

PLANT WEALTH OF EXPERIMENTAL GARDEN, CENTRAL CIRCLE BOTANICAL SURVEY OF INDIA, ALLAHABAD

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ABSTRACT

The Experimental Garden of Botanical Survey of India, Central Circle covering an area of about 3 ha is situated near Prayag Railway Station at 10, Chatham Lines, Allahabad. The garden has been divided into ten distinct sections comprising of plant wealth of about 560 species of flowering plants and pteridophytes excluding varieties and annuals.

The experimental garden of Botanical Survey of India, Central Circle is located in the same compound of main office building at 10, Chatham Lines, Allahabad-211002, covering the total area of about 3 ha with 500 sq. m of water area adjacent to Prayag Railway Station, 25° 50'N Lat., 81° 95'E Long. and 92 m alt. The minimum temperature in December is usually 4°C and maximum in May-June is about 47°C. The average rainfall received by Allahabad is about 850 mm. The garden was started in the year 1960 and is open to public from 9.30 a.m. to 18.00 hrs.

The experimental garden was established with the objectives of making it a living repository of plants of the country, selected exotic flora, preserve for rare, threatened, endangered species, selected tropical plants from other countries for acclimatisation in local condition, experimental propagation of medicinal, economical, horticultural species, growing plants of academic importance, focussing the importance of plants to create public awareness about the environment by distribution of plants free of cost to the Institutions, factories and local people etc. and as such creating interest in having some greenery and tree-plantation.

There are about 560 species (excluding varieties and annuals) of perennial herbs, shrubs, trees, climber, hydrophytes and xerophytes representing 114 families of flowering plants growing well in the garden. The experimental garden has been divided into ten distinct sections. A brief note regarding each section alongwith the names of species growing has been given.

I. *Gymnosperms Section* :

There are seven genera comprising of nine species grown in this section. These are : *Agathis robusta* Salisb., *Araucaria cunninghamii* Sweet, *Cycas circinalis* Linn., *C. revoluta* Thunb., *C. rumphii* Miq., *Pinus longifolia* Linn., *Taxodium mucronatum* Tenore, *Thuja orientalis* Linn., *Zamia floridana* A. DC.

II. *Ornamental Section* :

This section comprises a large lawn of 95 × 45 m surrounded by hedges, row of 25 tall trees of *Polyalthia longifolia* (Sonner) Thw., var. *drupacea* in front and *Roystonia regia* (H.B. & K.) O.F. Cook on the right and left sides of the entrance-path to the garden, other various ornamental plants are :

Agave americana Linn., *A. angustifolia*

Haw., *Alstonia scholaris* (Linn.) R. Br., *Amaryllis vittata* Ait., *A. vittata* var. *johnsonii* Hort., *Belamcanda chinensis* (Linn.) DC., *Bignonia allicia* Lamk., *B. capriolata* Linn., *B. unguiscati* Linn., *Bougainvillea glabra* Choisy, *B. spectabilis* Willd., *Canna coccinia* Mill., *C. indica* Linn., *C. generalia* Bailey, *C. variegata* Bouche, *Callistemon lanceolatus* DC., *Catesbaea spinosa*, *Cestrum diurnum* Linn., *C. nocturnum* Linn., *Chrysanthemum indicum* Linn., *C. maximum* Ramond, *Cicca acida* (Linn.) Merr., *Clerodendrum fragrans* Vent., *C. inerme* Gaertn., *C. phlomides* Linn., *C. macrosiphon* Hook. f., *C. serratum* (Linn.) Moon, *C. squamatum* Vahl, *Crescentia cujete* Linn., *Crinum asiaticum* Linn., *C. deflexum* Ker-Gawl, *C. distichum* Herb., *C. latifolium* Linn., *Dahlia pinnata* Cav., *Euphorbia pulcherrima* Willd. ex Klotz., *Gladiolus* sp. (hybrids), *Grevillea robusta* A. Cun., *Holmskioldia sanguinea* Retz., *Ixora chinensis* Linn., *I. coccinia* Linn., *I. parviflora* Vahl, *I. finlaysoniana* Wall. ex G. Don, *I. lutea* Hutch., *Kigelia pinnata* DC., *Lagerstroemia indica* Linn., *L. speciosa* (Linn.) Pers., *L. parviflora* Roxb., *L. thorallii* Pierre, *Manihot esculenta* Grantz., *Mirabilis jalapa* Linn., *Mussaenda erythrophylla* Schum. & Thorn., *M. frondosa* Linn., *M. luteola* Del., *M. philippica* A. Rich., *Paderia scandens* (Lour.) Merr., *Parmentiera cerifera* Seem, *Pentas lanceolatus* (Forsk.) K. Schum. vars. *alba*, *Carnea karmesena*, *Petrea volubilis* Linn., *Portlandia grandiflora* Linn., *Pyrostegia venusta* Ker-Gawl, *Rhoe discolor* Linn., *Rondeletia odorata* Jacq., *Sanchizia nobilis* Hook., *Santalum album* Linn., *Sansevieria cylindrica* Bog., *S. laurentii* (N.E. Bor) de Willd., *S. trifasciata* Prain, *S. subcylindrica*, *Solanum grandiflora* Ruiz & Pav., *Spathodea campanulata* Beauv., *Strobilanthes isophyllus* T. Ander., *Tabebuia chrysantha* (Jacq.) Nicholson, *T. rosea* DC., *T. palmerie* Rose, *Tecoma stans* (Linn.) H.B. & K., *T. cupensis* Lindl., *Zebrina pendula* Schl.

III. Plant Introduction Section

Plants mainly native of different tropical countries of the world as well as Indian plants from the other parts have been introduced, of which most of them are rare, ornamental and of economic interest, viz., *Acorus calamus* Linn., *Allamanda cathartica* Linn., *Annona muricata* Linn., *Anthocephalus cadamba* (Roxb.) Miq., *Ardisia solanacea* (Poir) Roxb., *Artobotrys uncinatus* Lamk., *Arundo donax* Linn., *Asclepias curassavica* Linn., *Banisteria* sp., *Bauhinia blackeana* Dunn., *B. vahlii* Wt. & Arn., *Brownea coccinea* Jacq., *Calophyllum inophyllum* Linn., *Cassia nobilis* Linn., *C. nodosa* Buch.-Ham. ex D. Don, *C. siamea* Lamk., *C. surattensis* Burm. f., *Chorisia speciosa* St. Thel., *Christia vespertilionis*, *Cordyline terminalis* Kunth, *Couroupita guianensis* Aubl., *Cryptostegia grandiflora* (Roxb.) R. Br. ex Lindl., *Cymbopogon citratus* (DC.) Stapf, *Dalbergia sympathetica* Nimmo ex Grah., *Dillenia indica* Linn., *Diospyros discolor* Willd., *Dombeya calantha* Schura, *Erythrina indica* Lam., *E. suberosa* Roxb., *E. vespertilis* Benth., *E. blackeana* Linn., *Furcraea foetida* (L.) Haw., *Garcinia cornea* Linn., *Gardenia latifolia* Ait., *Gleditschia macrocarpa* Desf., *Guaicum officinalis* Linn., *Guazuma ulmifolia* H.B. & K., *Gustavia angusta* Linn., *Haematoxylon campechianum* Linn., *Helicteres isora* Linn., *Hibiscus cruentus* Bertol, *H. elatus* Swartz., *H. hirtus* Linn., *H. heterophyllus* Vent., *H. liliflorus* Cav., *H. mutabilis* Linn., *H. rosa-sinensis* Linn., *H. sabdariffa* Linn., *H. schizopetalus* Linn., *H. syriacus* Linn., *Hibiscus* sp. horticultural var. yellow, *Hiptage benghalensis* (Linn.) Kurz, *Hoya parasitica* Wall. ex Trail, *Hymenodictyon excelsum* Wall., *Jacquinia ruscifolia* Jacq., *Jasminum sambac* Ait., *Kleinhovia hospita* Linn., *Malpighia coccigera* Linn., *M. glabra* Linn., *Manilkara hexandra* (Roxb.) Dub., *M. achras* (Mill.) Fosberg, *Mersdenia tenacissima* Wt. & Arn., *Peltophorum ferrugineum*, *Portulacaria afra* Jacq., *Psidium fried-*



Kleinhovia hospita Linn.

Costus speciosus Sm.





Alstonia macrophylla Wall.

Saraca asoca (Roxb.) de Wilde.





Cycas revoluta Thunb.



Cycas circinalis Linn.

richstheanium Nied., *Pterospermum acerifolium* (Linn.) Willd., *P. suberifolium* Lam., *Ravenia spectabilis* Griseb., *Saccharum bengalensis* Retz., *Saraca asoca* (Roxb.) de Willd., *Sophora tomentosa* Linn., *Sterculia foetida* Linn., *S. villosa* Roxb., *Strophanthus wallichii* A. DC., *Tabernaemontana divaricata* (Linn.) R. Br. ex Roem. & Schult., *Talinum calycinum* Engl., *Tamarix dioica* Roxb., *Thyralis glauca* O. Kuntze, *Ventilago calyculata* Willd., *Vetiveria zizanioides* (Linn.) Nash., *Wisteria sinensis* (Sms.) Sweet, *Yucca gloriosa* Linn.

IV. *Rosarium* :

A large rose garden of 40 x 60 m having around 100 beds is being maintained. About 250 varieties of roses in their wide range of colours and shades representing H.T. Floribunda, and Miniature are grown. The experimental garden has distinguished itself by winning several prizes from time to time through display of Roses, foliage plants etc. at local flower shows. A few of the important species and varieties growing in the garden are :

Rosa bourboniana Desp., *R. chinensis* Jacq., *R. multiflora* Thunb., *R. damascens* Mill, *Rosa* x climber *Rosa* x floribunda, *Rosa* x hybrid Tea, *Rosa* x miniature.

Anne harkness, Anurag, Asha, Bharat, Beryl batch, Black pearl, Brilliant light, Care-free beauty, Careless love, Champion, Chatillon rose, colour magic, Cuddles, Dani, Disco, Don don, Eterna, Full guarantee, Funkhur, Ganga, Gold star, Golden afternoon, Goldmedal, Hakun, Harmonie, Hojun, Indian princes, Jadis, Jantar-Mantar, Jawahar, Kasturi rangam, Kiss, Louisiana, Madhosh, Nav Sadabahar, Nishada, paradise, Pasty clinc, Pink surprise, Royal romance, Sahastradhara, Seiko, Silver Jubilee, Sonia, Summer days, Suvarnrekha, Tata centenary, Viamala, White commet, Wind sounds.

V. A large and oval shaped lily pool studded with 4 species of *Nymphaea* and

Nelumbo in their range of colours of white, pink, yellow, and blue is situated in the middle of rosery. In addition to it there are 4 other small tanks full of aquatic plants and these are :

Azolla pinnata R. Br., *Ceratopteris thalictroides* (Linn.) Brongn., *Eichhornia crassipes* (Mart.) Solms, *Hydrilla verticillata* Presl., *Ludwigia adscendens* (Linn.) Hara, *Nelumbo nucifera* Gaertn., *Nymphaea nouchali* Burm. f. var. white, *N. stellata* Willd. var. yellow, *N. stellata* Willd. var. blue, *Nymphoides cristatum* (Roxb.) O. Kuntze, *Typha augustata* Bory & Chaub.

VI. *Medicinal plants Section* :

More than about 100 species of herbs, shrubs, trees and climbers of medicinal importance are planted in this section. These are : *Abrus precatorius* Linn., *Abutilon indicum* (Linn.) Sweet, *Acacia catechu* (Linn.) Willd., *A. nilotica* (Linn.) Del ssp. *indica* (Benth.) Brenan, *Allium ampeloprasum* Linn., *Alpinia calcarata* Rosc., *Alstonia macrophylla* Wall., *Amomum subulatum* Roxb., *Ampelocissus latifolia* (Roxb.) Planch., *Andrographis paniculata* (Burm. f.) Wall. ex Nees, *Artemisia nilgirensis*, *Basella rubra* Linn., *Calotropis gigantea* (Linn.) R. Br., *C. procera* (Willd.) Dryand ex A. Ait., *Caryatia trifolia* (Linn.) Domin, *Catharanthus roseus* (Linn.) G. Don, *Cinnamomum camphora* T. Nees & Eber., *C. tamala* Blume, *Cissampelos pareira* Linn., *Cissus quadrangularis* Linn., *C. repanda* Vahl, *Cocculus hirsutus* (Linn.) Diels, *Crotalaria sericea* Retz., *Citrus limon* (Linn.) Burm. f., *Coffea arabica* Linn., *C. liberica* Hiern., *C. bengalensis* Roxb., *Costus speciosus* (Koenig ex Retz.) J.E. Smith, *Cryptolepis buchanani* Roem. & Schult., *Curculigo orchioides* Gaertn., *Curcuma pseudomontana* Grah., *C. zedoaria* (Berg.) Rosc., *Datura innoxia* Mill, *D. metel* Linn., *Desmodium gangeticum* (Linn.) DC., *D. gyrans* DC., *Dioscorea hispida* Dennst., *Diospyros peregrina* Gurke, *Elettaria carda-*

momum Maton, *Globba orixensis* Roxb., *Gossypium hirsutum* Linn., *Gymnema sylvestre* (Retz.) R. Br. ex Roem. & Schult., *Hedychium coronarium* Koen., *Hibiscus cannabinus* Linn., *Madhuca longifolia* (Koenig) Mac., *Malvaviscus arborens* Cav., *Mentha americana* Linn., *M. arvensis* Linn., *Mesua ferrea* Linn., *Millingtonia hortensis* Linn. f., *Mimosa himalayana* Gamble, *M. pudica* Linn., *Mimusops elengi* Linn., *Musa paradisiaca* Linn., *Musa* sp., *Murraya koenigii* (Linn.) Spreng, *Ocimum basilicum* Linn., *O. canum* Sims, *O. sanctum* Linn., *Pandanus odoratissimus* Linn. f., *Piper longum* Linn., *Plumbago capensis* Thunb., *Psoralea corylifolia* Linn., *Pterygota alata* (Roxb.) R. Br., *Ruellia tuberosa* Linn., *Sesbania grandifolia* Linn., *S. sesban* (Linn.) Merr., *Solanum incanum* Linn., *S. jasminoides* Paxt., *S. melongena* Linn., *S. muriacanthum* Dunn., *Tamarindus indica* Linn., *Telosma pallida* (Roxb.) Craib, *Terminalia bellirica* (Gaertn.) Roxb., *T. catappa* Linn., *Tiliacora acuminata* (Lamk.) Miers, *Tinospora cordifolia* (Willd.) Miers, *Tylophora indica* (Burm. f.) Merr., *Urginea indica* (Roxb.) Kunth, *Vitex negundo* Linn., *Vitis vinifera* Linn., *Withania somnifera* (Linn.) Dunal, *Zingiber capitatum* Roxb., *Z. cassumunar* Roxb.

VII. *Arboretum-cum-mini Forest Section* :

This section consists of a good number of shrubs, trees, lianes, climbers etc. and part of it has been earmarked for the development of natural mini forest. Natural regeneration of *Tectona grandis* Linn. f. (Teak) may be observed alongwith the other plants, viz. *Acacia auriculiformis* Griseb., *A. farnesiana* (Linn.) Willd., *Aegle marmelos* (Linn.) Corr., *Aglaonema pseudo-bracteatum*, *A. oblongifolium* Schott., *Ailanthus excelsa* Roxb., *Alangium salvifolium* (Linn. f.) Wang, *Albizia lebbek* (Linn.) Benth., *A. lucida* Benth., *A. odoratissima* (Linn. f.) Benth., *Allamanda neriifolia* Hook., *A. purpurea*, *A. violacea* Gardn. & Field, *Anogeissus pendula* Edgew., *Annona squamosa* Linn., *Angelonia salicariaefolia*

Humb. & Boupl., *Antigonon leptopus* Hook. & Arn., *Argyrea nervosa* (Burm. f.) Boj., *Artocarpus altalis* (Park) Fosberg, *A. communis* Forst., *A. heterophyllus* Lamk., *A. lakoocha* Roxb., *Azadirachta indica* A. Juss., *Bambusa arundinacea* Willd., *B. vulgaris* Schand., *Barringtonia acutangula* (Linn.) Gaertn., *Bauhinia acuminata* Linn., *B. corymbosa* Roxb., *B. racemosa* Lamk., *B. variegata* Linn., *Bombax ceiba* Linn., *Boswellia serrata* Roxb. ex Colebr., *Butea monosperma* (Lamk.) Taub., *Caesalpinia coriaria* Willd., *C. bonduc* (Linn.) Roxb., *C. pulcherima* Sw., *Campsis grandiflora* Loisel., *Capparis sepiaria* Linn., *Carica papaya* Linn., *Carissa congesta* Wight, *C. spinarum* Linn., *Cassia fistula* Linn., *C. javanica* Linn., *Casurina equisetifolia* Forst., *Cerbera jamsonii* Bolus, *Cipadessa baccifera* (Roth) Miq., *Citrus aurantifolia* (Christm.) Swingle, *C. maxima* (Burm.) Merrill, *Clitoria ternata* Linn., *Cordia dichotoma* Forst., *Crataeva nurvala* Buch.-Ham., *Cuscuta reflexa* Roxb., *Dalbergia melanoxylon* Grill, *D. sissoo* Roxb., *D. volubilis* Roxb., *Delonix regia* (Boj. ex Hook.) Rf., *Derris indica* (Lamk.) Bennet, *D. scandens* (Roxb.) Benth., *Dodonaea viscosa* (Linn.) Jacq., *Duranta repens* Linn., *Embllica officinalis* Gaertn., *Ephedra tweediana* C.A. Mey, *Eucalyptus citriodora* Hk., *E. tereticornis* Sm., *Eupatorium coelestinum* Linn., *Euphorbia antiquorum* Linn., *Feronia limonia* (Linn.) Swingle, *Ficus benghalensis* Linn., *F. elastica* Roxb., *F. palmata* Forsk., *F. religiosa* Linn., *F. retusa* Linn., *Flacourtia indica* (Burm.) F. Merr., *Gmelina philippensis* Cham., *Gardenia jasminoides* Ellis, *Grewia laevigata* Vahl, *G. rothei* DC., *G. subinaequalis* DC., *Hamelia patens* Jacq., *Haplophragma heterophylla* (Wall.) Dop., *Holarrhena antidysenterica* (Roth) A. DC., *Holoptelea integrifolia* Planch., *Ipomoea batatas* (Linn.) Lamk., *I. palmata*, Linn., *I. fistulosa* Mart ex Choisy, *Jacaranda mimosifolia* D. Don, *Jasminum auriculatum* Vahl, *J. grandiflorum* Linn., *J. primulinum* Hems, *J. multiflorum* (Burm. f.) Andr., *Jatropha*

curcas Linn., *J. gossypifolia* Linn., *J. hastata* Jacq., *J. multifida* Linn., *J. padebrica* Hook., *Kalanchoe diagremontana* Ham. & Perr., *K. grandiflora* Wight & Arn., *K. laciniata* (Linn.) Pers., *K. pinnata* (Lamk.) Pers., *Lantana camara* Linn., *Lawsonia inermis* Linn., *Lannea coromandelica* (Houtt.) Merrill, *Leucaena leucocephala* (Lamk.) Dewit Gills., *Mallotus philippensis* (Lamk.) Muell.-Arg., *Melanthesa turbinata* (Koenig. ex Roxb.) Oken, *Mangifera indica* Linn., *Melia azedarach* Linn., *Merremia quinquefolia* (Linn.) Hall. f., *Moringa oleifera* Lamk., *Morus alba* Linn., *M. australis* Poir., *Monghania macrophylla* (Willd. O. Ktze), *Mucuna pruriens* Bak., *Murraya paniculata* (Linn.) Jacq., *Nephelium litchi* (Lour.) Camb., *Nerium indicum* Mill., *Nyctanthes arbor-tristis* Linn., *Oroxylum indicum* (Linn.) Vent., *Parkinsonia aculeata* Linn., *Phoenix sylvestris* Roxb., *Psidium guajava* Linn., *P. variegatum*, *Pithocellobium dulce* (Roxb.) Benth., *Plumeria alba* Linn., *P. rubra* Linn. forma *acuminata* (Ait.) Woodson, *P. rubra* Linn., *Polygonum glabrum* Willd., *Punica granatum* Linn., *Putranjiva roxburghii* Wall., *Ricinus communis* Linn., *Samanea saman* (Jacq.) Merr., *Sapindus laurifolius* Vahl, *Senecio cruentus* DC., *Sizygium cumini* (Linn.) Skeels, *Solidago canadensis* Linn., *Spondias pinnata* (Linn. f.) Kurz, *Swietenia macrophylla* King, *S. mahogani* Jacq., *Tectona grandis* Linn. f., *Terminalia arjuna* (Roxb. ex DC.) Wight & Arn., *Thespesia populnea* (Linn.) Soland. ex Corr., *Thevetia peruviana* (Pers.) Schum., *Thunbergia alata* Boj. ex Sims, *T. erecta* (Benth.) T. Anders., *T. grandiflora* Roxb., *Triphasia aurintiola* Lour., *Turnera ulmifolia* Linn., *Vernonia elaeagnifolia* DC., *Zizyphus mauritiana* Lamk., *Z. oenoplia* Mill.

VIII. Experimental propagation and conservation of rare, endangered and medicinal plants :

It has been estimated that out of 2,50,000 higher plants about 50,000 will be in the danger of extinction by the end

of 20th Century. The extinction of wild species is posing problems not only for biologists but also to human beings since the ecological balance of the earth is being disrupted. The loss of wild species will also limit genetic resources. The botanical gardens play an important role in propagating and preserving such species within the gardens and as such the researches on conservation in Botanical Gardens play an important role in conservation. Some of the important species under propagation trial are : *Adhatoda vasica* Nees, *Aloe barbadensis* Mill., *Asparagus gonocladus* Bak., *A. officinalis* Linn., *A. plumosus* Bak., *A. racemosus* Willd., *Cordia sebastena* Linn., *Dioscorea alata* Linn., *D. bulbifera* Linn., *D. esculenta* Retz., *D. oppositifolia* Linn., *D. pentaphylla* Linn., *Dracaena fragrans* Ker-Gawl., *D. reflexa* Lam., *D. godseffiana*, *Dracaena* sp. (10 cultivars), *Ficus krishnae* A. DC., *Hemidesmus indicus* (Linn.) Schult., *Rauvolfia serpentina* Benth. ex Kurz, *R. tetraphylla* Linn., A. few rare species are : *Annona muricata* Linn., *Cinnamomum camphora* T. Nees, *Cycas* 4 spp., *Dalbergia lanceolaria* Linn. f., *D. sympathetica* T. Nees, *Ficus krishnae*, *Gymnema sylvestre* R. Br., *Hibiscus heterophylla* Vent., *Hyphaenae thebaica* (Linn.) Mart., *Hoya wightii* Hook. f., *Saraca asoca* (Roxb.) De Wilde, *Strychnos nux-vomica* Linn., *Terminalia arjuna* (Roth ex DC.) Wt. & Arn., *Tylophora indica* Burm. f.

IX. Green House

The green house contains about 1000 potted foliage, decorative or ornamental plants obtained from the various parts of the country as well as plants from other countries. They are grown through seeds and also serve as primary nursing house for plants propagated through budding and air layering. Others grown are : *Acalypha wilkesiana* Muell.-Arg., *A. hispida* Burm. f., *Adiantum capillus-veneris* Linn., *A. incisum* Forssk., *A. trapeziforme* Linn., *Alocasia indica* Schott, *Alternanthera bettzii*

ckiana Nichols, *Amorphophallus campanulatus* (Roxb.) Bl. ex Decne, *Aporacactus flagelliformis* Lam., *Aspidistra lurida* Ker-Gawl, *Arisaema speciosa* Linn., *Barleria cristata* Linn., *B. prionitis* Linn., *Begonia rex* Putzeys, *Begonia* sp., *Beloperone gattata* Brandgee, *Boehmeria nivea* (Linn.) Gond., *Brunfelsia americana* Linn., *Caladium bicolor* (W. Ait.), Vent., *Cardiospermum halicacabum* Linn., *Casearia elliptica* Willd., *Chlorophytum tuberosum* (Roxb.) Baker, *Colocasia esculenta* (Linn.) Schott, *Christella dentata* Forsk., *Haworthia coarctata* Haw., *Cereus caesius* Solm., *Cereus* sp., *Coleus blumei* Benth., *C. amboinicus* Lour., *Crossandra infundibuliformis* (Linn.) Nees, *Dendrobium herbaceum* Lindl., *D. pierardii* Roxb., *Dianthera secundæ* Griseb., *Dieffenbachia seguine* Schott, *D. amona* Hort. var. *D. tropica* snow Hort. var., *Drypetes roxburghii* (Wall.) Hurus., *Echinocaetus* sp., *Eranthemum nervosum* (Vahl) R. Br., *Euphorbia spendens* Boj., *E. canescens* Linn.; *E. milli* Ch. des Moul, *E. royleana* Boiss., *E. stapehoides* Boiss., *E. tirucalli* Linn., *Excoecaria bicolor* Hassk., *Eulophia nuda* Lindl., *Gomphrena globosa* Linn., *Haemanthus multiflorus* Baker, *Iresine herbastii* Hook. f., *Justicia gendarussa* Burm. f., *Ficus elastica* var. (Black Prince), *F. elastica* var. *senjarina*, *Lycopodium squarrosus* Forst., *Lygodium japonicum* (Thunb.) Sw., *Microsorium membranaceum* (D. Don) Ching, *Opuntia dillenii* (Ker-Gawl) Haw., *O. elatior* Mill, *O. tunicata* Hort., *Nephrolepis biserrata* (Sw.) Schott, *N. cordifolia* (Linn.) Presl., *Oxalis corniculata*

Linn., *Pancratium vesecundum* W. Ait., *P. zeylanicum* Linn., *Pedilanthus tithymaloides* Poir, *Pedilanthus* sp. 3 vars., *Peperomia obtusifolia* var. *variegata*, *Philodendron* sp., *Pilea microphylla* (Linn.) Liebm, *Pityrogramma calomelanos* (Sw.) Link, *Polyscias balfouriana* Bailey, *P. balfouriana* Bailey var. *marginata*, *P. fruticosa* Harms, *P. guilfoylei* Bailey, *Rhaphidophora aurea* (Lindl. & Andre) Budseys, *Ruscus aculeatus* Linn., *Schefflera venulosa* (Wight & Arn.) Harms, *S. arbericola*, *Scindapsus officinalis* (Roxb.) Schott, *S. officinalis* var. *marble queen*, *Setcratia purpurea* Linn., *Stapelia comparabilis*, *Selaginella involvens* (Sw.) Spring, *S. monospora* Spring, *Tacca pinnatifida* Forst., *Viola odorata* Linn., *Xanthosma tindenii* Engler, *Zephyranthus citrina* Baker, *Z. candida* Herb.

X. Germ-plasm Section :

The germ plasm collection of *Roses*, *Crotons*, *Dioscorea*, *Hibiscus* and *Dracaena* genera is being maintained and developed. A few of the important croton cultivars forms planted are President, Pride, Sensation, Spotted, Giant, Trilobium, Vishnu, Vivekanand.

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