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POTENTIAL ORNAMENTAL PLANTS FROM MEENACHIL TALUK OF KOTTAYAM DISTRICT, KERALA, INDIA

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ABSTRACT

The present paper highlights the diversity of ornamental potential plants from Meenachil taluk of Kottayam district, Kerala. As a result of present investigation, There are 98 taxa belonging to 80 genera in 37 families were documented. The ornamental potentiality of documented plant species is mainly based on their attractive flower colour, good looking habit and various plant parts with their beautiful appearance. The present study also emphasizes safe conservation and sustainable uses of wild resources are essential for future generations.

Keywords: Ornamental Plants, Meenachil Taluk, Kottayam District, Kerala.

INTRODUCTION

Wild flora is very important in view of aesthetic and recreational value for man. Human beings have always had a vital interest in plants of all kinds. In ancient times a knowledge of which plants were useful, generally as food and other purposes such as medicines, fibers, dyes, religious and ornamental purposes [1]. Such Ornamental plants are grown usually for the purpose of beauty, for their fascinating foliage, flowers and their pleasant smell. There is still scope for some special type of plants bearing attractive tiny flowers for gardening in urban areas, inside houses, offices, banks, hospitals, hotels and other buildings as ornamental plants have become very popular [2].

Mankind has enjoyed a long historical relationship with plants, using them as objects of beauty,

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sculpting gardens into a form of art and fashioning them into expressions of philosophical belief. From the 1970s onwards there has been a remarkable resurgence in worldwide interest in ornamental plants which resulted in renewed efforts to search for and develop new ornamental plants. This trend is continuing to this day [3]. Ornamental plants used in horticulture should be understood as an expression of the human desire not only to improve the quality of life but also to ensure survival. This may include everything from producing a steady, secure supply of selected and improved fruits, vegetables and other crops, to the creation of beauty, concentrated in a given location, in the form of a garden as a work of art [4, 5]. These gardens have a unique status among the other forms of art, because of the living, earthy and spatial qualities they bring to our daily reality [6, 7]. Most of the present day flowers have come from the wild progenitors, a few of which still exist in natural habitat [8]. Plants exercise a strong, positive influence on human behavior. The various wild ornamentals are raises their aesthetic values in indoors and outdoors [9]. The domesticated wild plants are propagated in various horticultural methods such as cuttings, grafting, budding and seeds also. The ornamental horticulture is to be the main pathway for the introduction of native plants to a country [10, 11].

MATERIALS AND METHODS

The present study was based on an extensive survey and field observations during the year 2013 - 2014. In this study attempts were made to find out various plants with different ornamental potentialities were



collected from Meenachil Taluk of Kottayam district, Kerala. The documentation was mainly based on the field observation, discussions with local peoples as well as scrutinizing the literature review. During the field visits, the plant specimens were collected at different reproductive stages to prepare herbarium specimens. The collected specimens were identified taxonomically with the help of available floras and literature [12,13,14]. The nomenclature of each species has been brought up to data as per the rules given in the International Code of Botanical Nomenclature (ICBN). The specimens were processed for the preparation of Herbarium by standard methods [15]. The voucher specimens were deposited in the Herbaria of Department of Botany, Deva Matha College Kuravilangad, Kottayam for future reference.

STUDY AREA

Meenachil taluk

Meenachil taluk of Kottayam district, Kerala is lies in the North-Eastern region of Kottayam district (9.36° N and 76.17° E) (Fig. 1 A-B) The area is blessed with diversified habitats such as lush paddy fields, hills and hillocks, highlands and different crop plantations. It has a tropical climate. The humidity is high and rises to about 90% during the rainy season. This area gets rain from two monsoon seasons, the South-west monsoon and the North-east monsoon. The average rainfall is around 3600 mm per year. The South-west monsoon starts in June and ends in September. The North-east monsoon season is from October to November. Pre-monsoon rains during March to May are accompanied by thunder and lightning; the highest rainfall during this period in December. January and February are cooler, while March. April and May are warmer. The temperature ranges between 38.5 °C and 15 °C. Though food crops like paddy and tapioca are cultivated mainly, majority of the population depends on cash crops like rubber and black pepper for income [16].

RESULTS AND DISCUSSION

The present study was undertaken to enumerate the diversity of ornamental potential plants from Meenachil taluk of Kottayam district, Kerala. There are 98 taxa belonging to 80 genera in 37 families were documented. Dicots are dominating with 31 families and monocots with 6 families. Among dicots, the group polypetalae with 16 families, 30 genera and 36 species, gamopetalae with 11 families, 36 genera and 45 species, monochlamydeae with 4 families, 5 genera and 6 species. In monocots 6 families are spreading over 9 genera and 11 species. (Table 1& Fig. 2).

In order to infer the dominant families of angiosperms Acanthaceae is the first dominant family with 10 species, Convolvulaceae is the second dominant family with 9- species, Fabaceae is the third dominant family with 8 species. The other dominant families such

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as Malvaceae (7-species), Asteraceae (6-species), Caesalpiniaceae (6-species), Commelinaceae (5-species), Lamiaceae (4-species) Rubiaceae (4-species), Verbanaceae (3 species) and all other families with 2 and 1 species respectively (Fig. 3).

The analysis were found that, a total of 71 genera of dicotyledons were represented. In polypetalae *Hibiscus is* the first dominant genus with 3- species followed by *Crotalaria, Desmodium, Senna* and *Sida* with 2- species respectively and all others having 1- species each. In gamopetalae *Ipomoea* and *Merremia* are the dominant genera with 3- species each followed by *Asystasia, Barleria, Clerodendrum, Evolvulus* and *Justicia* with 2- species respectively. In Monochlamydeae *Ficus* is the dominant genus with 2- species and all others having 1- species each. While in Monocotyledons, out of 9 genera represented *Cyanotis* and *Commelina* are the dominant genera with 2- species followed by all others possess 1- species each.

In order to infer the total life forms of ornamental flora of the study area reveals that, Herbs are more dominant form in which 51 species followed by shrubs with 25 species, climbers or ramblers or vines possess 13 species Trees 9 species (Fig. 4).

The ornamental potentiality of collected plant species is mainly based on their attractive flower colour, good looking habit and various plant parts with their beautiful appearance. The present observation on ornamental potentiality of 98 plant species collected from the study area was categorized based on their attractiveness of flower (80 species), good looking habit (15 species) and beautiful fruits and seeds (3 species) (Table 2). The various attractive flower colour is observed as Yellow (25 Nos.), Purple-pink (23 Nos.), White (15 Nos.), Blue (10 Nos.) and red (7 Nos.) (Fig. 5).

One of the most interesting parts of gardening is propagation. Horticultural importance of these potential plants are also valuable. The various propagation methods mainly through seeds, cuttings, divisions etc. The present study reveals that, Out of 98 ornamentals collected from different localities of Meenachil taluk of Kottayam district, are propagated through various manners such as seeds (74 Nos.), cuttings (13 Nos.), root stocks (6 Nos.), tubers (2 Nos.), Rhizome and nodal branches (3 Nos.) (Fig. 6).

Diversity of wild ornamental potential plants in Mannavan shola forest of Southern Western Ghats, Kerala was studied by Binu Thomas *et al.* [17]. According to their survey they noticed that, there are about 35 species belonging to 18- families and 27- genera were identified as potential ornamental plants. They also highlights some points like, the lack of suitable management and unsustainable utilization of wild resources may lead it to become rare and endangered. While studying the chasmophytic diversity of Velliangiri Hills by Binu Thomas *et al.* [18]. They noticed that, there about 30 ornamental chasmophytic species belonging to 20



families were collected from the rock crevices of Velliangiri Hills of Southern Western Ghats of Tamil Nadu, India. These potential ornamental chasmophytic plants possess an attractive habit, foliage and flowers, it also possess certain biological peculiarities for adapting rock crevices.

Potential ornamental plants and their contribution to the domestic gardens and landscape architecture practices were studied by Delna Joseph *et al.* [19]. According to their studies, there are about 146

species of potential ornamental plants and their domestication practices were discussed from Gudalur Taluk of Nilgiri district, Tamil Nadu. Similarly the assessment and horticultural approach on wild ornamental plants of Coimbatore district was done by Aravidhan *et al.* [20]. According to their study, there are about 41-plant species belonging to 23-families were identified as wild plants with ornamental potential and these plants are commonly used to grow in gardens for their aesthetic appeal.

	Table 1. Analy	sis of total	floristic e	lements of	ornamental j	plants
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Floristic Analysis							
Dicots	Families	Genera	Species				
Polypetalae	16	30	36				
Gamopetalae	11	36	45				
Monochlamydeae	4	5	6				
Monocots	6	9	11				

S. No	Botanical name	Family	Habit	Phenology	Ornamental potential	Mode of propagati on
1.	Abrus precatorius L. (Kunni)	Fabaceae	Climber	Dec. – Mar.	Charming climbing habit with attractive red colour seeds	Seeds
2.	<i>Abutilon indicum</i> (L.) Sweet. (Vadathutti)	Malvaceae	Shrub	Throughout the year	Flowers with alluring golden yellow petals	Seeds
3.	<i>Acacia auriculiformis</i> A. Cunn. <i>ex</i> Benth. (Acacia)	Mimosaceae	Tree	Dec. – Apr.	Tree with attractive leaves and spike	Seeds
4.	<i>Alysicarpus monilifer</i> (L.) DC. Prodr.	Fabaceae	Prostrate herb	Throughout the year	Beautiful prostrate habit with pink- violet flowers	Seeds
5.	Anisomeles indica (L.) O. Ktze. (Karinthumba)	Lamiaceae	Herb	Throughout the year	Beautiful habit with small scented violet flower	Seeds
6.	<i>Asclepia curassavica</i> L. (Kammalchedi)	Asclepiadaceae	Herb	Feb. – Nov.	Marvelous cup and saucer shaped red and yellow petals	Seeds, stem cuttings
7.	Asparagus racemosus Willd. (sathavari)	Liliaceae	Armed vine	Throughout the year	A lovely vine	Tuber
8.	Asystasia chelnoides Nees (Murikootipacha)	Acanthaceae	Herb	Dec. – Jan.	Beautiful whitish violet flowers	seeds
9.	Asystasia gangetica (L.) T. And. (Upputhali)	Acanthaceae	Herb	Jan. – Feb.	Stunning pink- white flowers	Seeds
10.	<i>Bacopa monnieri</i> L. (Neerbrahimi)	Scrophulariaceae	Succulen t Herb	Throughout the year	Gorgeous habit with attractive white flowers	Rooted branches
11.	Barleria buxifolia L. (Rosemullippoond)	Acanthaceae	Shrub	Nov Mar.	Charming white flowers	Seeds
12.	Barleria prionitis L. (Chemmulli)	Acanthaceae	Sub shrub	Nov. – Jan.	Charming golden yellow flowers	Seeds, stem

Table 2. List of ornamental plants from Meenachil taluk, Kottayam



						cuttings
13.	Bauhinia malabarica Roxb. (Mantharam)	Caesalpiniaceae	Small tree	Sep. – Dec.	Good looking leaves and large white flowers	Seedlings
14.	<i>Biophytum sensitivum</i> (L.) DC. (Mukkutti)	Oxalidaceae	Herb	Throughout the year	Pretty habit with fascinating pinnate leaves and small yellow flowers	Seeds
15.	<i>Blepharis</i> <i>maderaspatensis</i> (L.) Roth. (Hema kandi)	Acanthaceae	Prostrate herb	Throughout the year	An attractive small whitish-violet colour flowers	Seeds
16.	<i>Caesalpinia pulcherrima</i> (L.) Sw. (Rajamalli)	Caesalpiniaceae	Shrub	Throughout the year	Attractive red or yellow inflorescence	Stem cuttings
17.	<i>Calotropis gigantea</i> (L.) R. Br. (Erikku)	Asclepiadaceae	Shrub	Dec. – May	Good looking habit with attractive whitish-violet flowers	Stem cuttings
18.	<i>Catharanthus roseus</i> (L.) G. Don (Nithya kallyani)	Apocynaceae	Herb	Throughout the year	An attractive salvar- shaped corolla	Seed
19.	<i>Centrosema pubescens</i> Benth. (Kattupayaru)	Fabaceae	Twiner	Sept. – Jan.	Pleasing pink petals	Seeds
20.	Chassalia curviflora (wall. ex Kurz.) Thw. (Vellakurinji)	Rubiaceae	Shrub	Throughout the year	Attractive white- purple flowers and purple or black fruits	Seed
21.	<i>Cissus quadrangularis</i> L. (Changalamparanda)	Vitaceae	Rambler	Jun. – Jan.	Good looking succulent nature of habit	Stem cuttings
22.	Cleome rutidosperma DC. (Neelavela)	Cleomaceae	Erect herb	May-Nov.	Beautiful small violet flowers	Seed
23.	<i>Clerodendrum</i> <i>paniculatum</i> L. (Krishnakireedam)	Verbanaceae	Sub shrub	Sep. – Mar.	An attractive crown like red inflorescence	Seeds
24.	<i>Clerodendrum viscosum</i> Vent. (Perivelam)	Verbanaceae	Sub shrub	Throughout the year	An attractive white inflorescence	Seeds
25.	<i>Clitoria ternatea</i> L. (Sankupushpam)	Fabaceae	Herb.	May - Oct.	Good looking climbing habit with attractive violet flowers.	Seeds
26.	<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	Vine	Dec Mar.	Good looking climbing habit	Stem cuttings
27.	<i>Commelina benghalensis</i> L. (Vuzhaipadathi)	Commelinaceae	Creeping herb	Nov Jan.	Attractive creeping herb with blue flowers	Seed
28.	<i>Commelina clavata</i> Clarke	Commelinaceae	Creeping herb	Jun Nov.	Good looking blue flowers	Seeds
29.	Costus speciosus (Koenig) Smith (channa)	Zingiberaceae	Herb	Sep. – Oct.	An attractive habit and flowers	Rooted branches



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30.	<i>Crossandra</i> <i>infundibuliformis</i> (L.) Nees (Manjakkurinji)	Acanthaceae	Herb erect	Throughout the year	Charming yellow flowers	Seeds
31.	Crotalaria retusa L. (Kilukilukki)	Fabaceae	Sub- shrub	Dec. – Apr.	Attractive yellow inflorescence	Rooted stem cuttings
32.	Crotolaria verrucosa L. (Kilukiluppa)	Fabaceae	Erect herb	Throughout the year	Beautiful flowers	Seeds
33.	<i>Curculigo orchiodes</i> Gaertn. (Nilappana)	Hypoxidaceae	Herb	Throughout the year.	An attractive yellow perianth	Tuberous roots
34.	<i>Cyanotis cristata</i> (L.) D. Don.	Commelinaceae	Herb	Nov. – Jan.	An attractive habit and cyme	Nodal cuttings
35.	<i>Cyanotis fasciculata</i> (Heyne <i>ex</i> Roth) Schult.	Commelinaceae	Spreadin g herb	Sep. – Dec.	Pretty spreading habit with charming purple flowers	Nodal cuttings
36.	<i>Cyperus difformis</i> Linn. Cent.	Cyperaceae	Tufted herb	Sept. –Dec.	Fascinating tufted herb	Root stocks
37.	<i>Delonix regia</i> (Boj. <i>ex</i> Hook.) Rafin. (Gulmohar)	Caesalpiniaceae	Tree	Apr. – Jun.	Good looking tree with beautiful crown of red or yellow flowers	Seed
38.	<i>Desmodium</i> <i>heterophyllum</i> (Willd.) DC. (Sheppunerunji)	Fabaceae	Prostrate herb	Nov. – Mar.	Gorgeous prostrate herb with trifoliate leaves	Seeds
39.	<i>Desmodium triflorum</i> (L.) DC. (Cherupulladi)	Fabaceae	Prostrate Herb	Throughout the year	An attractive prostrate spreading herb	Seeds, rooted cuttings
40.	<i>Drymaria cordata</i> Edgew. & Hook. (Puliarai)	Caryophyllaceae	Diffuse herb	Throughout the year	Gorgeous diffuse herb	Seeds, plant cuttings
41.	<i>Elephantopus scaber</i> L. (Anachuvadi)	Asteraceae	Herb	Oct. – Jan.	Good looking habit	Seeds
42.	<i>Emilia sonchifolia</i> (L.) DC. (Muyalcheviyan)	Asteraceae	Herb	Dec. – Apl.	Good looking habit with attractive corolla	Seeds
43.	<i>Euphorbia pulcherima</i> wild. <i>ex</i> Klotzsch.	Euphorbiaceae	Shrub	Dec. – Mar.	Good looking habit	Stem cuttings
44.	<i>Evolvulus alsinoides</i> L. (Vishnukaranti)	Convolvulaceae	Prostrate herb	Throughout the year	An attractive prostrate herb with blue flowers	Seeds
45.	<i>Evolvulus nummularis</i> L.	Convolvulaceae	Herb	Throughout the year	Beautiful prostrate habit with white flowers	Seeds
46.	Ficus benghalensis L.(Peraal)	Moraceae	Tree	Aug. – Nov.	Good looking tree	Seedling
47.	Ficus religiosa L. (Arayal)	Moraceae	Tree	Mar. – Nov.	Good looking tree	Seedling
48.	Gloriosa superba L.	Liliaceae	Herb	Oct Mar.	An attractive vine with good looking flowers	Tuber
49.	<i>Hewittia malabarica</i> (L.) Suresh	Convolvulaceae	Twine	Nov. – Mar.	Charming climbing habit with cute yellow flowers	Seeds
50.	Hibiscus hispidissimus	Malvaceae	Shrub	Sep. – Jan.	Attractive large	Seeds



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	Griff (Matthinpuli)				vellow flowers	
	Omi. (Wattinppun)				Fract attractive	
51	Hibiscus rosa-sinensis L.	Malvaceae	Shrub	Sen – Dec	shrub with red	Stem
	(Chembarathi)	in a court	Sindo	Sep. Dee.	flowers	cuttings
-	Hibiscus schizopetalus					~
52.	(Dyer) Hook. f.	Malvaceae	Shrub	Aug May	An attractive red	Stem
	(Tookuchemparuthi)			<i>c ,</i>	flowers	cuttings
52	Hyptis suaveolens (L.)	Lamiaceae	Sub-	Nov. Ann	Beautiful blue	Saada
55.	Poit.		shrub	Nov. – Apr.	colored flowers	Seeds
					An attractive plant	
54	Impatiens balsamina L.	Balsaminaceae	Herb	Jul – Oct	with red, pink,	Seed
	(Balsam)	Duisuinnaceae	liele	sun oon	purple and white	Seed
					flowers.	
55.	<i>Ipomea cairica</i> (L.) Sweet	Convolvulaceae	Vine	Throughout	Lovely violet	Seeds
	(Kolambipoo)			the year	flowers	
50	Ipomoea obscura L.	Convoluniacoo	Twining	Throughout	Good looking	Saada
50.	(Thiruthali)	Convolvulaceae	Climber	the year	flowers	Seeus
	Inomea nes-triaridis I		Twining	Throughout	Delightful blue	
57.	(Pulichuvadi)	Convolvulaceae	Climber	the year	flowers	Seeds
			~	Throughout	Attractive bunch of	Stem
58.	<i>Ixora coccinea</i> L. (Thechi)	Rubiaceae	Shrub	the year	red flowers	cuttings
				There also	An attractive habit	Stem
59.	(Soomayayanakku)	Euphorbiaceae	Shrub	the year	with beautiful red	cuttings
	(Seemayavanakku)			the year	flowers	or seeds
	Justicia adhatoda Medick	Acanthaceae		Throughout		Stem
60.	(Adalodakam)	ricultureeue	Shrub	the year	An attractive spike	cuttings
					A (
(1	Insting ignoring Thurb	Acanthaceae	Harb	Oat Daa	Attractive nabit	Soada
01.	<i>Justicia Japonica</i> Thuno.		TIELD	Oct. – Dec.	flowers	Seeus
					Attractive	
	Lagerstroemia speciosa	T .1	Medium-	N/ 11	inflorescence with	G 1
62.	(L.) Pers. (Manimaruthu)	Lytharaceae	tree	May. – Jul.	pink or purple	Seeds
					flowers	
	Laucas aspara (Willd)	Lamiacana			Delightful 2-lipped	
63.	Link Enum (Thumba)	Lannaceae	Herb	Nov. – Feb.	white corolla and	Seeds
	Link: Linuin. (Thumba)				habit	
	Melastoma		~	Throughout	An attractive habit	Seeds
64.	malabathricum L.	Melastomaceae	Shrub	the year	with charming	
					violet flowers	
	Monomia tridantata (I.)				An attractive	Sach
65.	(Thelenceli)	Convolvulaceae	Twiner	Dec. – Jan.	prostrate hero with	Seeds
	(I halaneeli)				flowers	
	Merremia umbellata (L.)				Attractive white	Seeds
66.	Hall. (Vavara)	Convolvulaceae	Vine	MarMay	flowers	Seedo
					Charming flowers	G 1
67.	Maniala la	Convolvulaceae	Twiner	Dec Jan.	with lemon yellow	Seeds
	(manjakolambi)				corolla	
68	Mollugo oppositifolia I	Mulluginaceae	Prostrate	Ian – Dec	Good looking habit	Seeds
00.	Louigo oppositiona L.	managinaceae	herb	Juni Dec.		Secus
69.	Murdannia dimorpha	Commelinaceae	Herb	Jul. – Nov.	Beautiful blue	Seeds
	Dalz.				flowers	



70.	<i>Murraya paniculata</i> (L.) Jack. (Maramulla)	Rutaceae	Tree	Throughout the year	Attractive small white scented flowers and red fruits	Seeds
71.	<i>Mussaenda glabrata</i> (Hook.f.) Hutch. <i>ex</i> Gamble (Vellila)	Rubiaceae	Scandent shrub	Apr. – Nov.	Attractive deep yellow flower and good looking leafy sepals	Stem cuttings
72.	<i>Naregamia alata</i> Wight & Arn. (Nilanaragam)	Rutaceae	Woody- herb	Sep. – May	Attractive trifoliate leaves with small white scented flowers	Young seedlings
73.	Orthosiphon aristatus (Blume) Miq. (Poochameesa)	Lamiaceae	Under- shrub	Throughout the year	An attractive white inflorescence	Seed
74.	Passiflora edulis Sims (Passion-fruit)	Passifloraceae	Vine	Throughout the year	Beautiful white- purple flower with good looking habit	Seed
75.	Peltophorum pterocarpum DC.	Caesalpiniaceae	Tree	Jul. – Dec.	Good looking tree with attractive yellow flowers	Seed
76.	<i>Peperomia pellucida</i> (L.) Kunth. (Mashipatcha)	Piperaceae	Succulen t herb	Nov. – Apl.	Beautiful succulent habit	Rooted plantlets
77.	Pennisetum polystachion (L.) Schult.	Poaceae	Herb	Sept. – Dec.	A good looking habit with attractive spike inflorescence	Seeds
78.	Pilea microphylla (L.)	Urticaceae	Succulen t Herb	Throughout the year	Enchanting small succulent herb	Rooted branches
79.	<i>Plumbago zeylanica</i> Linn. (Vellakoduveli)	Plumbaginaceae	Herb	Sep. – Mar.	Chamming white flowers	Stem
80.	Ruellia tuberosa L.	Acanthaceae	Herb	Nov. – Feb.	An attractive violet	Seed
81.	Rubia cordifolia L.	Rubiaceae	Herb	Nov. – Mar.	Good looking	Seeds
82.	Rungia parviflora (L.) Clarke	Acanthaceae	Herb	Sep. – Jan.	Attractive habit with small white flowers	Seeds
83.	Senna alata (L.) Roxb. (Puhukkadikonna)	Caesalpiniaceae	Shrub	Feb. – Dec.	Attractive yellow flowers	Seeds
84.	Senna tora (L.) Roxb. (Thakara)	Caesalpiniaceae	Sub- shrub	Throughout the year	Beautiful yellow flowers	Seed
85.	<i>Sida cordata</i> Burm. f. (Vallikurunthotti)	Malvaceae	Herb	Aug. – Dec.	An attractive prostrate herb with yellow flowers	Seeds
86.	<i>Sida rhombifolia</i> L. (Kurunthotti)	Malvaceae	Shrub	OctMar.	Charming yellow flowers	Seeds
87.	Solanum nigrum sensu (Mani thakkali)	Solanaceae	Herb	Throughout the year	Beautiful purple berry fruits with white flowers	Seed
88.	<i>Spilanthes calva</i> DC. (Kuppamanjal)	Asteraceae	Herb	Oct Nov.	Enchanting yellow florets	Seed
89.	Stachytarpheta jamaicensis L.	Verbanaceae	Herb	Dec. – Mar.	A good looking sessile light blue flowers	Seed



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90.	Tecoma stans L. (Thangarali)	Bignoniaceae	Shrub	Throughout the year	Charming yellow flowers	Stem cuttings, seeds
91.	<i>Thevatia nerifolia</i> Juss <i>ex</i> Steud. (Manja-arali)	Apocynaceae	Tree	Throughout the year	An attractive habit with yellow flowers	stem cuttings
92.	Torena bicolor Dalz. (Kakkapoo)	Scrophulariaceae	Herb	Sept. – Jun.	Beautiful dark blue petals	Seeds
93.	Trianthema portulacastrum L. (Thazhuthama)	Aizoaceae	Semi- succulent herb	Throughout the year	Beautiful prostrate habit	Rooted branches
94.	<i>Triumfetta rhomboidea</i> Jacq.	Tiliaceae	Erect herb	Sept. – May	Pleasing flowers in leaf opposed cymes	Seeds
95.	<i>Urena lobata</i> L. (Uthiram)	Malvaceae	Shrub	Throughout the year	Charming pink flowers	Seed
96.	<i>Vernonia cinerea</i> L. (Puvankurunnila)	Asteraceae	Herb	Nov May	Good looking habit with pink to purple capitula	Seed
97.	<i>Vicoa indica</i> L. (Kammalchedi)	Asteraceae	Herb	Dec Mar.	Charming inflorescence with yellow rays	Seed
98.	Wedelia chinensis (Osbeck) Merr. (Manjakunjunni)	Asteraceae	Herb	Throughout the year	Attractive yellow flowers	Seed



Figure 2. Floristic analysis of ornamental flora of the study area



Fig. 1-B) Map of Kottayam district showing Meenachil Taluk



Figure 3. Dominant ornamental families of the study area

Analysis of dominant families



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CONCLUSION

The results of the present study indicates that the beautiful ornamental potential plants collected from the Meenachil taluk of Kottayam district, Kerala is very important factor for the contribution of biodiversity of an existing area. The lack of suitable management and unsustainable utilization of wild resources may lead it to become rare and endangered. The safe conservation and sustainable uses of wild resources is essential for future generations. Human-induced land use-cover changes have produced profound impacts on landscape and the global biosphere. Now a days a rapid change in the attitudes towards nature in the urban environment, which has led to an increased interest and greater appreciation of the value of nature in cities. Such changes reflect greater awareness of nature amongst the general public and also influence the management of urban green space through gardening. Keeping ornamental plants in indoor not only complement the room furnishing but also create a pleasant environment. Since very ancient time itself man has been enthusiastically engaging in gardening for food and aesthetic purpose and also for merging his dwelling with the natural environment.



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