



Pharmacognostic, phytochemical & pharmacological studies on whole plant of *Strobilanthes jomyi*

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Abstract

Strobilanthes genus is a rare Endangered ^[1] species exploring global Plant diversity of more than 450 flowering ^[2] plants in the family *Acanthaceae*, Habitually Shurb and 'Traditionally ^[3] used in various medical application for detoxification, defervescence, detumescence and antiphlogosis'. leaves is used as Hypoglycemic. goiter, antitumor's, tuberculosis, bactericidal and fungicidal, antioxidant, antidiabetic, anticancer, antimicrobial, wound healing, anti-inflammatory and anti ulcerogenic activities.

Strobilanthes Barbatus is a dwarf double floored arising from petals ^[4], The Organoleptic evaluation noticed by means of senses organ study are characteristic, followed by Phytochemical studies for the presence of Terpenoids, Flavanoids, Phytosterols, Phenolic compounds, fixed oils and carbohydrates. while terpenoids and phytosterols were present in all species of. *Strobilanthes* ^[1] Figure no. 1. *Strobilanthes jomyi* is the new species of *Strobilanthes* described and illustrated from northern kerala, its pollens are similar to that of *Strobilanthes ixiocephala* but the flower is different. It is also similar to *Strobilanthes ciliata* in the form its inflorescence and exerted stamens and style 2.

Strobilanthes species are reported for Anti-oxidant and Antidiabetics activity mainly of *Asperimus*, *Barbatus*, *Callosus*, *ciliates*, *Crispus*, *Cusia*, *Cuspidata*, *Glutinous*, *Heyneanus* from all over the world ^[5], and Figure no.1.

In *Strobilanthes* genus *Jyomi* species performed Pharmacognostic Studies as moisture content, Foreign matter, Total Ash value, Extractive values with respect to successive Soxhlet extraction in Pet ether, Chloroform, Methanol, Aqueous, Microscopical investigation included Histology of stem, Root, Leaf, Powder analysis Authenticity consist of size of calcium oxalate, Resins, Fibers of Sclerenchymatous & Phloem are evaluated ^[6], Preliminary Phytochemical Plant extracts active constituent reveals presence of Alkaloids, Glycosides, Flavones and Flavanoids Carbohydrates, Proteins and Aminoacids, Terpenoids, Saponins, Gums and Mucilage in the Extract of Chloroform (+ to 2+), and Methanol (+ to 2+), Pharmacological Invitro anti-oxidant activity, DPPH Method, Nitric acid, Hydrogen Peroxide activity shown significant activity.

Keywords: *S jomyi*, *S ciliata*, anti-oxidant

Introduction

Strobilanthes is a genus of about 439 species reported from all over the world bearing flowering plants in the family *Acanthaceae*, Many species are cultivated for their two-lipped, hooded flowers in shades of blue, pink, white and purple. Most are frost-tender and require protection in frost-prone areas, those are follows.

Strobilanthes accrescens, *adenophora* Nees, *adnata* Clarke, *adpressa* Wood, *afriastiniae* Benn. *alata* Blume, *albostrata* Ridl., *alboviridis*. Imlay, *alternata* (Burm.f.), Moylan. Wood, *amabilis* Clarke, *anamallaica* Wood, *anamitica* Kuntze, *anceps* Nees, *andamanensis* Bor, *andersonii* Bed, *angustifrons* C.B. Clarke, *anisophylla* (Wall. ex Hook.) T. Anderson, *antonii* Elmer, *apoensis* (Elmer) Merr., *aprica* (Hance) T. Anderson ex Benth., *arborea* Span., *Arenicola* W.W. Sm., *argentea* J.B. Imlay, *arnottiana* Nees, *articulata* J.B. Imlay, *assimulata* S.Moore, *asymmetrica* J.R.I.Wood & J.R.Benn., *atropurpurea* Nees, *atroviridis* Y.F. Deng & J.R.I. Wood, *attenuata* (Wall. ex Nees) Jacq. ex Nees, *auriculata* Nee, *auriculata* var. *dyeriana* (Mast.) J.R.I. Wood = *Strobilanthes dyeriana*, *aurita* J.R.I. Wood, *austrosinensis* Y.F. Deng & J.R.I. Wood, *autapomorpha* J.R. Benn., *axilliflora* C.B. Clarke ex S. Moore, *backer* (Bremek.) J.R. Benn., *bakeri* (Merr.) Y.F. Deng, *bantonensis* Lindau, *baracatanensis* (Elmer) Y.F. Deng, *barbata* Nees, *barbigera* J.R.I. Wood, Nuraliev & Scotland, *barisanensis* (Bremek.) J.R.I.Wood, *bheriensis* (Shakya) J.R.I. Wood, *bibracteata* Blume, *bilabiate* J.R.I. Wood,

biocullata Y.F. Deng & J.R.I. Wood, *bipartite* Terao ex J.R.I. Wood, *birmanica* (Bremek.) W.J. Kress & DeFilipps, *bislei* Sinj. Thomas, B. Mani, Britto & Pradeep, *blumeana* (Nees) Y.F. Deng, *bogoriensis* Lindau, *bolumpattiana* Bedd., *bombycine* J.B. Imlay, *borii* J.R.I. Wood, *bracteata* (Nees) J.R.I. Wood, *brandisii* T. Anderson, *bremekampiana* J.R.I. Wood & J.R. Benn., *brunelloides* (Lam.) J.R.I. Wood, *brunnescens* Benoist, *brunoniana* Nees, *bulusanensis* Elmer, *bunmeyerii* J.R.I. Wood, *callicole* J.R.I. Wood & J.R. Benn., *callosal* Nees, *calvata* J.R.I. Wood, *calycina* Nees, *campaniformis* J.R.I. Wood, *campanulate* Wight, *canarica* Bedd., *candida* J.R.I. Wood, *capillipes* C.B. Clarke ex Ridl., *capitata* (Nees) T. Anders, *carinei* J.R.I. Wood, *carnatica* Carine, J.M. Alexander & Scotland, *caudata* T. Anderson, *celebica* (Bremek.) J.R.I. Wood, *cernua* Blume, *chiangdaoensis* Terao, *chinensis* (Nees) J.R.I. Wood & Y.F. Deng, *chrysodelta* J.R.I.W, *ciliata* Ne, *cinnaminalis* C.B.Cla, *clarkei* J.R.I. Wood, *coertii* Terao ex J.R. Benn., *cognata* Benoist, *collina* N, *compacta* D. Fang & H.S., *congesta* Ter, *connata* Collett & Hems, *consanguinea* (Nees) T. Anders, *cordifolia* (Vahl) J.R.I. W, *corrugate* J.B. Imlay, *crassifolia* Miq., *crataegifolia* T. Anderson, *crispa* (L.) Blume, *crossandra* (Steud.) J.R.I. Woo, *cruciate* (Bremek.) Ter, *cumingiana* (Nees) Y.F. Deng & J.R.I. Wo, *cuneate* (Shakya) J.R.I.W, *cusia* (Nees) Kuntze, *cuspidata* (Benth.) T. Anderson, *cycla* C.B. Clarke ex W.W.Sm., *cyphantha* Diels *cystolithigera* Lindau, *dalzielii* (W.W.Sm.) Benoist, *decipiens* J.R.I.W, *decumbens*

(Bremek.) J.R.I. Wood, *decurrens* Nees, *deflexa* T. Anderson, *densa* Benoist, *denticulate* (Nees) T. Anderson, *diandra* (Nees) Alston, *dimorphotricha* Hance, *discolor* T. Anderson, *disparifolia* J.R.I. Wood, *divaricate* (Nees) T. Anderson, *dolichophylla* Benoist, *dryadum* Benoist, *dupenii* Bedd. Ex C.B. Clarke, *echinate* Nees, *elmeri* Y.F. Deng, *elongate* C.B. Clarke, *erecta* C.B. Clarke, *esquirolii* H. Lév., *euantha* J.R.I. Wood, *exserta* C.B. Clarke, *extensa* (Nees) Nees, *falconeri* T. Anderson, *farinose* C.B. Clarke, *fengiana* Y.F. Deng & J.R.I. Wood, *ferruginea* D. Fang & H.S.Lo, *filiformis* Blume, *fimbriata* Nees, *flava* Kurz, *flexa* Benoist, *flexicaulis* Hayata, *fluviatilis* (C.B. Clarke ex W.W. Sm.) Moylan & Y.F. Deng, *foliosa* (Wight) T. Anderson, *formosana* S. Moore, *forrestii* Diels, *fragrans* J.R.I. Wood, *frondose* J.R.I.W, *fruticose* (Chatterjee) W.J. Kress & DeFili, *fruticulose* (C.B. Clarke) Y.F. Deng, *fusca* J.R.I. Wood, *galeopsis* Stapf, *gamblei* Carine, J.M. Alexander & Scotl, *gardneriana* (Nees) T. Anderson, *gigantodes* Lind, *glabrata* Nee, *glandibracteata* D. Fang & H.S. Lo, *glandulosa* Blume, *glaucescens* N, *glomerata* (Nees) T. Anderson, *glutinosa* Nees, *gossypina* T. Anderson, *gracilis* Bedd., *graminea* J.B. Imlay, *gregalis* Collett & Hemsl., *guangxiensis* S.Z. Huang, *habracanthoides* J.R.I. Wood, *halconensis* Merr., *hallbergii* Blatt., *hamiltoniana* (Steud.) Bosser & Heine, *helferi* T. Anderson, *helicoides* T. Anderson, *helicta* T. Anderson, *heliophile* J.R.I. Wood, *henryi* Hemsl., *heterochroa* Hand.-Mazz., *heteroclite* D. Fang & H.S, *heteromalla* T. Anderson ex C.B. Clarke, *heyneana* Ne, *himalayana* J.R.I. Wood, *hirsute* Decne., *hirta* (Vahl) Blume, *hirticalyx* Ridl., *hirtisepala* C.B. Clarke, *homotropa* Nees, *hongii* Y.F. Deng & F.L.C, *hookeri* Nees, *hossei* C.B. Clarke, *humilis* (Nees) Gamble, *hupehensis* W.W. Sm., *hypericoides* J.R.I. Wood, *hypomalla* Benoist, *imbricata* Nees, *imlayae* J.R.I. Wood, *incisa* J.B. Imlay *inflata* T. Anderson, *integrifolia* (Dalzell) Kun, *integrifolius*, *involucrate* Blume, *japonica* (Thunb.) Miq., *jennyae* J.R.I. Wood, *jeyporensis* Bedd., *jogensis* Gilli, *jomyi* P. Biju, Josekutty, Rekha & J.R.I. Wood, *kachinensis* J.R.I. Wood & J.R. Benn., *kannanii* Josekutty, P. Biju, J.R.I. Wood & Augustine, *karensium* Kurz, *khasyana* T. Anderson, *khoshooana* (S.R. Paul) Karthik. & Moorthy, *kingdonii* J.R.I. Wood, *kjellbergii* J.R.I. Wood, *klossii* (S.Moore) Y.F. Deng, *koordersii* C.B. Clarke ex Koord, *korthalsii* (Bremek.) J.R.I. Wood, *kunthiana* T. Anderson ex Benth., *labordei* H. Lév., *lachenensis* C.B. Clarke, *lamiifolia* (Nees) T. Anderson, *lamioides* T. Anderson, *lamium* C.B. Clarke ex W.W. Sm., *lanata* Nees, *lanceifolia* T. Anderson, *lanyuensis* Seok, C.F. Hsieh & J. Murata, *larium* Hand.-Mazz., *latebrosa* Ridl., *latibracteata* J.B. Imlay, *lawsonii* Gamble, *laxa* T. Anderson, *leucopogon* Ridl., *lihengiiae* Y.F. Deng & J.R.I. Wood, *linearifolia* (Bremek.) Y.F. Deng, *longespicata* Hayata, *longgangensis* D. Fang & H.S.Lo, *longiflora* Benoist, *longipedunculata* Terao ex J.R.I. Wood, *longipetiolata* (Merr.) Y.F. Deng, *longispica* (H.P.Tsui) J.R.I. Wood & Y.F. Deng, *longistaminea* J.R.I.W, *longzhouensis* H.S.Lo & D. Fang, *lupulina* Nees, *lurida* Wight, *maclellandii* C.B. Clarke, *maclurei* Merr., *maculate* (Wall.) Nees, *maingayi* C.B. Clarke, *malabarica* Josekutty, P. Biju & Augustine, *mastersii* T. Anderson, *matthewiana* Scotland, *maxwellii* J.R.I. Wood, *mearnsii* Merr., *medogensis* (H.W.Li) J.R.I. Wood & Y.F. Deng, *meeboldii* Craib, *mekongensis* W.W. Sm., *membranacea* Talbot, *merrillii* C.B. Clarke, *micrantha* Wight, *macrocarpa* T. Anderson, *microstachya* Benth.,

mogokensis Lace, *monadelpha* Nees, *moschifera* Blume, *mucronatopunctata* Lindau, *mullayanagiriensis* Sinj. Thomas, B. Mani, Britto & Pradeep, *multangular* Benoist, *multidens* C.B. Clarke, *multiflora* Ridl., *muratae* J.R.I. Wood, *murutorum* J.R.I. Wood, *myura* Benoist, *nagaensis* (Bremek.) W.J.Kress & DeFilipps, *namkadingensis* Soulad. & Tagane, *naumannii* Engl., *neilgherrensis* Bedd., *nemorosa* Benoist, *neoaspera* Venu & P. Daniel, *newii* Bedd. Ex C.B. Clarke, *nigrescens* T. Anderson, *ningmingensis* D. Fang & H.S. Lo, *nobilis* C.B. Cla, *nockii* Trim, *novomegapolitana* Linda, *nutans* (Nees) T. Anderson, *obesa* Benoist, *obtusibracteata* Terao, *oligantha* Miq., *oligocephala* T. Anderson ex C.B. Clarke, *oresbia* W.W. Sm., *orientalis* J.R.I. Wood, *orthostachya* (Bremek.) J.R.I. Wood & J.R. Benn., *ovata* Y.F. Deng & J.R.I. Wood, *ovatibracteata* H.S.Lo & D. Fang, *ovatifolia* (Bremek.) J.R.I. Wood, *oxycalycina* J.R.I. Wood, *pachyphylla* C.B. Clarke, *pachys* C.B. Clarke ex Merr., *palawanensis* Elmer, *panichanga* (Nees) T. Anderson, *paniculata* (Nees) Miq., *paniculiformis* J.R.I. Wood, *papillosa* T. Anderson, *parabolica* Nees, *parryorum* C.E.C. Fisch., *parvifolia* J.R.I. Wood, *pateriformis* Lindau, *patulus* Benoist (Merr.) Y.F. Deng, *pavala* (Roxb.) J.R.I. Wood, *pedicellata* Ridl., *pedunculosa* Miq., *pendula* J.R.I. Wood & J.R. Benn., *peninsularis* Terao, *pentandra* J.R.I. Wood, *pentastemonoides* (Nees) T. Anderson, *penstemonoides*, *perplexa* J.R.I. Wood, *perrottetiana* Nees, *phoenicea* Ridl. *phyllocephala* J.R.I. Wood & Scotland, *phyllostachya* Kurz, *pinetorum* W.W. Sm., *pluriformis* C.B. Clarke, *poilanei* Benoist, *polybotrya* Miq., *polyneuros* C.B. Clarke ex W.W. Sm., *polystachya* Benoist, *polythrix* T. Anderson, *pothigaiensis* Gopalan & Chithra, *procumbens* Y.F. Deng & J.R.I. Wood, *pseudocollina* K.J. He & D.H. Qin, *pteroclada* Benoist, *pterygorrhachis* C.B. Clarke, *pubescens* (Bremek.) J.R.I. Wood, *pubiflora* J.R.I. Wood, *pulcherrima* T. Anderson, *pulneyensis* C.B. Clarke, *punctate* Nees, *pusilla* J.R.I. Wood, *quadrifaria* (Wall. ex Nees) Y.F. Deng, *ramulosa* J.R.I. Wood, *rankanensis* Hayata, *ranongensis* Terao, *recurve* C.B. Clarke, *remota* T. Anderson, *renschiae* (Bremek.) J.R.I. Wood & J.R. Benn., *repanda* (Blume) J.R. Benn., *reptans* (G. Forst.) Moylan ex Y.F. Deng & J.R.I. Wood, *reticulata* Stapf, *retusa* D. Fang, *rhamnifolia* (Nees) T. Anderson, *rhombifolia* C.B. Clarke, *rhytiphylla* (Nees) Y.F. Deng, *rhytisperma* C.B. Clarke, *ridleyi* Merr., *rivularis* J.R.I. Wood & J.R. Benn., *rosea* Nees, *rostrata* Y.F. Deng & J.R.I. Wood, *rubescens* T. Anderson, *rubicunda* (Nees) T. Anderson, *rufescens* (Roth) T. Anderson, *ruficapillis* Ridl., *ruficaulis* Ridl., *rufocapitata* C.B. Clarke, *rufopauper* C.B. Clarke, *rufosepalus* C.B. Clarke, *rufostrobilata* C.B. Clarke, *sabiniana* (Wall. Ex Lindl.) Nees, *saccata* J.R.I. Woo, Augustine, Josekutty & P. Biju, *saltiensis* S. Moore, *sanjappae* Karthik. & Moorthy, *sarcorrhiza* (C.Ling) C.Z. Zheng ex Y.F. Deng & N.H. Xia, *sarmentosa* Benoist, *scabra* Nees, *scabrida* Ridl., *schomburgkii* (Craib) J.R.I. Wood, *scrobiculata* Dalzell ex C.B. Clarke, *secunda* T. Anderson, *serrata* J.B. Imlay, *sessilis* Nee, *setosa* J.R.I. Wood, *sexennis* Nees, *shanensis* (Bremek.) J.R.I. Wood, *simonsii* T. Anderson, *simplex* J.R.I. Wood, *sinica* (H.S.Lo) Y.F. Deng, *sinuate* J.R.I. Wood, *speciose* Blum, *spicata* T. Anderson, *spiciformis* Y.F. Deng & J.R.I. Wood, *squalens* S. Moore, *steeniana* J.R. Benn., *stenodon* C.B. Clarke, *stenura* (Bremek.) J.R. Benn., *stolonifera* Benoist, *straminea* W.W. Sm., *strigose* D. Fang & H.S. Lo, *suborbicularis* J.B. Imlay, *sulawesiana* J.R.I.

Wood, *sulfurea* Benoist, *sumatrana* Miq., *sylvestris* Ridl., *szechuanica* (Batalin) J.R.I. Wood & Y.F. Deng, *tamburensis* C.B. Clarke, *tanakae* J.R.I. Wood, *taoana* Y.F. Deng & J.R.I. Wood, *tenax* Dunn, *tenuiflora* J.R.I. Wood, *teraoi* J.R.I. Wood & J.R. Benn., *tetrasperma* (Champ.) Druce, *thomsonii* T. Anderson, *thwaitesii* T. Anderson, *tibetica* J.R.I. Wood, *timorensis* Nees, *tomentosa* (Nees) J.R.I. Wood, *tonkinensis* Lindau, *torrentium* Benoist, *trichantha* J.R.I. Wood, *tricostata* Sinj. Thomas, B. Mani, Britto & Pradeep, *tristis* (Wight) T. Anderson, *truncate* D. Fang & H.S. Lo, *tubiflos* (C.B. Clarke) J.R.I. Wood, *twangensis* J.R.I. Wood & D. Borah, *unilateralis* J.R.I. Wood, *urceolaris* Gamble, *urens* (Roth) J.R.I. Wood, *urophylla* (Nees) Nees, *vallicola* Y.F. Deng & J.R.I. Wood, *venosa* (C.B. Clarke) J.R.I. Wood, *verruculosa* Nees, *versicolor* Diels, *vestita* Nees, *violacea* Bedd., *violascens* Ridl., *violifolia* T. Anderson, *virendrakumariana* Venu & P. Daniel, *viridis* (Merr.) Y.F. Deng, *viscosa* (Arn. Ex Nees) T. Anderson, *wakasana* Wakas. & Naruh., *walker* Arn. Ex Nees, *wallichii* Nees, *wangiana* Y.F. Deng & J.R.I. Wood, *warburgii* Terao ex J.R. Benn., *wardiana* J.R.I. Wood, *wightiana* Nees, *wightii* (Bremek.) J.R.I. Wood,

willisii Carine, *wilsonii* J.R.I. Wood & Y.F. Deng, *winckelii* (Bremek.) J.R. Benn., *xanthosticta* C.B. Clarke, *yunnanensis* Diels, *zenkeriana* (Nees) T. Anderson, *zeylanica* T. Anderson, *zwickiae*, *Strobilanthes* following species are reported for Anti-oxidant and Antidiabetics activity mainly of *Asperimus*, *Barbatus*, *Callosus*, *ciliates*, *Crispus*, *Cusia*, *Cuspidata*, *Glutinous*, *Heyneanus* are more popular In *Strobilanthes* genus *Jyomi* species performed for Pharmacognostic Studies and Preliminary Phytochemical Plant extracts active constituent reveals spresence of Alkalods, Glycosides, Flavones and Flavanoids Carbohydrates, Proteins and Aminoacids, Terpenoids, Saponins, Gums and Mucilage in the Extract of Chloroform (+ to 2+), and Methanol (+ to 2+), Pharmacological Invitro anti-oxidant activity, DPPH Method, Nitric acid, Hydrogen Peroxide activity shown significant activity.

Objective's

1. Successive solvent extraction
2. Phytochemical screening
3. Pharmacognostical studies of plant
4. Pharmacological studies



Fig 1

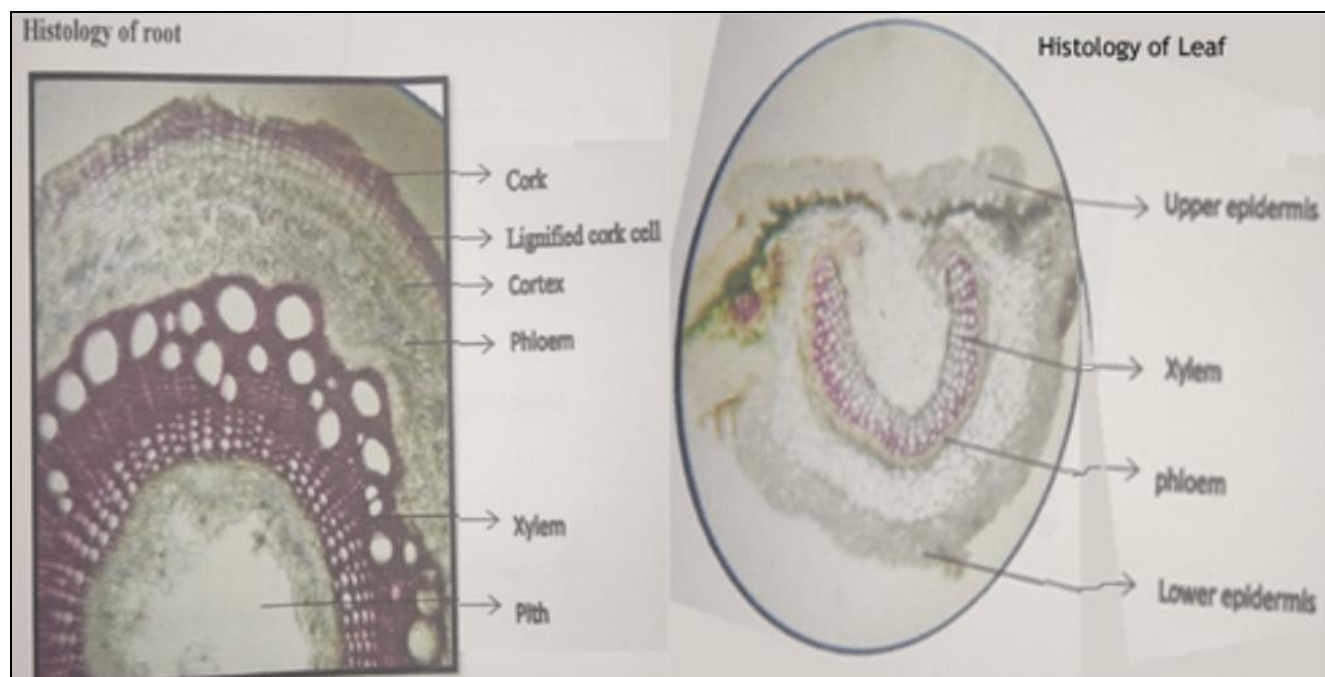


Fig 2

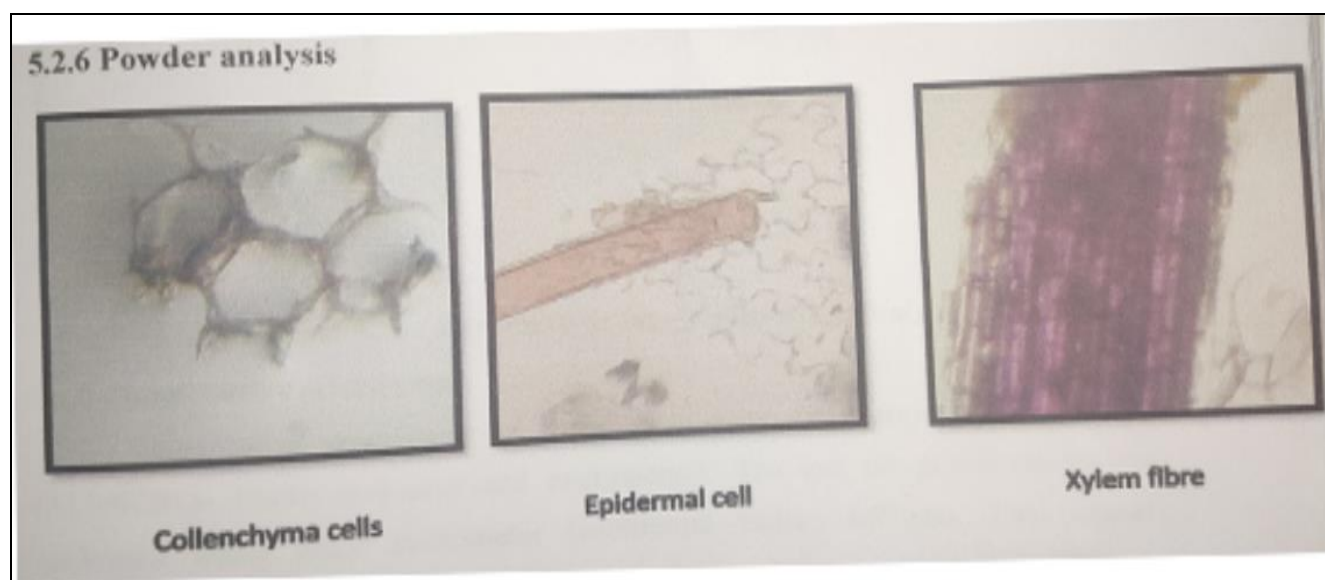


Fig 3

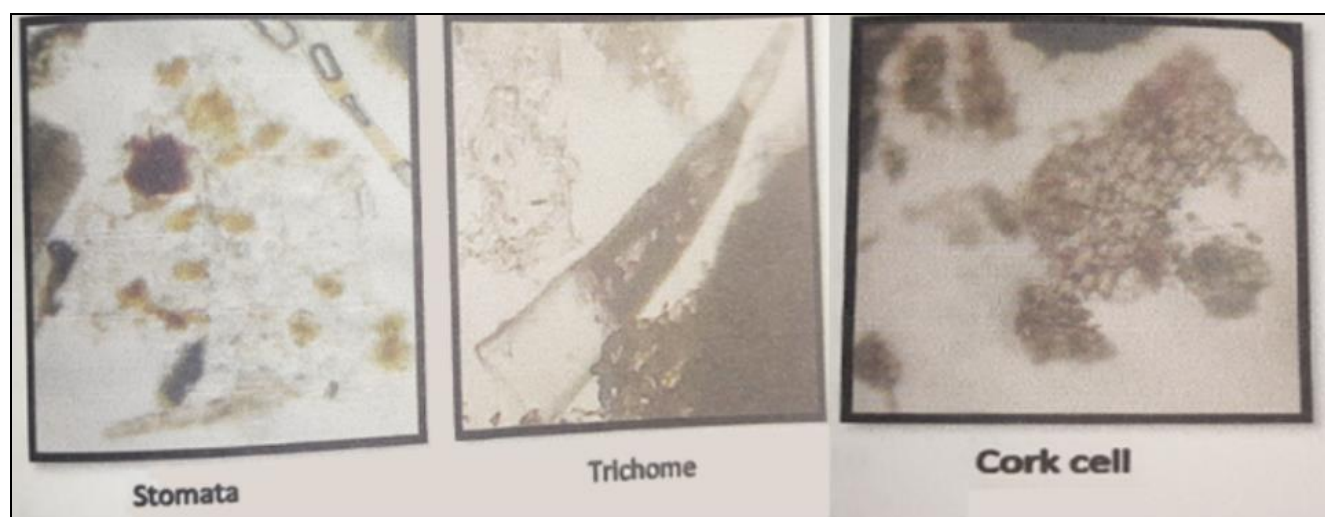


Fig 4

Methodology

- Plant collection, drying and authentication
- Pharmacognostic studies of plant (Ash value, extractive value, moisture content, macroscopical and microscopical evaluation)
- Successive solvent extraction
- Phytochemical screening (preliminary screening and TLC profiling)
- Pharmacological study on different extracts of plant
- a. In-vitro antioxidant activity
 - DPPH method
 - Nitric oxide scavenging assay

Material and Methods

Strobilanthes jomyi collected from Pandya Latitude 11.503067, Longitude 75.635963, Kasargod which is authenticated by Dr. Josekutty E J, Botany Department, Kasargod Government College, on 27-06 2021 Herbarium is deposited, Pharmacognostical Investigation on Moisture content, Foreign Matter, n Total Ash Value (Water soluble and Acid soluble) Powder is sieved at #mesh size 10, subjected for successive extract for Petroleum Ether, Chloroform, Methanol, Aqueous.

Organoleptic Evaluation noticed by means of senses of organs by colour, odour, size, shape, taste, Special features for touch, textures are characteristic, Microscopical evaluation performed at In house Laboratory facilities, Preliminary Phytochemical Plant extracts active constituent reveals presence of Alkaloids, Glycosides, Flavones and Flavanoids Carbohydrates, Proteins and Aminoacids, Terpenoids, Saponins, Gums and Mucilage in the Extract of Chloroform (+ to 2+), and Methanol (+ to 2+), Pharmacological Invitro anti-oxidant activity, DPPH Method, Nitric acid, Hydrogen Peroxide activity standard procedures, The Thesis report submitted to Kerala university of Health sciences of Dissertation code and Registration number: 192780022, dated November 2021 with college seal.

Results and Conclusion

Strobilanthes jomyi collected from Pandya Latitude 11.503067, Longitude 75.635963, Kasargod in rainy season and dried in oven hot air type at 60°C upto crispy crumbling in nature, Powder is sieved at mesh size 10, subjected to successive Soxhlet extraction for Petroleum Ether 0.59%, Chloroform 0.69%, Methanol 8.8%, Aqueous 11.12%.

Moisture content 17.83%w/w, Foreign Matter 0.33%w/w, Total Ash Value 14.75%w/w (Water soluble 9.86%w/w and Acid soluble 4.23%w/w).

Organoleptic Evaluation noticed by means of senses of organs by colour of leaf is green, Stem is Green, odourless, size of leaf length 8-13cm x 4.5-7cm, Flowers 1.5-4 x 0.6-1.00cm, seeds 1.8-2.2 x 1.7-1.9mm, *Strobilanthes jomyi*, is described and illustrated from Kerala, India. The new species is similar to *S. ixiocephala* in its spheroidal, echinulate pollen, but differs in its pendulous inflorescence, thinly hispid style, exerted stamens and 4-seeded capsule with entirely pubescent seeds. It is also similar to *S. ciliata* in the form of its inflorescence and exerted stamens and style, but differs in its ovate-elliptic leaves with crenate margin, hairy bracts and bracteoles, glandular-pubescent ovary and gland-tipped capsule, pubescent seeds and spheroidal, echinulate pollen. Its possible relationships are discussed based on its pollen and floral morphology, Flowers at base is white and Blueish above, textures is smooth, Preliminary Phytochemical Plant extracts active constituent reveals presence of Alkaloids, Glycosides, Flavones and Flavanoids Carbohydrates, Proteins and Aminoacids, Terpenoids, Saponins, Gums and Mucilage in the Extract of Chloroform (+ to 2+), and Methanol (+ to 2+),

Microscopical evaluation performed at In house Laboratory facilities, Figure number 2 to 4.

Pharmacological Invitro anti-oxidant Scavenging activity (Removal of discarded waste), DPPH Method, Nitric acid, Hydrogen Peroxide activity standard procedures, as in Table no. 1. and Figure no.5.

Table 1

Sl. No.	Methods	Extracts	% Inhibition	IC ₅₀ , s-c/2=Answer
01	DPPH at 200µg/ml at 517nm	Standard (Ascorbic acid)	88.53	44.265
02		Pet ether,	62.22	26.31
03		Chloroform,	68.42	10.055
04		Methanol,	80.26	4.135
05		Aqueous	70.86	8.835
06	Nitric Oxide at 200µg/ml at 517nm	Standard (Ascorbic acid)	87.27	43.635
07		Pet ether,	59.14	14.03
08		Chloroform,	71.23	8.02
09		Methanol,	80.21	3.53
10		Aqueous	70.70	8.285
11	Hydrogen Peroxide at 200µg/ml At 257 nm	Standard (Ascorbic acid)	87.88	43.94
12		Pet ether,	54.04	16.92
13		Chloroform,	71.59	8.145
14		Methanol,	80.80	3.54
15		Aqueous	75.25	6.315

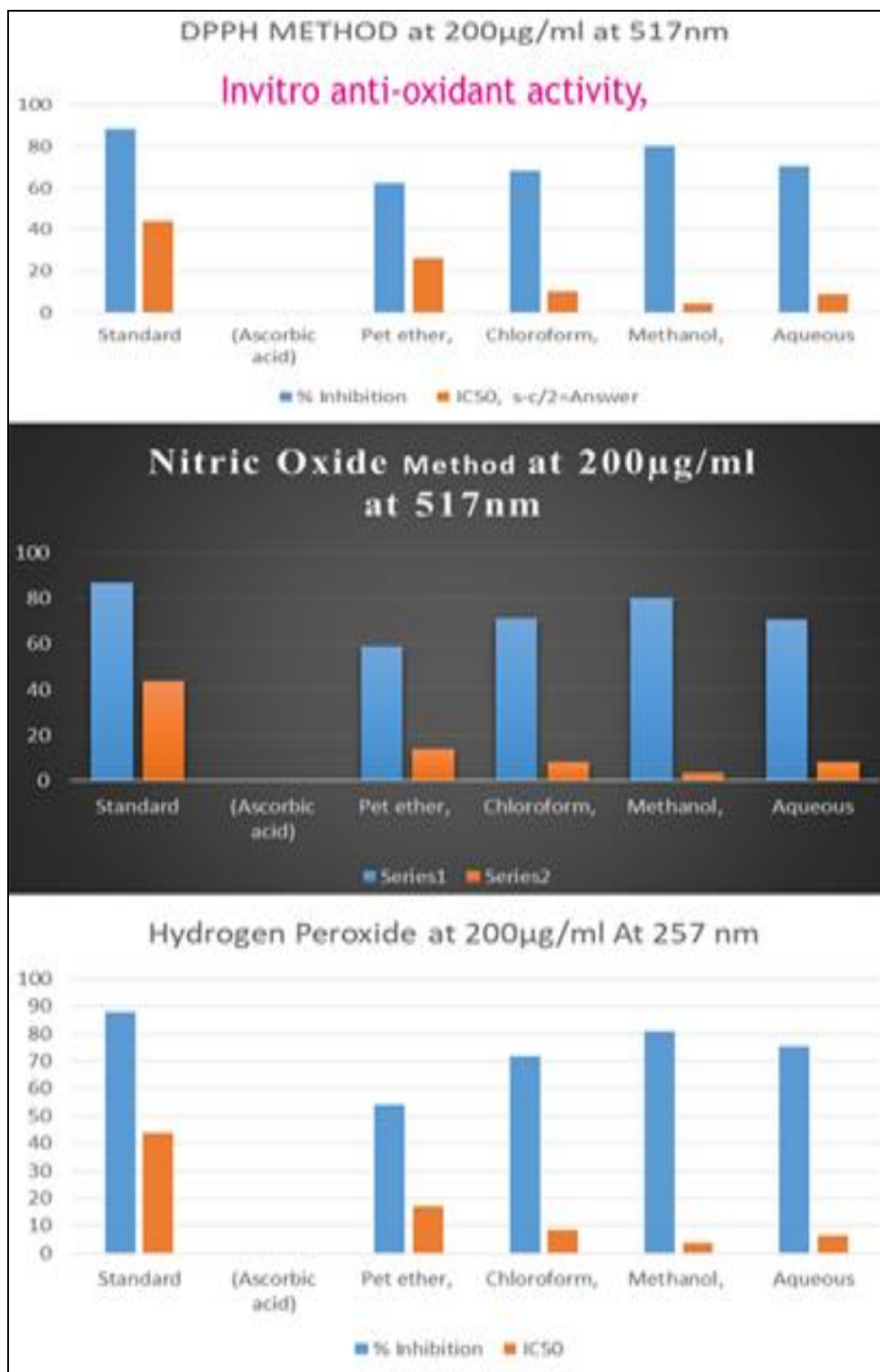


Fig 5

Summary

1. Plant collection, drying and authentication
2. Pharmacognostic studies of plant (Ash value, extractive value, moisture content, macroscopical and microscopical evaluation)
3. Successive solvent extraction
4. Phytochemical screening (preliminary screening and TLC profiling)
5. Pharmacological study on different extracts of plant In-vitro antioxidant activity
6. Percentage yield calculation and physical characterisation
7. Determination of pharmacognostic parameters
8. Selection of extract showing anti-oxidant and anti-inflammatory activity
9. Study anti-oxidant and anti-inflammatory property by IC₅₀ calculation
10. *Strobilanthes* species are very famous for their medicinal use. Many medicinal properties have been exploited from other species of this genus. Since there no scientific studies made on *Strobilanthes jomyi* it is expected to reveal and provide scientific basis for claimed properties in the plant.

Conflict of Interest

The Authors are obliging for the Academic research/references but not for commercial use which is prohibited.

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