properties of the methanol extract of *Pseudarthria viscida* [10]. Methanol extract of *Pseudarthria viscida* administrated orally at 200 and 400 mg/kg body weight on carrageenan-induced paw edema in albino rats. *Pseudarthria viscida* treated rats exhibited significantly higher inhibitory activity when compared to the standard drug and could be used as the best agent against inflammation [10].

Carrageenan-induced inflammation includes three stages of release of mediators: the first stage includes serotonin and histamine, the second includes kinins, and the third includes prostaglandin [23]. Anti-inflammatory drugs inhibit only the third stage because anti-inflammatory drugs can inhibit prostaglandin synthesis [24]. The extract of *Pseudarthria viscida* at dose levels of 200 and 400 mg/kg significantly inhibited carrageenan-induced paw edema in the first and third stages, indicating the capability of inhibition over serotonin and/or histamine and prostaglandins. *Pseudarthria viscida* extract at 400 mg/kg dose showed higher inhibition than the same plant extract's 200 mg/kg dose.

A similar study conducted with petroleum ether extract of *Pseudarthria viscida* showed anti-inflammatory activity in carrageenan-induced paw edema in albino rats [25]. The anti-inflammatory activity of this plant might be due to the mechanism of histamine inhibition and prostaglandin or serotonin synthesis. Phytosterol chemicals in the root and leaf of *Pseudarthria viscida* are responsible for anti-inflammatory activity [25].

A study indicates that ethanol extract of *Pseudarthria viscida* (400 mg/kg) plays a crucial role as a protective factor against carrageenan-induced acute inflammation [26]. Preliminary phytochemical screening of *Pseudarthria viscida* revealed the presence of flavonoids, proteins, tannins, and phenolic compounds. Flavonoids mainly target prostaglands, which play a role in the late stages of acute inflammation and pain perception. Hence, the presence of flavonoids in the roots of *Pseudarthria viscida* may contribute to the anti-inflammatory and pain-relieving properties [26]. This justifies the traditional use of *Pseudarthria viscida* to treat fever and inflammatory and painful conditions [26].

Hepatoprotective activity

The ethanol extract of *Pseudarthria viscida* showed a hepatoprotective effect against N-Nitrosodiethylamine-induced liver cancer in albino rats [22]. The hepatoprotective effect is due to the increased level of antioxidant enzymes in the liver, which showed protective activity against induced liver toxicity [22]. Another investigation was conducted to study the hepato-protective activity of the aqueous extract of *Pseudarthriaviscida* on 7, 12 dimethyl benz [α] anthracene [DMBA] induced liver damage in Wistar albino rats and two different doses (100 and 200 mg/kg) of the extracts were administrated to experimental rats for 90 days [27]. Treatments with extract were found to exhibit significant hepatoprotective activity, as evidenced by decreased levels of serum enzymes compared to those of the control group [27]. Therefore, this will support the folk medicine system as *Pseudarthria viscida* is used to treat liver diseases.

Antipyretic activity

Ethanol leaf extract of *Pseudarthria viscida* showed antioxidant properties, could reduce the lipid peroxidation process and thus reduce the body temperature [28]. In another study, two doses of (100 mg/kg and 200 mg/kg) petroleum ether extract of Pseudarthria viscida were administered orally in two groups of rats. The results showed that pyretic activity was reduced considerably [25]. The antipyretic effects of *Pseudarthria viscida* in rats are due to inhibitory activity on prostaglandin synthesis in the hypothalamus [25]. This antipyretic activity might be due to the presence of sterols. Thus, this investigation has a scientific basis for using plants to treat pyretic problems. The presence of carbohydrates, glycosides, tannins, steroids and phenols in *Pseudarthria viscida* was responsible for the antipyretic effect of *Pseudarthria viscida* [29]. The results from the study substantiate the antipyretic effect of *Pseudarthria viscida* when compared among the test drugs.

Cytotoxic activity

It was reported that leaf powder of*Pseudarthriaviscida* showed anti-tumor activity against different cell lines [30]. An investigation suggested that methanol root extracts of *Pseudarthria viscida* exhibit the strongest cytotoxic effect on HeLa and HeP G2 cell lines compared with L929 normal fibroblast cell lines [31]. An experiment was conducted, evaluating the anti-tumor and antioxidant activity of the methanol extracts of *Pseudarthria viscida* and this study was performed in mice and involved the administration of methanol extracts (100 mg/kg and 200mg/kg) for 14 days after 24 hours of tumor inoculation [32]. The results suggested that mice treated with *Pseudarthria viscida* reduced tumor volume and had significant anti-tumor and antioxidant effects [32]. Different concentrations of ethanol extract from the leaf of *Pseudarthria viscida* were evaluated for its in vitro anti-tumor activity against different cell lines [30]. An in vitro study of the leaf extract showed significant cytotoxicity in various cancer cells using the MTT assay compared to standard cyclophosphamide.

A study confirmed that roots of *Pseudarthria viscida* showed cytotoxic activity against HCT-15 cancer cell line [33]. The preliminary phytochemical evaluation indicated the presence of glycosides, flavonoids, alkaloids, terpenoids and tannins, which could be the reason for the cytotoxicity of the plant.

Antioxidant activity

An investigation was conducted by using different concentrations of *Pseudarthria viscida* extracts (10, 25, 50, 125, 250, 500, 1000 µg/ml), subjected to antioxidant tests and the results indicated that stem and root methanol extract of *Pseudarthria viscida* showed potent antioxidant activity evaluated by DPPH, superoxide and nitric oxide assays [34]. Phenolic compounds in the *Pseudarthria viscida* might be responsible for the antioxidant activity.

The antioxidant activity of *Pseudarthria viscida* was studied and the study aimed at evaluating the antioxidant and anti-tumor activities of methanol extract of *Pseudarthria viscida* by radical scavenging methods [35]. The methanol extract of *Pseudarthria viscida was* administrated at the doses of 100 and 200 mg/kg in mice for 14 days after 24 hrs of tumorinoculation and results showed that extracts of this plant decreased the tumor volume and viable cell count, thereby increasing the life span of mice. Methanol extract of *Pseudarthria viscida* lowers lipid peroxidation and protein content and increases the catalase enzyme activity and glutathione content in DAL-bearing mice. Thereby, it may act as an anti-tumor agent [35].

An investigation was conducted to evaluate the *in vitro* antioxidant effect of the aqueous extract of the root of *Pseudarthria viscida* by using DPPH, superoxide and nitric oxide assays and the result showed that alkaloid fraction of *Pseudarthria viscida* showed significant antioxidant activity [36].

CONCLUSION

Pseudarthria viscida is one of the least exploited medicinal plants in the field of research. The present review studied the traditional medicinal uses and pharmacological properties of *Pseudarthria viscida*. The outcome of the present study documented that *Pseudarthria viscida* is a good source of various biochemicals and has enormous pharmacological properties. It has become an important ingredient in many Ayurvedic formulations for curing various diseases. The major chemical constituents present in this herb are caffeic acid, gallic acid, rutin and ferulic acid, 1, 5 dicaffeoylquinic acid, oleic acid, tetradecanoic acid and quercetin. Literature indicates its tremendous applicability in various health issues, including hemorrhoids, blood disorders, anti-tumor, diabetes, wound healing and bronchitis. This review validated that most of the conventional claims benefit the health issues. Bioactive compounds present in the *Pseudarthria viscida* justify using this plant to treat various diseases. As verified, most of the research has been done on the extracts of *Pseudarthria viscida*. Hence, further study is required to discover the bioactivity of various biochemicals that confer therapeutic properties to this plant's health benefits.

Conflict of interest

The authors declared no conflict of interest.

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REFERENCES

1. Sasidharan N. Phytochemical characterization and evaluation of the medicinal plant Moovila for resource enhancement. KFRI Research Report No. 296. Peechi: Kerala Forest Research Institute; 2007.
2. Warrier PK, Nambiar VPD, Ramankutty C. Indian medicinal plants: a compendium of 500 species. 4th ed. Hyderabad: Orient Longman Ltd; 1996.
3. Kavitha K, Sangeetha N, Nepolean R, HariBabu Y. Evaluation of antimicrobial activity of methanol extract of *Pseudarthria viscida* leaf. Int Res J Pharm. 2018;9(6):189-91.
4. Shaaganti M, Amareshwari P, Rao NB. Phytochemistry, micropropagation and pharmacology of near-threatened plant *Pseudarthria viscida* (L.) Wight & Arn. J Pharmacogn Phytochem. 2019;8(1):2102-8.
5. Suriyavathana M, Rajan T. Anti-inflammatory activity of *Pseudarthria viscida* (L) Wight & Arn. root extract in rats. J Pharm Res. 2011;4(4):1134-5.
6. Deepa MA, Narmatha BV, Basker S. Anti-fungal properties of *Pseudarthria viscida*. Fitoterapia. 2004;75:581-4.
7. Prasad NB, Nambiasan PN. Phytochemical studies on *Pseudarthria viscida*. J Res Indian Med Yoga Homeopathy. 1976;11:104-6.
8. Sangeetha G, Swapna TS. Anticancerous potential of *in vivo* and *in vitro* developed roots of *Pseudarthria viscida* (L.) Wight & Arn. Trends Biosci. 2020;11(7):1320-7.
9. Wang ZW, Gu MY, Li GZ. Surface properties of Gleditsia saponin and synergisms of its binary system. J Dispersion Sci Technol. 2005;26:341-7.
10. Naik K, Krishnamurthy R. Anti-inflammatory activity of methanolic extracts of *Pseudarthria viscida* and *Uraria picta* against carrageenan-induced paw edema in albino rats. Open Access J Med Aromat Plants. 2018;9(1):1.
11. VijayaBaskaran M, Gomathi S, Sambathkumar R. Evaluation of hepatoprotective effect of *Pseudarthria viscida* Linn. against DMBA-induced liver damage in Wistar rats. World J Pharm Res. 2016;5(3):1471-80.
12. Qin Y, Ji X, Jing J, Liu H, Wu H, Yang W. Size control over spherical silver nanoparticles by ascorbic acid reduction. Colloids Surf A Physicochem Eng Asp. 2010;372:172-6.
13. Humaira-Yousuf-Shaw L, Laxmi T, Bhattacharya S. Anti-diabetic plants used by tribals in Madhya Pradesh. Nat Prod Radiance. 2004;3(4):427-8.
14. Venkateshwarlu E, Sharvanabhava BS, Arvind P, Rakeshkumar Reddy P, Dileep P, Mahathi K. Evaluation of anti-diabetic and hypolipidemic activity of *Pseudarthria viscida* (whole plant) in streptozotocin-nicotinamide induced type II diabetic rats. Glob J Pharmacol. 2013;7(2):192-7.
15. Kuppusamy R, Shirwaikar A, Sam KG, Kaitheri SK. Anti-diabetic activity of *Pseudarthria viscida* aqueous root extract in neonatal streptozotocin-induced NIDDM rats. Rev Bras Farmacogn. 2012;22(5):1079-84.
16. Cherian S, Kumar RV, Augusti KT, Kidwai JR. Anti-diabetic effect of a glycoside of pelargonidin isolated from the bark of *Ficus bengalensis* Linn. Indian J Biochem Biophys. 1992;29(5):380-2.
17. Burtis CA, Ashwood ER, Bruns DE. Tietz textbook of clinical chemistry and molecular diagnosis. 4th ed. Philadelphia: WB Saunders Company; 2005.
18. Sahare AY, Manwar V, Padgilwar S, Bakal R. Antimicrobial activity of *Pseudarthria viscida* roots. Asian J Microbiol Biotechnol Environ Sci. 2008;10(1):135-6.
19. Hemlal H, Ravi S. GC-MS, HPTLC and antimicrobial analysis of root extracts of *Pseudarthria viscida* Wight and Arn and *Desmodium gangeticum* (Linn) DC. Int Res J Biol Sci. 2012;1(5):57-65.

20. Hanish Singh JC, Alagarsamy V, Parthiban P, Selvakumar P, Narsimha Reddy Y. Neuroprotective potential of ethanolic extract of *Pseudarthria viscida* (L.) Wight & Arn against β-amyloid (25-35)-induced amnesia in mice. Indian J Biochem Biophys. 2011;48(3):197-201.
21. Muthukrishnan S, Thinakaran R. Chemical investigation of *Pseudarthria viscida* root by GC-MS analysis. Pharmacognosy Commun. 2012;2(3):26-9.
22. Vijayabaskaran M, Sajeer P, Perumal P. Wound healing activity of ethanol extract of *Pseudarthria viscida* Linn. Int Res J Pharm. 2011;2(4):141-4.
23. Dimo T, Fotio AL, Nguelefack TB, Asongalem EA, Kamtchouing P. Anti-inflammatory activity of leaf extracts of *Kalanchoe crenata* Andr. Indian J Pharmacol. 2006;38(2):115.
24. Winter CA, Risley EA, Nuss GW. Carrageenin-induced edema in hind paw of the rat as an assay for anti-inflammatory drugs. Proc Soc Exp Biol Med. 1980;111(3):544-7.
25. Nithyakalyani K. Phytochemical and pharmacological investigations of *Pseudarthria viscida* (L.) Wight and Arnott. Int J Pharmacometrics Integr Biosci. 2020;5(2):16-21.
26. Khatale PN, Manikrao AM, Vijayabaskar M, Shivkumar T, Sabale PM. Analgesic and anti-inflammatory activities of ethanolic extracts of *Pseudarthria viscida* (L.) roots. Pharmacol Online. 2011;1:1153-9.
27. Manickam VB, Swaminathan G, Ramanathan S. Evaluation of hepatoprotective effect of *Pseudarthria viscida* Linn against DMBA-induced liver damage in Wistar rats. World J Pharm Res. 2016;5(3):1471-80.
28. Shantha Kumar S, Saravanan C, Sudha R, Thamizhmozhi M. Antipyretic and anti-nociceptive effect of alcoholic extracts of *Pseudarthria viscida* (L.) Wight and Arn. Int Res J Pharm. 2012;3(10):155-7.
29. Roopesh R. Comparative pharmaco-experimental evaluation of *Desmodium gangeticum* (Linn.) DC and *Pseudarthria viscida* (Linn.) Wight & Arn WSR to its antipyretic action [dissertation]. Bengaluru: Rajiv Gandhi University of Health Sciences (India); 2018.
30. Sheeba, Jasmin TS, Aleykutty NA. Evaluation of *in vitro* anti-tumor activities of microwave-assisted extract and fractions of *Pseudarthria viscida* leaves. Asian J Pharm Health Sci. 2017;7(3):1726-9.

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