

EVALUATION OF POTENTIAL VALUE OF DASHAPUSHPA IN AYURVEDA- A REVIEW ARTICLE

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DOI: https://doi.org/10.47071/pijar.2023.v08i02.01

ABSTRACT

Dashapushpamis a group of ten potential herbs which are culturally and medicinally significant to the people .More than flowers the entire plant is considered in this group and is widely used in Ayurveda. The herbs are used effectively in home remedies because of their medicinal properties and their ability to cure in a natural way. Also these plants are used in folklore practice in lithiasis, gonorrhea, vomiting, indigestion, skin diseases, intermittent fever, flatulence, urogenital diseases etc. Most of them are scientifically validated for various bioactivities. This article would throw some light on the therapeutic potential of these ten sacred plants aiding to further utilization of theseplants. **Keywords:** Therapeutic potential, dashapushpam, sacred plants

PARYESHANA

INTRODUCTION:

The ten plants have both healing and traditional values .All are used as ingredients in various Ayurvedic formulations. The dashapushpa drugs has been referred in classical ayurvedic texts such as arogyakalpadruma, sarvaroga chikitsa ratna,abhidanamanjari, kodasheri margam, prayoga samuchayam ,chikitsakauthukam, vaidyamanorama and agastya marma shastra.

In front of the household shrine, the ten sacred plants of dasapushpamwere displayed in a gleaming brass plate in the Malayalam of month karkkidakam(the monsoon season in Kerala state) in the olden days. Several studies were undertaken on different members of dasapushpam. In this endeavor, author would throw some light to further popularize these sacred plants as these plants are essential as better remedy for various ailments Coming to the detailing of the tenplants. Aervalanata(L):

It is Anti-diabetic, Anti parasitic, Anti fertility, Antimicrobial, Diuretic, hypolipidemicanti-inflammatory, hypoglycemic, hepoprotective, Antiurolithiasis and Anti asthmatic Indications—AshmariBhedana, Krimgna

Virataradi

Formulations-Kashayam, MarmaQulika Habit And Distribution

This is an erect, prostrate under shrub and occurs throughout India as a common weed in fields and waste places. Herb, erect or prostrate with a long tap-root, branched from near the base;branches many, pubescent or wolly- tomentose, striate. Plant occurs in tropical region of India ascending to 6000 feet altitude. In addition to Kerala state, the plant is also found in Uttar Pradesh, Andhra Pradesh, Gujarat, Rajasthan, Tamil Nadu and Madhya Pradesh.

Pharmacodynamics

Rasa: tikta(bitter), kashaya(astringent) Guna:laghu(light),teekshna(Penetratig) Virya:usna (hot) Vipaka:katu(pungent)

Doshakarma: kaphavatashamana(patifying

kaphaand vatadosha)

Therapeutic Uses The plant is diuretic. The root is useful in strangury (slow to be and painful discharge of urine). The roots are used in the treatment of headache. The plant is regarded as a demulcent on the Malabar Coast. ia. They also give decoction of the whole plant to cure pneumonia, typhoid and other prolonged fevers. It also has anthelmintic action. It is also used as demulcent and useful in strangury. It is valued in arsenic poisoning. The herb is also used in malaria and skindiseases.

2.Biophytumsensitivum.L

It is a flowering perennial herb which

thrives well in tropical and sub tropical climate. The plant has a very short unbranched stem and the pinnate leaves with small leaflets on either side arise from the tip of the stem. Flowers occur in and are pale yellow to orange in color with five petals .Seeds is enveloped by a stiff and flexible fleece. The plant propagates by means of seeds.Viparitalajjalu(in Sanskrit) is a very small flowering plant.

The herb is known to pacify Kapha and pitta. It is used to treat conditions like arthritis, sprain, stiff neck etc. It is one of the herbs which is given to women after delivery because of its ability to clean the uterus .It is also used in cases of heavy bleeding in women. A paste made of the leaves mixed with butter milk is used in cases of diarrhoea.

Habit And Distribution

It is a very small flowering plant, an annual herb of erect stem, stout or slender, and glabrous. This plant flower is an important flower for the people of Kerala state. It is distributed throughout the hotter parts of India as weeds in moist shady places and all over tropical Africa and Asia.

Pharmacodynamics

Rasa: tikta(bitter), kashaya(astringent)

Guna: laghu(light), ruksha(dry) Virya: sheeta

Vipaka:katu(pungent) Doshakarma: kaphapittashamana(pacifying kaphaand pitta dosha)

Therapeutic Uses

It is used in insomnia, convulsions, cramps, chest-complaints, inflammations and tumours. Decoction is given in bronchial asthma and phthisis. Roots decoction is given in lithiasis5. The leaves are diuretic and relieve strangury. he seeds are powdered and applied to wounds. The root in decoction is given in gonorrhea and lithiasis. The crushed whole plant is used in chronic skin troubles. It is eaten to induce sterility in man. The effect of the leaf extract for the treatment of hyperglycaemic patients was studied on glucose homeostasis in rabbits. All the extracts except the methanol extracts of aerial parts exhibited anti-inflammatoryactivity.

3.Cardiospermumhalicacabum(Lin n)

It is used in treating ear aches and in relieving swellings. The juice is said to reduce obesity. The herb is also used in hair oil preparations to reduce dandruff and for darkening the hair. The herb also has laxative properties. It is a climbing plant widely distributed in tropical and subtropical Africa and Asia. Leaves are mixed in castor oil to treat stiff limbs, rheumatism and lumbago. Root has diaphoretic, diuretic and laxative properties. Leaf juice is used for ear ache. It is used in the treatment of rheumatism, nervous diseases, stiffness of thelimbs and snakebite. Salted leaves are used as a poultice on swelling.

Formulations-

Chukkumthippalyadigulika, mahadhanwantaramgulika Indicated In Graharoga,Bhootavishapaha Classical Reference Raja nigantu – guduchyadivarga. Habit And Distribution Plant is commonly climbing on bushes and hedges along road-sides, forestclearings and in dry deciduous forests, also common in cultivated fields. Greatly found throughout the plains of Southern India.

Pharmacodynamics

Rasa: tikta(bitter) Guna: laghu(light), ruksha (dry) Virya: ushna(hot) Vipaka:katu (pungent) Doshakarma: vatakaphashamana(pacifying vataand kaphadosha)

Therapeutic Uses

The root is considered diaphoretic, diuretic, and aperient. The fried leaves are considered emmenagogue. The leaves and stem are used against common cold and angina. The leaf paste is applied on domestic animals to kill lice and other insects. It is used in the treatment of rheumatism6, lumbago, skeletal fractures, nervous diseases, amenorrhoea, haemorrhoids, erysipelas, emetic, laxative, and rubefacient and stomachic. The herb is used in hair oils for treating dandruff, alopecia and for darkening hair. C. halicacabumhas been used in the treatment of rheumatism, nervous diseases, stiffness of the limbs and snakebite. Leaves are crushed and made into a tea, which aids itchy skin. Salted leaves are used as a poultice on swellings. Young leaves can be cooked as vegetables. The leaf juice has been used as a treatment for earache as

4. Curculigoorchioides (Gaertn.)

well.26

According to Ayurveda, root is heating, aphrodisiac, alternative, appetiser, fattening and useful in treatment of piles, biliousness, fatigue, bloodrelated disorders etc

Classical Reference

Bhavaprakasha — guduchyadivarga Kaiyyadevanigandu — oushadivarga Raja nigantu — moolakadivarga

Formulations

This plant is known as 'kali musali' in Sanskrit belonging to family Amaryllidaceae.

Habit And Distribution

A sub-erect excessively branching and tall with densely crowded whitish cladophyllschrub with stout, terete stem and ascending branchlets. It occurs in the subtropical Himalayas from Kumaon eastwards ascending to 1800 meters, the Hhasia hills, Bengal, Assam, Konkan, the Western Peninsula and Chennai extending South as far as Cape Comorin. In many parts of India, due to it's over exploitation, kali musaliis becoming rare in occurrence. **Pharmacodynamics**

Rasa: madhura(sweet) Guna: guru (heavy), snigdha(unctuous) Virya: sheetha(cold) Vipaka:madhura(sweet)

Doshakarma:vatapittashamana (pacifying vata and pitta dosha) and kaphavardhaka

Therapeutic Uses

It is present in several drug formulations used in the treatment of menorrhagia and other gynaecological

problems. The root is bitter, appetizer, nervine, adaptogenic, sedative, anticonvulsive, androgenic and antiinflammatory. It is also used in jaundice, urinary disorders and skin diseases, useful in piles, fatigue, diseases of the blood. The rhizome is used for asthma, diarrhoea, and gonorrhea, demulcent and diuretic, tonifying kidney and for strengthening muscles and bones. According to Ayurveda, root is heating, aphrodisiac, useful in the treatment of appetizer, piles, fatigue, blood related disorders. According to Unani of system medicine, root is carminative, tonic, aphrodisiac, antipyretic and useful in bronchitis, ophthalmic8, indigestion, vomiting. The powdered rhizomes with milk are taken as a restorative tonic, also for sexual debility.

5.Cynodondactylon(Pers.)

in

padoladichoorna, durvaditaila9, manasa mitravatakam, arukaladitaila

Indicated In

Used

visarpa,trishna,dahaetc

Classical Reference

Dhanwantarinigantu- karaveeradigana Kaiyyadevanigantu – oushadivarga Raja nigantu – shalmalyadivarga Shodalanigantu – karaveeradivarga Cynodondactylon (Linn.) Pers. belongs to family Poaceae. This herb is known as 'Durva' in Sanskrit language which can grow in poor soil. Bermuda grass or dhub grass was considered as a sacred grass by the Hindus, and it is

still used for worships in temples. Habit And Distribution

A large twining herb; extremities softtomentose; bark grey, corky and deeply furrowed on old stems. It grows throughout the Southern part of India. It grows in open areas where there are frequent disturbances such as grazing, flooding, and fire **Pharmacodynamics** tikta (bitter), Rasa: kashaya (astringrent) Guna: guru (heavy) Virya: ruksha (dry) usna (hot) Vipaka:usna (hot) Doshakarma: tridoshshara (pacifying tridosha) Therapeutic Uses

The parts used medicinally are the stems and the leaves. The Ayurvedic Pharmacopoeia of India describes the dried fibrous root in menorrhagia, metrorrhagia and burning micturation. It is also reported to be antiseptic, demulcent, diuretic, and emollient. The grass is a remedy in epitaxis, haematuria, inflammed tumours, whitlows fleshy excrescences, cuts,

cystitis, nephritis and in scabies and other skin diseases. Herb is possessing astringent, anticatarrhal, styptic propertieInternally it is used in the treatment of chronic diarrhoea and dysentery. The leaf juice has also been

used in the treatment of hysteria, epilepsy and insanity. The plant is a folk remedy for headache, haemorrhage, hypertension, measles, snake bite, uro-genital disorders warts

6..Eclipta Alba(L)

and wounds.

In ayurvedic medicine, the leaf extract is considered a powerful liver tonic10, rejuvenative and especially good for the hair. Ecliptaprostrata also has traditional external uses, such as for athlete's foot, eczema and dermatitis, and on the scalp to address hair loss; the leaves have been used in the treatment of scorpion stings. It is used as anti-venom against snakebite in China and Brazil. It is reported to improve hair growth and color.

Indicated In

Keshya,Rasayana,Kushtahara, Sophahara,Krumihara,vishagna Classical Reference Raja nigantu Formulations

Bringarajathailam

Habit And Distribution

It is an erect or prostrate, much branched, roughly hairy, annual, rooting at the nodes. The stem and branches trigose with appressed hairs on both sides and tapering base. It is found as a common weed throughout Southern India ascending up to 6000ft.

Pharmacodynamics

Rasa: tikta (bitter), katu (pungent) Guna: laghu (light), ruksha (dry) Virya: usna (hot) Vipaka:katu (pungent) Doshakarma: kaphavatashamana (pacifying kapha and vatadosha) Therapeutic Uses

It is used as a tonic and diuretic in hepatic and spleen enlargement. It is also used in catarrhal jaundice and for skin diseases. The alcoholic extract of the plant has shown antiviral activity against Ranikhet disease virus. The plant is commonly used in hair oil all over India for healthy black and long hair. The fresh juice of leaves is used increasing appetite, improving for digestion42 and as a mild bowel regulator. It is commonly used in viral hepatitis to promote bile flow and protect the parenchyma and popularly used to enhance memory and learning. The plant has a reputation as an anti ageing11 agent in Ayurveda. It is used

as a general tonic for debility. Externally it is used for inflammation, minor cuts and burns and the fresh leaf-juice is considered very effective in stopping bleeding.

7.EmiliaSonchifolia

It is an annual herb with weak or erect stems. Leaves are ovate or obovate. The plant flowers from July to October. The flowers are lavender, purple or pink in color. It occurs in open fields and waste lands. It contains calcium, phosphorous magnesium, sodium and potassium. contains vitamins like riboflavin and niacin.The plant is astringent, depurative, diuretic12, expectorant, febrifuge and sudorific. The juice of the root is used in the treatment of diarrhea.

Indicated In anaha, jwara, soola, krumi Formulations

brihatvidhyadarabhra rasa

Classical Reference

charaka – krimignamahakashaya Susrutha – surasadigana Shodalanigantu- namasangraha Raja nigantu – guduchyadivarga Kaiyyadevanigantu – ushadivarga Bhavaprakashanigantuguduchyadivarga **Habit And Distribution** A glabrous slender herb, 30-40 cm in height. Erect, variouslybranched. Leaves obovateand flowers purplish in colour. Distributed throughout India, Ceylon, most tropical and sub tropical regions. The whole plant is usedmedicinally.

Pharmacodynamics

tikta (bitter), Rasa: kashaya (astringent), katu (pungent) Guna: laghu (light), teekshna (penetrating) sheeta Virya: (cold) Vipaka:katu (pungent) Doshakarma kaphapittashamana (pacifying kapha and pittadosha) **Therapeutic Uses** is sudorific, antiseptic The plant astringent, depurative14, diaphoretic, diuretic, expectorant, febrifuge, and ophthalmic. A tea made from the leaves is used in the treatment of dysentery. The juice of the leaves is used in treating eye inflammations, night blindness, cuts and wounds and sore ears. It is used in infantile tympanitis and bowel complaints. Root used as antidiarrhoeal. Leaf used for otitis media under medical supervision.

8. Evolvulusalsinoides Linn

The whole plant is used for medicinal purpose, externally; the medicated oil of the herb is useful as a hair tonic, to promote the hair growth. Its paste is also applied externally in skin diseases. Sankhapushpi(sanskit name) hair oil prevents the premature graying and failing of hair. Internally, the plant is used in vast range of diseases. The whole plant juice is traditionally used in various mental disorders. As one of the best psychotropic drugs, it was held in high esteem by the ancient sages of India. In minor memory disturbances, nervous debility and amentia it is widely used as a brain

parinama shoola,medhya,visha unmade,apasmara Classical Reference sarangadharasamhita

tonic.

Indicated I

In Sanskrit language, this plant is known as 'vishnu's step' and is used in worship belongs to Convolvulaceae family.

This is a perennial prostrate herb widely distributed in tropical and subtropical regions throughout the world. It grows as a weed in open and grassy places throughout India. It is with a small woody root stock.

Pharmacodynamics

Habit And Distribution

Rasa: tikta (bitter), katu (pungent) Guna: laghu (light), ruksha (dry) Virya: usna (hot) Vipaka:katu (pungent) Doshakarma: kaphavatashamana (pacifying kapha and vatadosha)

Therapeutic Uses

The whole plant is used for various ailments. The plant is used as a remedy for dysentery and to enhance intelligence and improve memory. The bitter, acrid, plant is febrifuge, aphrodisiac, anthelmintic, expectorant and useful in bronchitis, brain tonic, an aid in conception, astringent, antidysenteric and asthma. It is also useful in epilepsy, forgetfulness, falling and greying of hair, intermittent fevers and general debility. Used in nervine affections17 (epilepsy, insanity, spermatorrhoea), and duodenal ulcers, also for uterine affections uterine bleeding and internal haemorrhages. A decoction of this herb is given as a blood purifier.

9.Ipomea sepiaria.Roxb

Indicated In

Garbhada,Rasayana,Balya, Vrishya,streevandhyathva

Formulations

bruhatphalagritham, lakshmanarishtam

Classical Reference

Bhavaprakasanigantu-guduchyadivarga Dhanwantarinigantu —guduchyadivarga Kaiyyadevanigantu — aushadivarga Raja nigantu — mulakadivarga Carakasamhita —prajasthapani

Habit And Distribution

A slender twinning perennial with villous stems and tuberous roots. It is distributed throughout greater part of India.

Pharmacodynamics

Rasa: madhura (sweet) Guna: guru (heavy), shigdha (unctuous) Virya: sheetha (cold) Vipaka: madhura (sweet) Doshakarma: vatapittashamana (pacifying vata and pitta dosha) and kaphavardhaka (increasing kaphadosha) Therapeutic Uses

Juice of the plant is used as deobstruent19, diuretic, hypotensive, uterine tonic, antidote to arsenic poisoning. The plant is reported to show aphidicidal activity and appeared to be useful as pesticides. Seeds used as cardiac depressant, hypotensive, spasmolytic. Plant is also used in the treatment of sterility in women, urinary retention20, constipation, gynaecological disorders21.

10.Vernoniacinerea.L

VernoniaCineria is a terrestrial annual

herb. The plant has erect and cylindrical stems. Leaves are ovate or lanceolate. The flowers are either white or purple in color and occur in small head inflorescence. The plant grows in waste lands, open fields and road sides. New plants grow from the seeds which are dispersed by wind. Every part of the plant can be used medicinally. This herb has been used to treat a number of disorders including inflammation, malaria, fever worms, pain, cancer, abortion, and various gastro-intestinal disorders. The juice of the plant is given to children with urinary incontinence. **Classical Reference** Bhavaprakasha - guduchyadivarga nigantu shatahvadivarga Raja Shodalanigantu – lakshmanadiyarga Indicated In sukrakara, kshata, vishamajwara, sidhma kushta This plant is commonly called as ashcoloured fleabane' belonging to the family Asteraceae.

Habit And Distribution

An erect, rarely decumbent, tender or soft herb, a weed; stems slender, 15-17cm., high (6 inch to 3 feet) grooved and ribbed; branches hairy. It is distributed throughout India, as a weed on roadsides and open places. It is one of the commonest Indian weeds.

Pharmacodynamics

Rasa: tikta (bitter) Guna: laghu (light), ruksha (dry) Virya: ushna (hot) Vipaka:katu (pungent) Doshakarma: kaphavatashamana (pacifying kapha and vatadosha).

Therapeutic Uses

The whole plant is also considered to promote perspiration in febrile condition. The roots are useful in diarrhoea, cough, inflammations, skin diseases, leprosy, renal and vesicalcalculi. The leaves are useful in humid herpes, eczema, ring worm, guineaworms, and elephantiasis.

The flowers are used in conjunctivitis. The seeds are useful in roundworms, threadworms, cough, flatulence, leucoderma, psoriasis, chronic skin disease. Seeds used as antiflatulent, antispasmodic; used in dysuria, decoction used for colic. The Ayurvedic Pharmacopoeia of India recommends the plant in intermittent fever, filariasis **Discussion:**

These ten herbs are to be studied and understood like the other group of herbs such as dashamoola,

panchamoola and other dashemani explained by Acharya charaka. All these drugs are being used traditionally in several ailments as headache, stomach ache, diarrhea, amenorrhea, rheumatism; antipyretic etc. later on the studies conducted proved the folklore claims on the efficacy of these drugs. t Almost all the ten drugs except kali musali and lakshmana possess similar pharmacodynamics. pharmacological studies done on different dashapushpa drugs proved the antimicrobial, seantiparasitic, antidiabetic, antidiarrheal, antioxidant, antiinflammatory, immune-modulatory, antibacterial, antihelmintic, anti-stress antiamnesic, antiulcer, anticatatonic, analgesic, antipyretic, gastroprotective and cytotoxic activity like effects. Henceforth, more extensive research studies should be conducted in this direction .

Conclusion:

Globally there is a great increase in herbal medicine research. The therapeutic potential of these ten sacred plants are unlimited and not explored properly to cure various illness. The detailed investigation of its standardization, pharmacological

activity, toxicity and clinical trials may help to develop new drugs for controlling various diseases. So, the drug development from these plants has tremendous scope in the future. Some of the research activities have been carried out on these plants during the past few decades which give sufficient motivation among the scientist community in exploring more information about these sacred plants. AU research and development programme should be undertaken on dashapushpam for their potential in economic and therapeutic utilization. Also the cultivation, collection, and further pharmacological exploration of

these ten plants should be encouraged. References :

Clowdhury D, Sayeed A, Islam A, Shah AlamBhuiyan M, AstaqMohal Khan GR. Antimicrobial activity and cyrotoxicity of Aervalanata. Fitoterapia2002;73:92-4.

The therapeutic potential of ten sacred plants (dashapushpa) of kerala state of southern india arun raj gr,¹shailaja u,²raoprasanna n,³ajayan s⁴

3 Anantha D, Israiel Kumar T, Santosh Kumar M, Manohar Reddy A, Mukharjee NS, LakshmanaRao A. In vitro anti helmentic activity of aqueous and alcoholic extracts of Aervalanata seeds and leaves. J Pharm Sci Res. 2010;2: 317-21.

- 4 Vetrichelvan T, Jegadeesan M, SenthilPalaniappan M, Murali NP, SasikumarK. Diuretic and antiinflammatory activities of aervaIanata in rats. Indian J Pharm Sci2000;62:300-2.
- 5 Soundararajan P, Mahesh R, Ramesh T, Begum VH. Effect of Aervalanata on calcium oxalate urolithiasis in rats. Indian J ExpBiol2006;44:981-6.
- 6 Shirwaikar A. Issac D. Malie S. Effect of Aervalanata on cisplath and gentamicin models of acute renal failure. J Ethnopharmaco. 2004;90(1):81-6. PubNes. PMID: 14698513
- 7 Kumar D. Posed DN, Parkash Bhatnaga Antiasthmatic activity of that extract of Aervalanata Linn. Pharmacology online2009;2:1075-81.
- 8 Savadi R, Alagawadı K. Antifertility activity of ethanolic extracts of plumbagoindica and Aervalanata on albino rats. Int J Green Pharm2009;3:230-3
- 9 Deshmukh ITA, Mada BadoleSL, Bodhankar DhaneshwarSR.

Antihyperglycaemic activity of alcoholic extract of Aervalanata (L.) A.L. Juss. ex J.A. Schultes leaves in alloxan induced diabetic mice. J Applied Biomed2008;6:81-7.

B١

10 Vetrichelvan T, Jegadeesan M. Anti-diabetic activity of alcoholic extract of Aervalanata (L.) JussJuss. exSchultes in rats. J Ethnopharmacol 2002;80:103-7. PMID: 12007698.

- 11 Soundararajan P. Mahesh R. Ramesh T. Begum VH. Hypolipidemic activity of Aervalanataon ethylene glycol calcium induced oxalate urolithiasis in rats. Pharmacology online 2007;1:557-63.
- 12Nevin KG, Vijayammal PL. Effect
of
Aervalanata
hepatotoxicityagainst
carbon
carbon
totrachloride12Nevin KG, Vijayammal PL. Effect
against
carbon
carbon
totrachloride

Pharmach gicl and immunomodulator, lifects of vervalanatain daltons lymphoma ascites-bearing mice. Pharm Biol2005;43:640-6.

PI

14 Noria KC, Hayammal PL.
Effect of Aervalanata on solid tunor induced by DLA cells in mice Fitoterapia2003;74:578-82.
15 Joanofare J, Vamsadhara C.
Evaluation of antidiarrhoeal activity of Aerva species. Nat

- Pandey G. DravyagunaVijnana.
 1st reprint ed. Varanasi:
 ChowkhambaKriashnadasAcade
 my: 2004.p.383.
- 17 Kamble SY, Patil SR, Sawant PS, Sangita S, Pawar SG, Singh EA.
 Studies on plants used in traditional medicine by Bhilla tribe of Maharashtra.Indian Journal Of Traditional Knowledge

2010;9(3):591-8.

- 18 Guruvayoorappan C, Afira AH, KuttanG.Antioxidant potential of Biophytumsensitivumextract in vitro and in vivo. J Basic ClinPhysiolPharmacol 2006;17(4):255-67. PubMed PMID:17338281.
- Banerjee T, Van der Vliet A,
 Ziboh VA. Down regulation of
 COX-2 and iNOSby
 amentoflavone and quercetin in
 A549 human lung
 adenocarcinoma cellline.

Prostaglandins LeukotEs sent Fait Acids 2002;66:485–92. PubMed PMID: 12144868.

20 Puri D. Screening of mildly hypoglycaemic competences: Obese British Angol Habbits with borderline globose intolerance as animal model of the Pharm Sci 2006:68:51 83.

21 Guruvayoorappan C, Kuttan G. Inhibition of tumour specific angiogenesis by amentoflavoue. Biochemistry (Mose)
2008;73(2):209-18. PubMed PMID:18298378.

22 Guruvayoorappan C, Kurtan G, Amentoflavone stimulates apoptosis in B16F-10 melanoma cells by regulating bcl-2, p53 as well as caspase-3 genes and regulates the nitric oxide as well as proinflammatory cytokine production in B16F-10 melanoma cells, tumor associated macrophages and peritoneal macrophages. J ExpTherOncol 2008;7(3):207-18. PubMed PMID:19066129.

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Published BY: Shri Prasanna Vitthala Education and Charitable Trust (Rea)

Source of Support: NIL Conflict of Interest : None declared