

HERBAL GARDEN

- SOP
- LIST OF MEDICINAL PALNTS
- LIST OF QR CODES OF MEDICINAL PLANTS

Standard Operating Procedure (SOP) for Herbal Garden

1. Title of the SOP

Standard Operating Procedure for the Establishment and Maintenance of a Herbal Garden

2. Purpose

This SOP outlines the standardized practices for the establishment, management, and utilization of a herbal garden in the college campus. It aims to promote environmental sustainability, educational enrichment, and research opportunities related to medicinal and aromatic plants.

3. Scope

This procedure applies to all departments and individuals involved in the planning, implementation, and use of the herbal garden, particularly within the domains of pharmacy, botany, Ayurveda, and environmental sciences.

4. Responsibility Matrix

Designation	Role/Responsibility
Principal / Head of College	Overall supervision and policy approval
Herbal Garden Committee	Planning, implementation, periodic review, and plant selection
Faculty Coordinators	Supervision of students, curriculum integration, and awareness programs
Gardener / Groundskeeper	Daily maintenance, watering, weeding, and composting
Students / Volunteers	Active participation in planting, upkeep, and educational activities

5. Site Selection and Layout

Select a sunny location with access to water and proper drainage. Fence the area to prevent encroachment or grazing. Plan pathways, plots, labeling boards, and irrigation systems. Include a shade house or greenhouse if required for delicate species.

6. Selection of Plants

Choose species based on:

- Medicinal relevance: e.g., *Ocimum sanctum* (Tulsi), *Azadirachta indica* (Neem), *Aloe vera*, *Phyllanthus emblica* (Amla), *Zingiber officinale* (Ginger), *Murraya koenigii* (Curry leaves), etc.
- Climatic adaptability
- Curriculum requirement
- Availability of planting material



7. Plantation Guidelines

Prepare raised beds using loamy soil mixed with organic compost. Use scientific spacing, and group species according to families or uses. Label each plant with a botanical name, common name, family, and therapeutic use. Plant during appropriate seasonal windows.

8. Maintenance Protocol

- Watering: Once daily or as per seasonal need
- Weeding: Weekly or bi-weekly
- Fertilization: Use only organic manure or compost
- Pest Control: Use bio-pesticides or neem-based formulations
- Pruning: As required to encourage growth

9. Record-Keeping and Documentation

Maintain a Herbal Garden Logbook including:

- List of plants with scientific details
- Source of planting material
- Planting and maintenance dates
- Usage records for academics
- Photographic documentation

10. Educational and Research Integration

Incorporate garden visits in curriculum and practical sessions. Use for student research and herbal drug identification. Organize awareness events and exhibitions.

11. Safety and Environmental Guidelines

Ensure safe handling of tools. Avoid hazardous chemicals. Encourage eco-friendly and zero-waste gardening practices.

12. Review and Evaluation

Conduct annual evaluation by the Herbal Garden Committee. Assess plant survival, maintenance, and student participation. Implement improvements as needed.

13. Annexure (Optional Attachments)

- Sample Layout Plan
- Plant List Template
- Maintenance Checklist
- Logbook Sample Pages



LIST OF MEDICINAL PLANTS

<u>S.No.</u>	<u>Botanical Name</u>	<u>Common Name</u>	<u>Family</u>	<u>Uses</u>
1	<i>Calendula officinalis</i>	Pot marigold	Asteraceae	Dermatitis & Wound healing
2	<i>Aloe barbadensis</i>	Aloe vera	Asphodelaceae	Antioxidant
3	<i>Curcuma longa</i>	Turmeric	Zingiberaceae	Antiseptic & Anti-Inflammatory
4	<i>Aegle marmelos</i>	Bael	Rutaceae	Diarrhoea & Dysentery
5	<i>Murraya koenigii</i>	Curry leaves	Rutaceae	Anemia
6	<i>Crassula ovata</i>	Jade plant	Crassulaceae	Antiseptic
7	<i>Rosa rubiginosa</i>	Rose	Rosaceae	Antidepressant
8	<i>Ocimum basilicum</i>	Green Tulsi	Lamiaceae	Anti-Inflammatory
9	<i>Euphorbia lactea</i>	Dragon bone	Euphorbiaceae	Anti-Inflammatory
10	<i>Syzygium cumini</i>	Java plum	Myrtaceae	Treatment Of Asthma
11	<i>Euphorbia tithymeloides</i>	Devil's backbone	Euphorbiaceae	Insecticidal
12	<i>Citrus cavaleriei</i>	Sweet orange	Rutaceae	Antibacterial & Antifungal
13	<i>Ficus benjamin</i>	Benji	Ficaceae	Anti-Epileptic
14	<i>Tabernanthe iboga</i>	Eboka	Apocynaceae	Neurological disorder
15	<i>Saraca indica</i>	Ashoka tree	Fabaceae	Antibacterial
16	<i>Brassica oleracea</i>	Kale Casper	Brassicaceae	Treat Bowel Ailments
17	<i>Jacobaea maritima</i>	Silver Ragwort	Asteraceae	Laxative & Anti-Cancer
18	<i>Digitalis purpurea</i>	foxglove	Plantaginaceae	Anti arrhythmic
19	<i>Phyllanthus emblica</i>	Amla	Euphorbiaceae	Hepatoprotective
20	<i>Withania somnifera</i>	Ashwagandha	Solanaceae	Immunomodulator
21	<i>Mentha piperita</i>	Pudina	Lamiaceae	Antioxidant
22	<i>Chlorophytum borivilianum</i>	Safed Musli	Liliaceae	Arthritis
23	<i>Cymbopogon citratus</i>	Lemon Grass	Poaceae	Antioxidant
24	<i>Chamaecostus cuspidatus</i>	Insulin	Costaceae	Anti-diabetic
25	<i>Jasminum officinale</i>	Chameli	Oleaceae	Hepatitis & Liver cirrhosis
26	<i>Hibiscus Rosa-sinensis</i>	Gudhal	Malvaceae	Anti-spasmodic& Antioxidant
27	<i>Catharanthus roseus</i>	Sadabahar	Apocynaceae	Anti diabetic
28	<i>Trachyspermum ammi</i>	Ajwain	Apiaceae	Antispasmodic
29	<i>Azadirachta Indica</i>	Neem	Meliaceae	Antioxidant
30	<i>Bryophyllum pinnatum</i>	Dard Path	Crassulaceae	UTI infection & kidney stones
31	<i>Senna angustifolia</i>	Senna	Leguminosae	Laxative
32	<i>Terminalia bellirica</i>	Baheda	Combretaceae	Ulcers & Respiratory infections



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33	<i>Syngonium podophyllum</i>	Syngonium	Araceae	Antibacterial
34	<i>Justicia adhatoda</i>	Adusa	Acanthaceae	Expectorant & Antispasmodic
35	<i>Thymus vulgaris</i>	Thyme	Lamiaceae	Analgesic & Anti-inflammatory
36	<i>Salvia rosmarinus</i>	Rosemary	Lamiaceae	Neurological disorders
37	<i>Pterocarpus santalinus</i>	Red sandalwood	Leguminosae	Antipyretic & Dermatitis
38	<i>Andrographis paniculata</i>	Kalmegh	Acanthaceae	Anti-diabetic & Hepatoprotective
39	<i>Asparagus racemosus</i>	Shatavari	Asparagaceae	Infertility & Anxiety
40	<i>Glycyrrhiza glabra</i>	Liquorice	Fabaceae	Anti-tussive

NEWLY ADDED PLANTS

41	<i>Prosopis cineraria</i>	Shami	Fabaceae	Toothache & skin disorder
42	<i>Carica papaya</i>	Papaya	Caricaceae	Digestive & skin disorder
43	<i>Psidium guajava</i>	Guava	Myrtaceae	Diabetes
44	<i>Plumeria rubra</i>	Champa	Apocynaceae	Diuretic & stress management
45	<i>Calotropis gigantea</i>	Indian madar	Apocynaceae	Respiratory & digestive disorder
46	<i>Centella asiatica</i>	Indian pennywort	Apiaceae	Blood purification
47	<i>Eryngium foetidum</i>	Saw toothed coriander	Apiaceae	Detoxification
48	<i>Elephantopus scaber</i>	elephant's foot.	Asteraceae	anti-inflammatory, antidiabetic
49	<i>Kalanchoe pinnata</i>	Patharchatta	Bryophyllum pinnatum	Wound and anti-pyretic
50	<i>Brassica oleracea</i>	Kale Casper	Brassicaceae	supporting immunity, bone health,
51	<i>Withania somnifera</i>	Ashwagandha	Solanaceae	stress and anxiety reduction, sleep improvement
52	<i>Citrus limon</i>	Lemon plant	Rutaceae	boosting immunity, aiding digestion.
53	<i>Cinnamomum verum</i>	cinnamon	lauraceae	antioxidant, anti-inflammatory, and antimicrobial properties.
54	<i>Stevia rebaudiana</i>	Stevia	Asteraceae	managing blood sugar, blood pressure
55	<i>Piper sirihoa L.</i>	Betel plant	Piperaceae	digestive aid and oral hygiene to pain relief and wound healing
56	<i>Moringa oleifera</i>	Moringa	Moringaceae	antioxidant, anti-inflammatory, and antibacterial.
57	<i>Rubus idaeus</i>	Raspberry	Rosaceae	provide potassium, essential to heart function
58	<i>Gymnema sylvestre</i>	Gudmar	Asclepiadaceae	Diabetes, improves cholesterol levels. Regulates blood sugar
59	<i>Salvia rosmarinus</i>	Rosemary	Lamiaceae	digestion, hair, and pain
60	<i>Codiaeum variegatum</i>	Croton	Euphorbiaceae	malaria, fever, inflammation, and digestive problems



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61	<i>Lilium michiganense</i>	lily	Liliaceae	treating conditions like inflammation, coughs
62	<i>Aloe barbadensis</i> Miller.	Aloevera	Asphodelaceae	treating skin conditions, reducing inflammation, and improving digestion.
63	<i>Syngonium podophyllum</i>	Syngonium	Araceae	treating stomach ache, wound healing,
64	<i>Cymbopogon citratus</i>	Lemon grass	Poaceae	aiding digestion, reducing fever and inflammation,
66	<i>Chamaecostus cuspidatus</i>	Insulin	Costaceae	managing diabetes.
67	genus <i>Tagetes</i>	Mary gold	Asteraceae	anti-inflammatory, antiseptic, and wound-healing properties.
68	<i>Bergera koenigii</i>	Curry leave	Rutaceae	promoting hair health, and potentially aiding in blood sugar.
69	<i>Lamium purpureum</i> L.	lavender	Lamiaceae	aiding in relaxation, reducing anxiety and stress, Promoting sleep.
70	<i>Trachyspermum ammi</i>	ajwain	Apiaceae	digestive health, respiratory issues, and pain relief.
71	<i>Murraya paniculata</i>	Madhukamani	Rutaceae	wound healing, insect bite relief, and potential anti-diarrheal.
74	<i>Psidium guajava</i>	Guava	Myrtaceae	treating digestive issues, boosting immunity.



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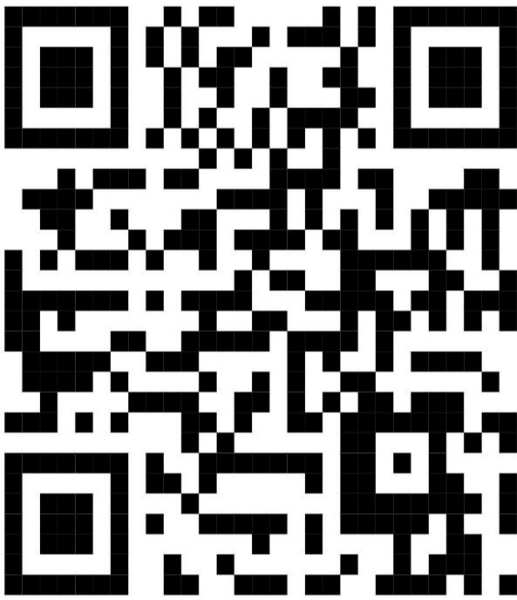
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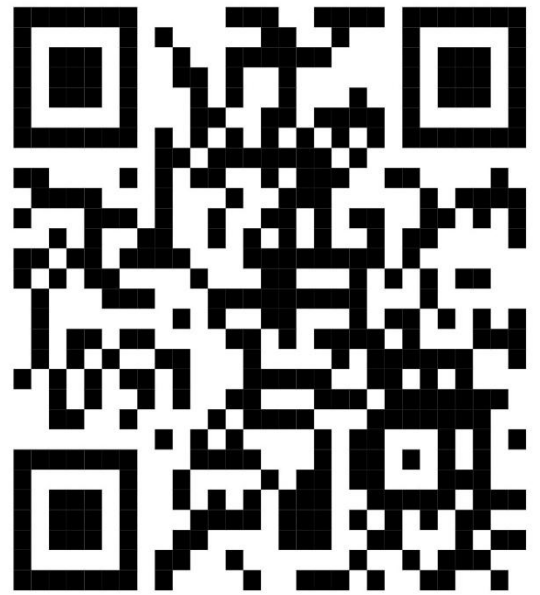
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**CYMBOGOPON
CITRATUS(LEMON GRASS)**



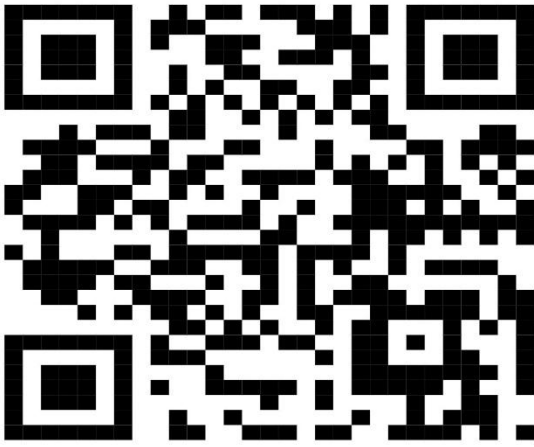
**ALOE BARBADENSIS(ALOE-
VERA)**



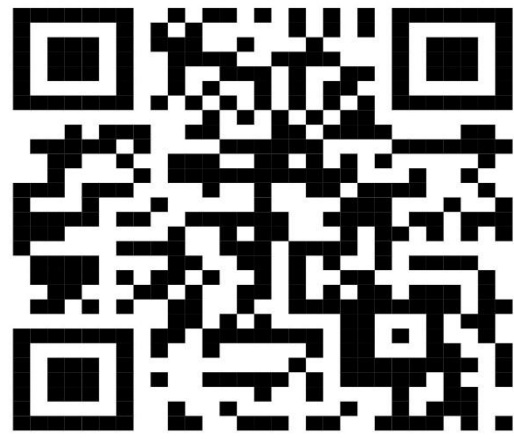
**BRASSICA OLERACEA(KALE
CASPER)**



**ANDROGRAPHIS
PANICULATA(KALMEGH)**



**CRASSULA
OVATA(JADE PLANT)**



**CHAMAECOSTUS
CUSPIDATUS(INSULIN)**



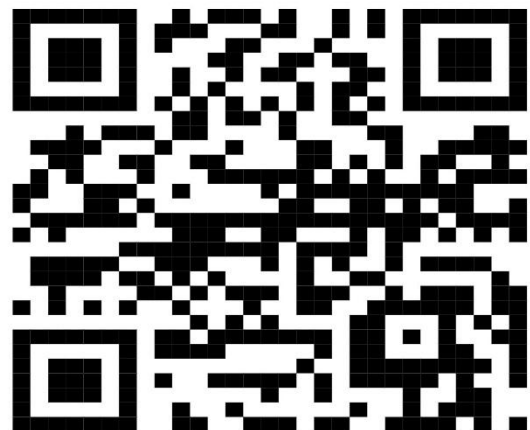
AEGLE MARMELOS(BAEL)



**CITRUS CAVALERIEI(SWEET
ORANGE)**



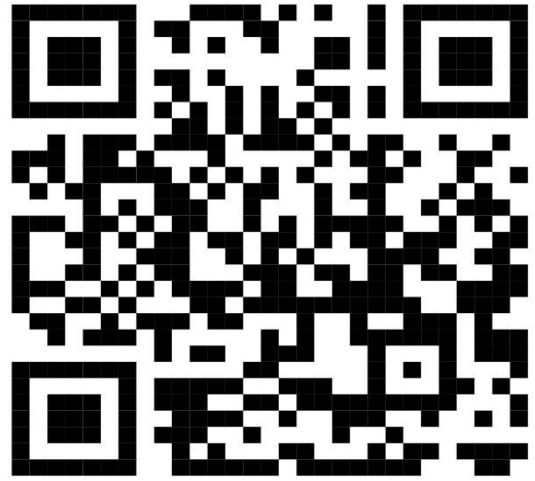
**CALENDULA OFFICINALIS(POT
MARIGOLD)**



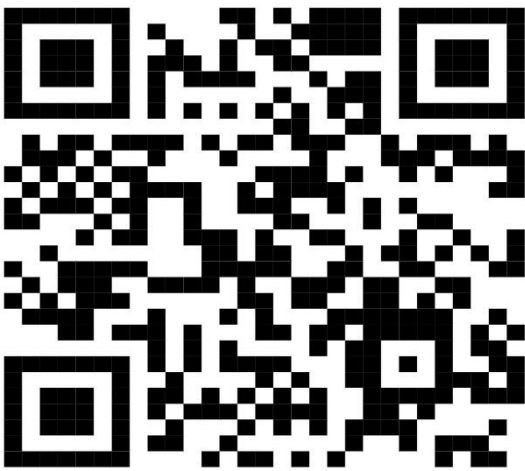
**SARACA INDICA (ASHOKA
TREE)**



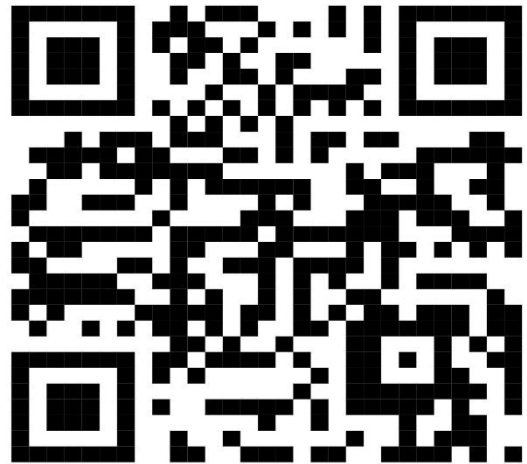
**JACOBAEA MARITIMA(SILVER
RAGWORT)**



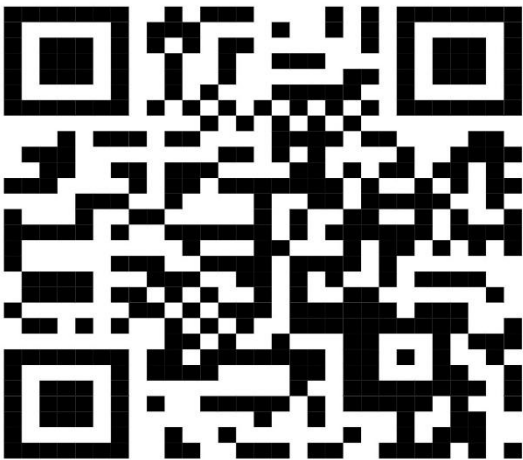
**ASPARAGUS
RACEMOSUS(SHATAVARI)**



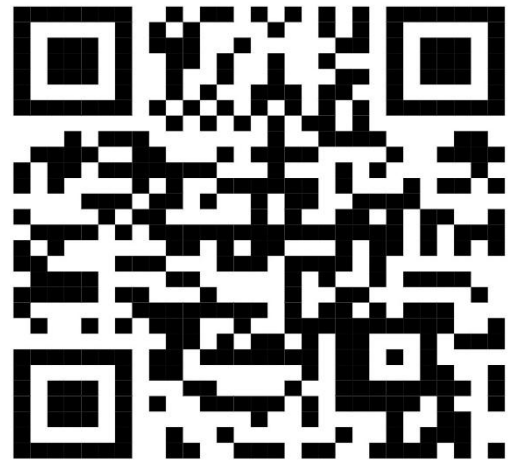
**EUPHORBIA LACTEA(DRAGON
BONE)**



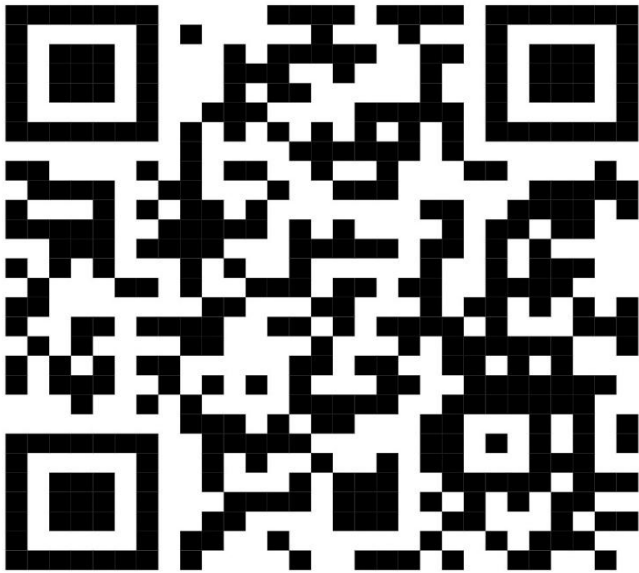
**BRYOPHYLLUM
PINNATUM(DARD PATH)**



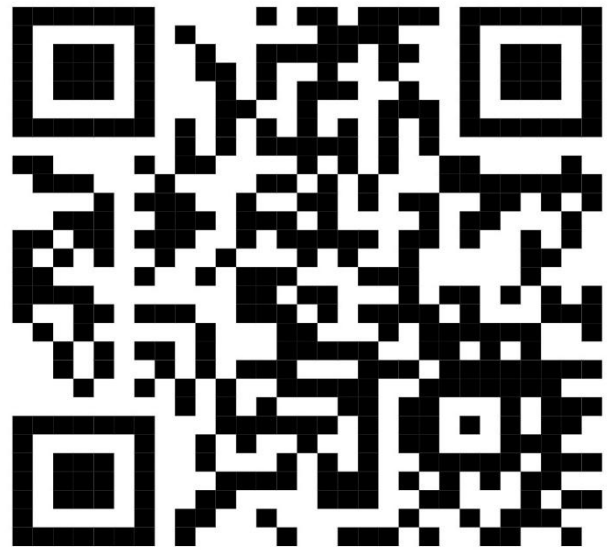
**CATHARANTHUS
ROSEUS(SADABAHAR)**



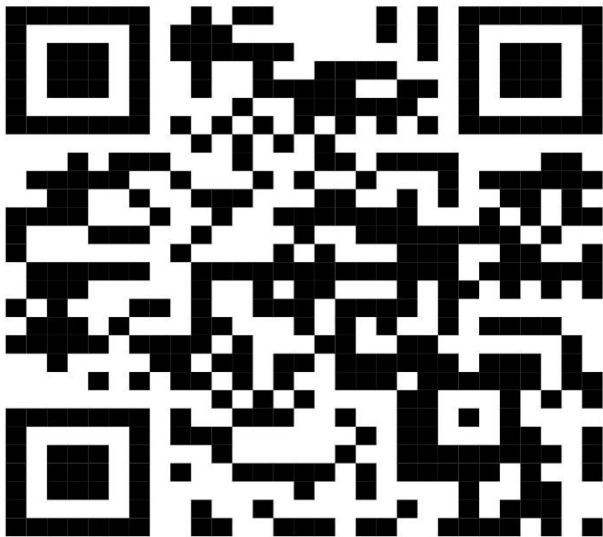
**SALVIA
ROSMARINUS(ROSEMARY)**



**SYNGONIUM
PODOPHYLLUM(SYNGONIUM)**



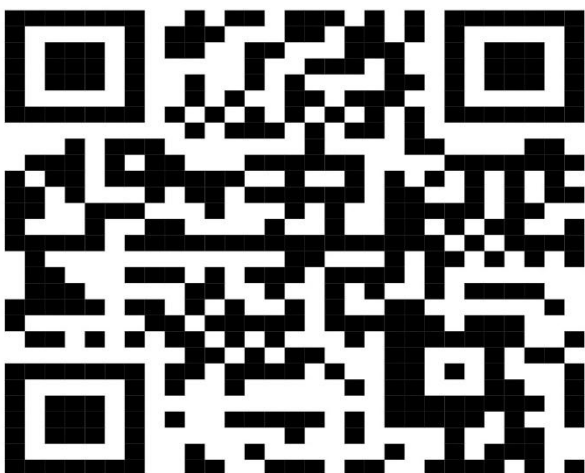
**JASMINUM
OFFICINALE(CHAMELI)**



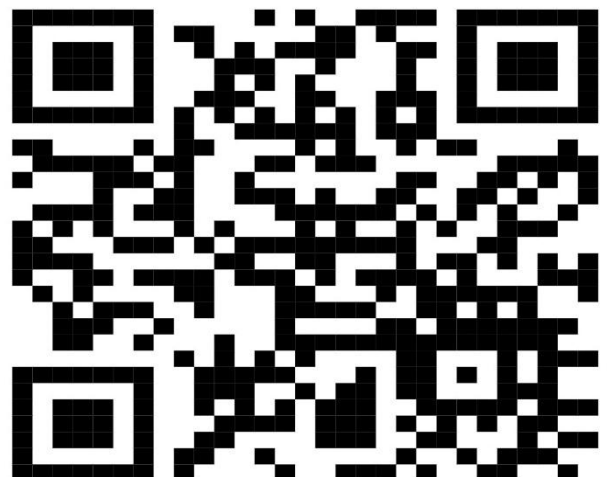
PHYLLANTHUS EMBLICA(AMLA)



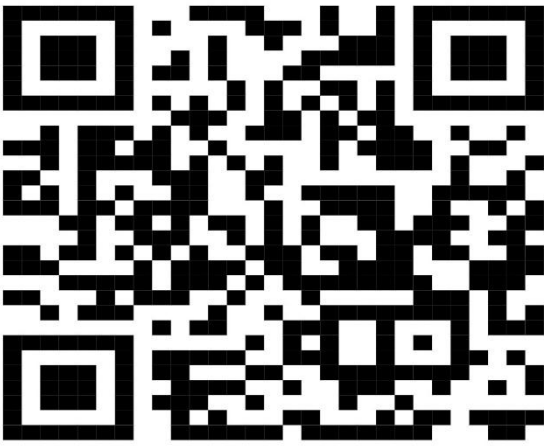
**CHLOROPHYTUM
BORIVILIANUM(SAFED MUSLI)**



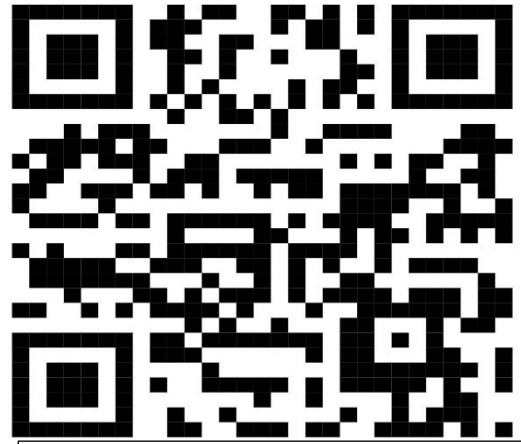
ROSA RUBIGINOSA(ROSE)



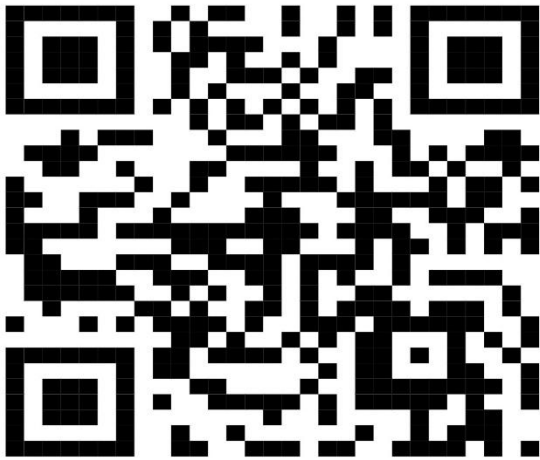
**MURRAYA KOENIGII(CURRY
LEAVES)**



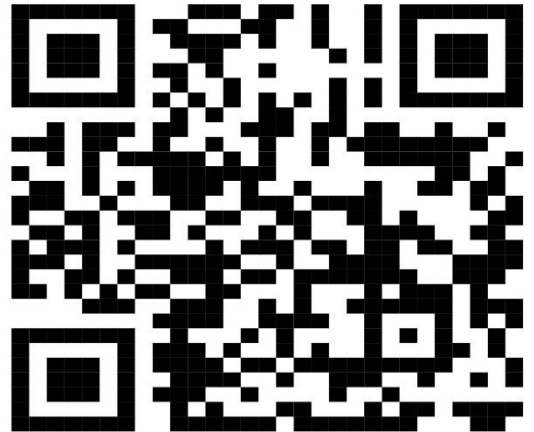
**CURCUMA
LONGA(TURMERIC)**



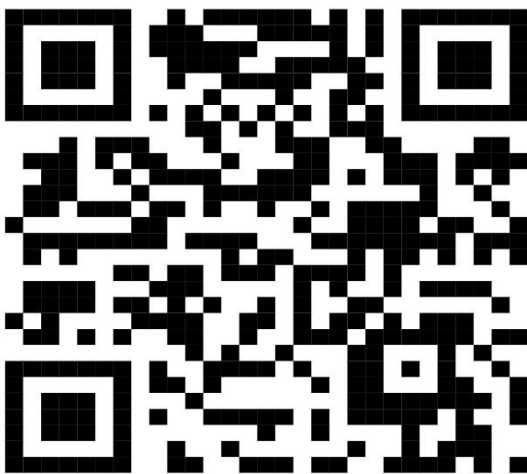
**OCIMUM
BASILICUM(GREEN TULSI)**



**DIGITALIS
PURPUREA(FOXGLOVE)**



**SYZYGIUM CUMINI(JAVA
PLUM)**



**MENTHA
PIPERITA(PUDINA)**



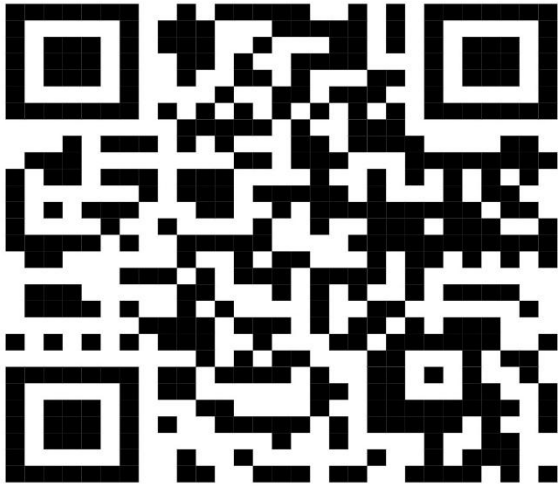
**TABERNANTHE
IBOGA(EBOKA)**



**EUPHORIA TITHYMELOIDES(DEVIL'S
BACKBONE)**



**WITHANIA
SOMNIFERA(ASHWAGANDHA)**



**MURRAYA PANICULATA(MADHU
KAMNI)**



JUSTICIA ADHATODA(ADUSA)



**TERMINALIA
BELLIRICA(BAHEDA)**



**SENNA
ANGUSTIFOLIA(SENNA)**



**AZADIRACHTA
INDICA(NEEM)**

x
2



**HIBISCUS
ROSA(GUDHAL)**



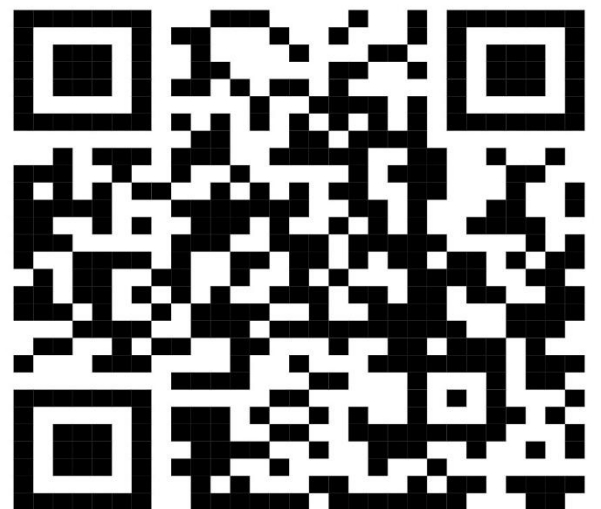
**PTEROCARPUS SANTALINUS(RED
SANDALWOOD)**



**TRACHYSPERMUM
AMMI(AJWAIN)**



**GLYCYRRHIZA
GLABRA(LIQUORICE)**



THYMUS VULGARIS(THYME)