



**Government Degree College for women  
Sangareddy**

**Best practice**

**Reuse of Waste Rice Bags**

**By**

**DEPARTMENT OF BOTANY**

**Incharge of Botany Department**

**Principal**

**Principal**  
**Govt. Degree College for Women**  
**Sangareddy- 502 001 (T.S)**

## Introduction:

The reuse of waste rice bags activity started by Botany department on 10th February- 2021. The reuse of waste rice bags is one of the best ways to reduce the pollution on this earth. This waste rice bags are best for the plants that do not have deep roots. Different sizes of rice bags are available to prepare as plant grow bags. We can use these bags as ideal containers.

### Method of preparing the waste rice bags as grow bag:

Be sure to use nylon thread waste rice bags instead of cotton which will deteriorate fast. Fill the rice bags with soil until there is 2 feet of soil in bag. Arrange the soil so that the bag becomes flat on the ground and plant the saplings. Place this grow bags on the bricks. Check the moisture in the bag daily by stickling the finger into the soil. If the top one inch of soil feels dry then water thoroughly until the moisture begins dripping from the bottom of the waste rice bag. Finally roll up the sides of the bag as the plant grows.

### Benefits of using waste rice bags:

- ✓ These bags are readily available and inexpensive
- ✓ As the plastic pots are heavy and difficult to move grow bags are easy to move as they are light weight,
- ✓ They are breathable and drain well unlike plastic pots
- ✓ Allows the air to reach the roots
- ✓ The compost in the bag should not get too compact, keep it loose by shaking and kneading like a pillow
- ✓ Grow bags are porous and drain fast.
- ✓ This helps in beautification and also purifies the air

Initially 20 grow bags were prepared and kept in front of the departments in the science corridor. This practice will encourage our college students to reuse the waste rice bags as ~~grow bags~~ grow bags of plants in their homes which reduce the pollution to some extent.







**Government Degree College for women  
Sangareddy**

**Best practice**

**Nutritional value of leafy vegetables**

**By**

**DEPARTMENT OF BOTANY**

**Incharge of Botany Department**

**Principal  
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**Govt. Degree College for Women  
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## **Introduction:**

Leafy green vegetables are an important part of a healthy diet. They're packed with vitamins, minerals and dietary fibre but low in calories. Eating diet rich leafy greens can offer numerous health benefits including reduced risk of obesity, heart disease, high blood pressure and mental disorders. Vegetables are important for human nutrition in terms of bioactive molecules. They are considered as an essential part of the diet to meet the daily nutrient requirements.

## **Objectives:**

- ✓ to reduce malnutrition
- ✓ to create the awareness of more consumption of leafy vegetables
- ✓ to create the awareness about the wild leafy vegetables which are rich in various nutrients
- ✓ to promote the sustainable utilization of leafy vegetables to achieve nutritional security

## **Method:**

- The leafy vegetables were collected by the faculty and students of this college from the local market, wild varieties from other areas and prepared the herbarium.
- The data of nutritional value of leafy vegetables collected from UCF Project and nutritional value, National Institute of Nutrition, Hyderabad analysis through the available internet online sources.
- The data is displayed in the Department of Botany for the purpose of the students and others to know about leafy vegetables.

The above practice started in the month of March 2020 and it is continued till now.

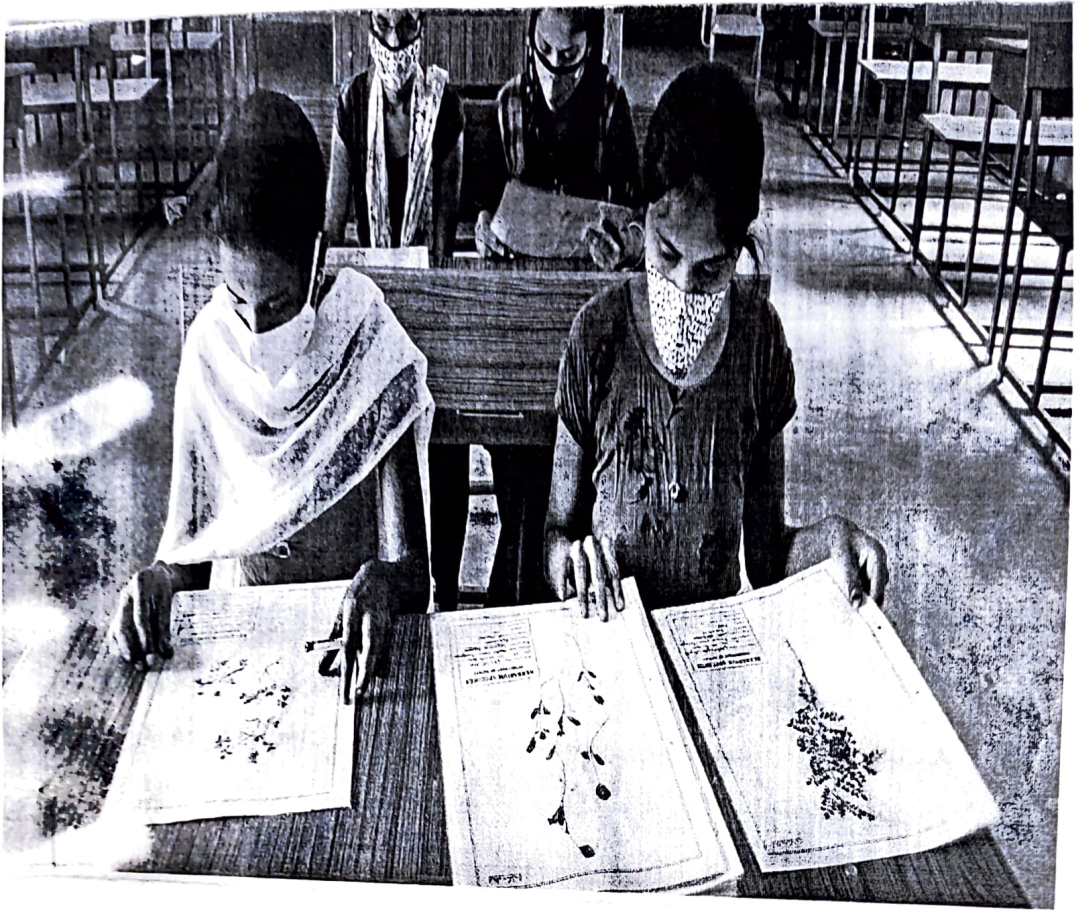
## **Reference:**

[https://www.mcgill.ca/cine/files/cine/Dalit\\_Datatables\\_leafyvegs\\_Jn06.pdf](https://www.mcgill.ca/cine/files/cine/Dalit_Datatables_leafyvegs_Jn06.pdf)

The following list of leafy vegetables are available:

S.No	Common Name	Scientific Name	Family	Cultivated/wild
1	Bengal gram	Cicer arletinum	Fabaceae	cultivated
2	Pulichinta	Oxalis corniculata	Oxalidaceae	wild
3	purvuthotakura	Amaranthus viridis	Amaranthaceae	wild
4	Pongaganti kura	Alternanthera sessilis	Amaranthaceae	wild
5	fenugreek	Trigonella foenum	Fabaceae	cultivated
6	mint	Mentha spicata	Lamiaceae	cultivated
7	Chukka kura	Rumex vesicarius	Polygonaceae	cultivated
8	Rajgiri kura	Amaranthus paniculatus	Amaranthaceae	cultivated
9	Guntagalaraku	Eclipta alba	Asteraceae	wild
10	Mullathota kura	Amaranthus spinosus	Amaranthaceae	wild
11	karepaku	Murraya koenigii	Rutaceae	cultivated
12	Coriander/kotimira	Coriander sativum	Apiaceae	cultivated
13	Onion springs/ulliparaka	Allium cepa	Liliaceae	cultivated
14	Palakura/spinach	Spinacia oleracea	Amaranthaceae	cultivated
15	tummikura	Leucas aspera	Lamiaceae	wild
16	Pindi kura	Aerva lanata	Amaranthaceae	wild
17	San hemp/gongura	Hibiscus cannabinus	Malvaceae	cultivated
18	Tamarind	Tamarindus indicus	Caesalpiaceae	wild
19	Tella garjala	Trianthema decandra	Aizoaceae	wild
20	Tentem kura	Cassia tora	Caesalpiaceae	Wild
21	Silleru kura	Physalis minima	Solanaceae	wild
22	Peddathota kura	Amaranthus gangeticus	Amaranthaceae	wild
23	Gangavall kura	Portulaca oleracea	Portulacaceae	cultivated
24	Uthareni	Achyranthes asera	Ameranthaceae	wild
25	Bachali	Basella alba	Basellaceae	wild







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Sangareddy**

**HERBAL GARDEN**

**By**

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Principal

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## Introduction:

The significant part of knowledge and tradition is currently being eroded due to modernization and availability of alternatives. Therefore, it is necessary to inculcate young minds to realize the fascinating knowledge and tradition associated with plant resources, and helps them understand the medicinal value of local available plants.

Students where they got the opportunity to learn about the medicinal plants by actually planting the medicinal herbs and watching them grow in their gardens, and by exploring information about them from various sources

Herbal garden was established in 2018-19 academic year in the month of July-2018 and it is well maintained.

## Objectives:

- To encourage and promote 'Herbal Garden.' concept and provide them an opportunity to work closely with herbal plants.
- To inculcate a sense of familiarity with surrounding biodiversity and its conservation, especially herbal plants
- To educate students in identifying different types of herbs and their uses
- To encourage students to develop such herbal gardens in their house.
- To popularize the usefulness of commonly available and frequently used herbal plants
- to conserve the associated traditional knowledge for future generations,

An herbal garden reflects the long standing tradition of conserving and using plants products for health care and cooking.

Making a herbal garden is an opportunity to grow herbs for use, while spreading knowledge of their importance and traditional uses, and saving plants.

## Plan of herbal garden:

The area about 50ftX 6 ft is selected in front of science block to establish the herbal garden. The plot area was divided into small plots .locally available herbal plants are grown in plots.

Due to pandemic COVID-19 lockdown was imposed from March 2020 since then college campus was closed till Sep-2020.

Later when the college was reopened most of the herbal plants were dried up due to lack of providing water and protection from the cattle. Then we started again to restore the garden in full scale. Since then we have been maintaining the garden till now

# Ginger



**Common Name : Ginger (Alia)**

**Scientific name : *Zingiber officianalis***

**Family: Zingiberaceae**

**Useful parts : Rhizome**

**Medicinal uses:**

- ✓ **To treat nausea**
- ✓ **Helps in weight loss**
- ✓ **Reduces cold and flu**
- ✓ **Good for heart**
- ✓ **Treats inflammation**
- ✓ **Improves brain function**
- ✓ **Treats muscle pain**
- ✓ **Treats indigestion**
- ✓ **Protects liver**
- ✓ **Reduces cholesterol levels**
- ✓ **Kills bad bacteria**



# Government Degree College for Women, Sangareddy

## Department of Botany

### Botanical Garden

Botanical garden is the collection of live plants used for the purpose of education, studying the characters, display, research, conservation, recreation etc. Earlier we have small botanical garden of 500 sq.ft which was destroyed due to construction work and also due to lack of protection from cattle. Later it was restored in front of the administrative block in the month of December 2019. The new botanical garden was established with an area of about 840 sq ft (56ftx15ft) with water facility and protection. Every year we add other species to a botanical garden to enhance the diversity. This year 2021-22 we added five species.

The garden consists of various groups of plants like nonflowering plants - Pteridophytes, flowering plants - Gymnosperms and Angiosperms that includes dicots and monocots. At present consists of 45 species which represents 37 families.

#### List of plants of our botanical garden

Common name	Scientific name	Family	Group
Fish tail fern	<i>Nephrolepis biserrata</i>	Nephrolepidaceae	Pteridophyte
Sago palm	<i>Cycas revoluta</i>	Cycadaceae	Gymnosperms
Colonial pine	<i>Araucaria cunninghamii</i>	Araucariaceae	Gymnosperms
Gold c	<i>Cupressus macrocarpa</i>	Cupressaceae	Gymnosperms
Champak/ sampenga	<i>Magnolia champaca</i>	Magnoliaceae	Angiosperms-dicot
Teega sampenga/ harichampa	<i>Artabotrys odoratissimus</i>	Annonaceae	Angiosperms-dicot
China rose	<i>Hibiscus rosa-sinensis</i>	Malvaceae	Angiosperms-dicot
Cotton rose	<i>Hibiscus mutabilis</i>	Malvaceae	Angiosperms-dicot
Rose	<i>Rosa indica</i>	Rosaceae	Angiosperm -dicot
Puvelaga	<i>Murraya paniculata</i>	Rutaceae	Angiosperms-dicot
Scrub cherry	<i>Syzygium australe</i>	Myrtaceae	Angiosperms- dicot
Touch me not	<i>Mimosa pudica</i>	Mimosaceae	Angiosperms-dicot
Red sander /yerrachandanam	<i>Pterocarpus santalinus</i>	Fabaceae(S.S)	Angiosperms- dicot
Sandal wood	<i>Santalum album</i>	Santalaceae	Angiosperms- dicot
Star fruit	<i>Averrhoa carambola</i>	Oxalidaceae	Angiosperms- dicot
Devaganneru	<i>Plumeria rubra</i>	Apocynaceae	Angiosperms-dicot
Temple tree	<i>Plumeria pudica</i>	Apocynaceae	Angiosperms- dicot
Desert rose	<i>Adenium obesum</i>	Apocynaceae	Angiosperms-dicot

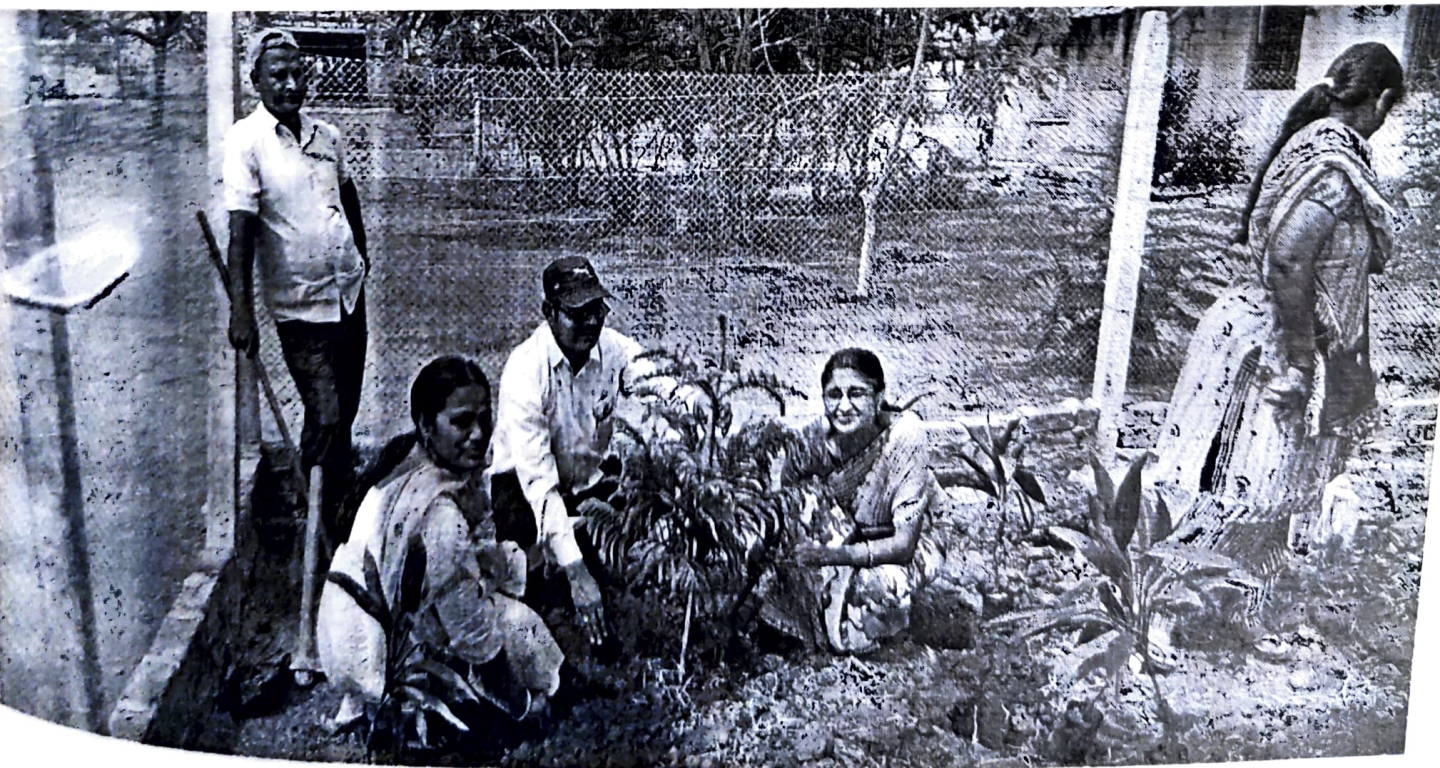


malipincham	<i>Coleus blumei</i>	Lamiaceae	Angiosperm-dicot
rijatham	<i>Nyctanthes arbor-tristis</i>	Oleaceae	Angiosperms-dicot
white sky vine	<i>Thunbergia grandiflora</i>	Acanthaceae	Angiosperms-dicot
the morning	<i>Ipomoea indica</i>	Convolvulaceae	Angiosperm-dicot
ry ange flame vine	<i>Bignonia tecomiflora</i>	Bignoniaceae	Angiosperms-dicot
low bells	<i>Tecoma stans</i>	Bignoniaceae	Angiosperms-dicot
anku pushpam	<i>Clitoria ternatea</i>	Fabaceae(s.s)	Angiosperms-dicot
ng pod rslane	<i>Portulaca umbraticola</i>	Portulacaceae	Angiosperms-dicot
ble rose	<i>Portulaca grandiflora</i>	Portulacaceae	Angiosperm-dicot
leeping fig	<i>Ficus benjamina</i>	Moraceae	Angiosperms- dicot
adian rubber tree	<i>Ficus elastica</i>	Moraceae	Angiosperms-dicot
jeer	<i>Ficus carica</i>	Moraceae	Angiosperms-dicot
d passion wer	<i>Passiflora coccinea</i>	Passifloraceae	Angiosperms-dicot
nk mussaenda	<i>Mussaenda philippica</i>	Rubiaceae	Angiosperms-dicot
rebrush	<i>Hamelia patens</i>	Rubiaceae	Angiosperms-dicot
aisy	<i>Gazania rigens</i>	Asteraceae	Angiosperms-dicot
roton fir	<i>Codiaeum variegatum</i>	Euphorbiaceae	Angiosperms-dicot
roton gold dust	<i>Codiaeum variegatum</i>	Euphorbiaceae	Angiosperms-dicot
namadumpa	<i>Colacasia esculenta</i>	Araceae	Angiosperms-dicot
laming katy	<i>Kalanchoe blossfeldiana</i>	Crassulaceae	Angiosperm -dicot
nsulin plant	<i>Costus igneus</i>	Costaceae	Angiosperms- monocots
ragon plant	<i>Dracaena marginata</i>	Liliaceae	Angiosperms- monocot
Ti plant	<i>Cordyline fruticosa</i>	Asparagaceae	Angiosperms- monocot
Boat lily	<i>Tradescantia spathacea</i>	Commelinaceae	Angiosperms- monocot
Vakka	<i>Areca catechu</i>	Arecaceae	Angiosperms- monocot
Golden bamboo	<i>Bambusa vulgaris</i>	Poaceae	Angiosperms- monocot





**Installing the cement poles for fencing the garden.**



**Planting the saplings by our staff**



# GOVERNMENT DEGREE COLLEGE FOR WOMEN, SANGAREDDY

## TREE AUDIT REPORT

To create green cover, eco-friendly atmosphere, pure oxygen at the college campus, plantation program is organized every year by involving all students, principal, and the faculty of all departments. Many plant species are present at college campus. The faculty member of the botany department along with office subordinate audited on 18-06-2021 and 19-06-2021 and identified various plant species with the help of flora.

List of plant species observed in the campus during the field visit

S.NO	Local name	Botanical name	Family	Habit
1	Devakanchanam	<i>Bauhinia purpurea</i>	Caesalpiniaceae	Tree
2	Naramamidi	<i>Polyalthia longifolia</i>	Annonaceae	Tree
3	Gulmohar	<i>Delonix regia</i>	Caesalpiniaceae	Tree
4	Kanuga	<i>Derris indica</i>	Fabaceae	Tree
5	Eppa	<i>Madhuca longifolia</i>	Sapotaceae	Tree
6	Neem	<i>Azadirachta indica</i>	Meliaceae	Tree
7	Deerisena/Shirish	<i>Albizzia lebeck</i>	Mimosaceae	Tree
8	Tellatumma	<i>Leucaena leucocephala</i>	Mimosaceae	Tree
9	Teak	<i>Tectona grandis</i>	Verbenaceae	Tree
10	Badam	<i>Terminalia catappa</i>	Combretaceae	Tree
11	Regu	<i>Zizypus mauritiana</i>	Rhamnaceae	Tree
12	Copper Pod	<i>Peltophorum pterocarpum</i>	Caesalpiniaceae	Tree
13	Papaya	<i>Carica papaya</i>	Caricaceae	Tree
14	Guava	<i>Psidium guajava</i>	Myrtaceae	Tree
15	Karepaku	<i>Murraya koenigii</i>	Rutaceae	Tree
16	Silver Oak	<i>Grevillia robusta</i>	Proteaceae	Tree
17	Seemachinta	<i>Pithecellobium dulce</i>	Caesalpiniaceae	Tree
18	Nemalinara	<i>Holoptelea integrifolia</i>	Ulmaceae	Tree
19	Usiri	<i>Phyllanthus emblica</i>	Euphorbiaceae	Tree
20	Custard Apple	<i>Annona squamosa</i>	Annonaceae	Tree
21	Neredu	<i>Syzygium cumini</i>	Myrtaceae	Tree
22	Citrus	<i>Citrus aurantium</i>	Rutaceae	Tree
23	Tamarind	<i>Tamarindus indica</i>	Caesalpiniaceae	Tree
24	Drumstick	<i>Moringa oleifera</i>	Moringaceae	Tree
25	Coconut	<i>Cocos nucifera</i>	Arecaceae	Tree
26	Castor	<i>Ricinus communis</i>	Euphorbiaceae	Shrub
27	Devil's tree	<i>Alstonia scholaris</i>	Apocynaceae	Tree
28	Shisham	<i>Dalbergia sissoo</i>	Fabaceae	Tree

29	Acacia	<i>Prosopis juliflora</i>	Mimosaceae	Tree
30	Yellow Oleander	<i>Thevetia peruviana</i>	Apocynaceae	Tree
31	Nandivardhanam	<i>Tabernaemontana divaricata</i>	Apocynaceae	Shrub
32	Mehendi	<i>Lawsonia inermis</i>	Lythraceae	Shrub
33	Kadamalle	<i>Millingtonia hortensis</i>	Bignoniaceae	Tree
34	Yellow Trumpet	<i>Tabebuia aurea</i>	Bignoniaceae	Tree
35	Neeti Budda	<i>Spathodea companulata</i>	Bignoniaceae	Tree
36	Nidra Saperu/cow tamarind	<i>Samanea saman</i>	Mimosaceae	Tree
37	Paper flower	<i>Bougainvillea spectabilis</i>	Nyctaginaceae	shrub
38	Nuruvarahalu	<i>Ixora coccinea</i>	Rubiaceae	shrub
39	Day Jasmine	<i>Cestrum diurnum</i>	Solanaceae	shrub
40	Milk Weed	<i>Calotropis gigantea</i>	Asclepiadaceae	shrub
41	Taani	<i>Terminalia bellirica</i>	Combretaceae	Tree
42	Tippateega	<i>Tinospora cordifolia</i>	Menispermaceae	climber
43	Pomegranate	<i>Punica granatum</i>	Lythraceae	shrub
44	Weeping Fig	<i>Ficus benamina</i>	Moraceae	shrub
45	Madri	<i>Gliricidia sepium,</i>	Fabaceae	Tree
46	Chettu tangedu	<i>Cassia siamea</i>	Caesalpiaceae	Tree
47	Kapok tree	<i>Ceiba pentandra</i>	Malvaceae	Tree
<b>Common plants</b>				
48	Gabbutulasi	<i>Hyptis suaveolens</i>	Lamiaceae	Shrub
49	Congress weed	<i>Parthenium hysterophorus</i>	Asteraceae	Herb
50	Pacchabotlu	<i>Euphorbia hirta</i>	Euphorbiaceae	Herb
51	Vempali	<i>Tephrosia purpurea</i>	Fabaceae	Herb
52	Paileru	<i>Tribulus terrestris</i>	Zygophyllaceae	Herb
53	Purnarva	<i>Boerhaavia diffusa</i>	Nyctaginaceae	Herb
54	kalabanda	<i>Aloe vera</i>	Liliaceae	Herb
55	Mulluponaganti	<i>Alternanthera pungens</i>	Amaranthaceae	Herb
56	Adavi ponaganti	<i>Alternanthera tenella</i>	Amaranthaceae	Herb
57	Garika	<i>Cynodon dactylon</i>	Poaceae	Herb
58	Tellagajjala kura	<i>Trianthema portulacastrum</i>	Aizoaceae	Herb
59	Radhamanoharam	<i>Quisqualis indica</i>	Combretaceae	climber



