Indigenous ornamental diversity of Western Ghats

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Western Ghats

- Mountain range – stretching along 1600 km
- Parallel to the western coast of India
- Traverses Kerala, Karnataka, Tamil Nadu, Maharashtra, Goa & Gujarat
- Flowering plants – 7402 species
- Endemic to India – 2253 species
- Endemic to Western Ghats – 1273 species
AICRP KAU Centre, Vellanikkara

- Centre identified for native ornamentals
- Wild orchid collections – 30 different species
- Potential indigenous ornamental plants – 30
- Native plants with IC no -4
- Native orchids with IC no. -4
Exacum bicolor

- Habitat – dry grasslands & shola grasslands
- Endemic to Peninsular India
- Herbaceous perennial, sprouting from dry stumps during monsoon. Stout quadrangular stem, flowers in dichasial cyme, Average 30-40 flowers/plant, bicolored, 3-5 cm flower dia
- 8-10 days field life for individual flower
- IC no. – 555235
- Reported medicinal properties
- Excellent as pot plant & bedding plant
Exacum bicolor

Habitat (2005)

Sprouting

Habit

Flower

Pollinators

Bunch of Flowers
Location Map for *Exacum bicolor* in Kerala
Exacum bicolor variations

Variation - leaves

Variation - Petals

white flowers
Exacum bicolor - Habitat status

Trade of *Exacum bicolor*

Local medical practitioners

Dried plants

Traders of *Exacum bicolor*
Exacum bicolor

Pot plant

Bedding plant

Crop improvement

Flower arrangement
**Impatiens dasysperma**

- **Habitat** – under shade of trees during monsoon
- **Endemic to Southern Western Ghats, endangered**
- **Annual, seed propagated, alternate leaves, usually fascicled towards the apex of the stem**, Flowers axillary, solitary or in groups of 2-3. **plant height of 50-60 cm, average of 35-40 flowers in a plant. Flower size 2.5-3 cm.**, Flowers pink in color with a deep pink throat.
- **IC no. – 632873**
- **Potential as pot plant & bedding plant**
Impatiens dasysperma
**Sesamum laciniatum**

- **Habitat** – lateritic hills
- **Endemic to** Peninsular India
- **Annual**, seed propagated, leaves variously lobed,
- Flowers solitary, axillary, purple with a yellow palate, 2.5 - 4.0 cm size and very showy.
- **IC no.** – 632874
- **Potential** as hanging pot plant
Allmania nodiflora / Celosia nodiflora

- **Habitat** – Deciduous forests
- **Annual, seed propagated, Stem branched from or near base,** Leaves obovate/oblong/linear,
- **Flower-heads are globose,** orange-red.
- **IC no.** – 632875
- **Potential as a pot plant**
- **Leaves are used as vegetable**
Memecylon malabaricum

• Habitat – Evergreen/semi evergreen forests
• Endemic to Southern Western Ghats
• Under shrub, seed propagated, Leaves opposite, ovate & stalkless. Flowers born in fascicles, in many flowered dense cymes. Flowers are brilliant blue and very attractive.
• Potential as a pot plant, in shrubbery, both under shade & open
• Potential medicinal properties
Memecylon malabaricum
Eranthemum capense var. concanense

- Habitat – Semi evergreen & moist deciduous forests
- Endemic to Peninsular India
- Under shrub, propagated through cuttings, Stem jointed, softly hairy. Leaves opposite, dark green. Flowers born in fascicles, in many flowered dense cymes. Flowers blue, velvety, 1-2 cm
- Potential as a pot plant, in shrubbery under shade
- Potential medicinal properties
Barleria buxifolia var.mysorensis

- **Habitat** – deciduous forests
- **Distribution** – S. India & Sri Lanka
- **Shrub, Leaves opposite, obovate**, The plant is densely prickled, Flowers singly in leaf-axils, nearly stalkless, purplish-blue.
- **Potential as a pot plant, in shrubbery, rockery**
Capparis baduuca

- **Habitat** – Semi evergreen forests
- **Endemic to Western Ghats, vulnerable**
- **Erect shrub**, 2-4 m tall. shoots armed with short, straight spines. Leaves elliptic-ovate to lance-like, with a narrow tip. Flowers are lilac, showy, 3-5 cm across, turning to white on fading, the upper pair of petals have a yellowish blotch near throat.
- **Potential as a specimen plant**
- **Potential medicinal properties**
**Naregamia alata**

- **Habitat** – lateritic hills & grassy slopes
- **Endemic to** Peninsular India
- **Subshrub**, propagated through seeds/cuttings, Leaves divided into 3 leaflets, leafstalk winged, Flowers solitary, axillary, white with a yellow tipped staminal tube. Flower size 3.0 – 4.0 cm
- **Potential** as a pot plant, ground cover under shade
- **Potential medicinal properties**
Tephrosia pulcherrima

- **Habitat** – moist deciduous forests
- **Distribution** – Peninsular India & Sri Lanka
- **Shrub**, propagated through seeds, Stem erect and densely hairy. Orange flowers in few flowered racemes.
- **Potential** as a pot plant, in shrubbery under partial shade
- **Potential medicinal properties**
Uvaria narum

- **Habitat** – deciduous forests
- **Distribution** – South India & Sri Lanka
- Straggling shrub with dark bluish green leaves. Leaves oblong, glabrous. Crushed leaves smell like cinnamon. Flowers are reddish, solitary, at branch ends.
- **Potential** in shrubbery
- **Potential medicinal properties**, roots for extraction of sweet scented oil
Flemingia strobilifera

- **Habitat** – Deciduous & semi evergreen forests
- **Distribution** – Indo-Malesia
- **Shrub, 2m**, propagated through seeds, **Leaflet obovate to ovate**, **Flowers occur in at branch-ends/ in leaf-axils branched racemes 8-15 cm long.** **Flowers are enclosed in large leaf-like persistent bracts.** Flowers have **creamy petals, light yellow, or pinkish to purple.** **Flowering:** October-December.
- **Potential in shrubbery, dry flowers**
- **Potential medicinal properties**
Flemingia strobilifera
Memecylon edule

- **Habitat** – semi evergreen forests
- **Distribution** – Indo-Malaysia
- **Endangered**
- **A large shrub/small tree, up to 8-14m tall with amazing bright blue flowers, drought resistant**
- **As a specimen plant**
- **Potential medicinal properties**
Melastoma malabathricum

• **Habitat** – semi evergreen forests
• **Distribution** – S-E Asia
• **An evergreen shrub, up to 2 m tall. Leaves elliptic to lanceolate, flowers vary from light to dark pink**
• **In shrubbery**
• **Potential medicinal properties**
Tabernaemonatana alternifolia

Large shrub
Endemic to Western Ghats
Endangered
Flowering: April – May
White flowers
Orange fruits
Medicinal
Native plants

- Ensure sustainable landscaping
- Support edible landscaping
- Provide natural herbal remedies
- Provide shelter, food to natural fauna especially butterflies & birds
Prospects of native plants?

• Many endemic & beautiful flowering plants
• Wide choice for trees, shrubs, herbs & seasonals
• Cater to different flowering seasons
• Either nectar/host plants of butterflies, bees
• Butterfly garden exclusively with natives
• Theme parks of natives
How to promote native plants

- Public parks
- Botanical gardens
- Highway median
- Institutions
- Corporate offices
- Air ports
- Golf course
- Green belts
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Limitations

Need for research

- Plant adaptations to specific locations
- Plant improvement
- Suitability for various landscaping purposes
- Successful domestication & commercial multiplication
Thank you