

Shiv Nadar Institution of Eminence

Water conscious planting

Shiv Nadar Institution of Eminence has taken into consideration the local weather and terrain for all its planting purposes. The university's huge campus has been carefully planned with water conscious planting including many arid and semi-arid plants on campus. The university does not remove old or native trees planted previously. Steps are taken to ensure their continued survival. We have ensured that biodiversity (including flora and fauna) and the terrestrial ecosystem is preserved. Careful consideration is also given to the use of optimal water-saving equipment on the campus like the drip-irrigation system for the landscaped gardens and use of treated water by the Sewage Treatment Plant.

Some of the water conscious planting activities undertaken are:

- The old Date Palm Forest was left intact during the construction phase, and it is a restricted area to protect and conserve the natural habitat of the associated wild species.
- The Natural Lake area has been restored and managed to provide a safe habitat for a wide variety of aquatic animals and plants. The slope of the landscape is such that the water naturally flows towards the lake.
- Water-conscious plants are planted in all building blocks, thereby resulting in a green campus and reduced irrigation requirements. The campus has many drought- tolerant plants, such as *Acacia auriculiformis* A.Cunn.ex Benth., *Albizia lebbeck* (L.) Benth., *Casuarina equisetifolia* L. to name a few.
- The campus is home to many arid and semi-arid plant species of xerophytes promoting water conscious planting. These are:

Name of Plant Species	Family	Common Name	Hindi Name
<i>Acacia modesta</i> Wall.	Leguminosae	Amritsar Gum	फुलाई
<i>Acacia senegal</i> (L.) Willd.	Leguminosae	Gum Acacia, Gum Arabic Tree	कुमट
<i>Agave americana</i> L. ¹	Asparagaceae	Agave	कमल कैक्टस
<i>Agave americana</i> L. ²	Asparagaceae	Variegated Agave	कमल कैक्टस
<i>Alluaudia procera</i> (Drake) Drake	Didiereaceae	Madagascar Ocotillo	
<i>Boswellia serrata</i> Roxb. ex Colebr.	Burseraceae	Indian Frankincense	सालर, श.लक/
<i>Cactus</i> sp.1	Cactaceae	Cactus	...
<i>Cactus</i> sp.2	Cactaceae	Cactus	...
<i>Cactus</i> sp.3	Cactaceae	Star cactus	...
<i>Capparis decidua</i> (Forssk.) Edgew.	Capparaceae	Bare Caper	कैर, करीर
<i>Colophospermum mopane</i> (Benth.) Leonard	Leguminosae	Mopane	...
<i>Commiphora mukul</i> (Hook. ex Stocks) Engl	Burseraceae	Guggul	
<i>Commiphora wightii</i> (Arn.) Bhandari	Burseraceae	Guggul	

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Commiphora wightii (Arn.) Bhandari	Burseraceae	Guggul, Indian bedellium	गुगुल
Cordia sinensis Lam.	Boraginaceae	Grey Leaved Saucerberry	गउदी
Cylindropuntia fulgida (Engelm.) F.M.Knuth	Cactaceae	Cholla Cactus	
Dichrostachys cinerea (L.) Wight & Arn.	Leguminosae	Sickle Bush	कुणाली
Euphorbia caducifolia Haines	Euphorbiaceae	Leafless Milk Hedge, Danda-Thor	
Euphorbia cotinifolia L.	Euphorbiaceae	Caribbean Copper Bush	...
Euphorbia tirucalli L.	Euphorbiaceae	Pencil Tree, Indian Tree Spurge	...
Euphorbia royleana Boiss.	Euphorbiaceae	Royle's Spurge	थोर
Euphorbia sp.	Euphorbiaceae	Euphorbia Cactus	...
Furcraea foetida (L.) Haw.	Asparagaceae	Mauritius hemp, Giant False Agave	...
Justicia sp.	Acanthaceae	...	...
Justicia spicigera Schltl.	Acanthaceae	Mexican Honeysuckle, Orange Plume Flower	
Kalanchoe blossfeldiana Poelln.	Crassulaceae	Flaming Katy	
Malvaviscus arboreus var. mexicanus Schltl.	Malvaceae	Mexican Turk's Cap	जूबा कुसुम
Operculicarya decaryi H. Perrier	Anacardiaceae	Elephant Tree	...
Opuntia cylindrica (Lam.) DC.	Cactaceae	Cane Cactus	
Opuntia dillenii (Ker Gawl.) Haw.	Cactaceae	Pricklypear	नागफनी
Opuntia ellisiana Griffiths	Cactaceae	Spineless Prickly Pear	
Opuntia microdasys subsp. rufida (Engelm.) U. Guzmán & Mandujano	Cactaceae	Red Bunny Ears Cactus	
Parkinsonia aculeata L.	Leguminosae	Mexican Palo Verde, Jerusalem Thorn	विलायती कीकर, राम बबूल
Ravenia spectabilis Engl.	Rutaceae	Lemonia, Pink Ravenia	...
Russelia equisetiformis Schltl. & Cham.	Plantaginaceae	Fountain bush, Coral Plant	रसीली
Salvadora oleoides Decne.	Salvadoraceae	Pilu	पीलू
Salvadora persica L.	Salvadoraceae	Toothbrush Tree, Miswak	मिस्वाक
Sansevieria cylindrica Bojer ex Hook.	Asparagaceae	Cylindrical Snake Plant, Spear Sansevieria	
Sansevieria hyacinthoides (L.) Druce	Asparagaceae	Snake Plant, Devil's Tongue	...

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Tamarix indica Willd.	Tamaricaceae	Indian Tamarisk	झाऊ
Tecomella undulata (Sm.) Seem.	Bignoniaceae	Roheda	...
Yucca aloifolia L.	Asparagaceae	Aloe Yucca, Dagger Plant	यु*का
Yucca gigantea Lem.	Asparagaceae	Spineless/Giant yucca	
Yucca glauca Nutt.	Asparagaceae	Soapweed Yucca	युक्का
Yucca gloriosa L.	Asparagaceae	Mound Lily Yucca, Spanish Dagger	
Jatropha curcas L.	Euphorbiaceae	Barbados Nut	रतनजोत
Tabebuia aurea (Silva Manso) Benth. & Hook.f. ex S.Moore	Bignoniaceae	Silver/Yellow Trumpet Tree	...
Tabebuia rosea (Bertol.) Bertero ex A.DC.	Bignoniaceae	Rosy Trumpet Tree	बसंत रानी
Euphorbia milii Des Moul.	Euphorbiaceae	Crown of Thorns, Kiss Me Not	...
Acacia catechu (L.f.) Willd.	Leguminosae	Cutch tree	खैर
Acacia concinna (Willd.) DC.	Leguminosae	Soap Pod	शिकाकाई
Acacia nilotica (L.) Delile	Leguminosae	Gum Arabic Tree, Babul	बबूल
Albizia lebbeck (L.) Benth.	Leguminosae	Siris Tree	बसन्त
Prosopis cineraria (L.) Druce	Leguminosae	Khejri Tree	खेजड़ी
Prosopis juliflora (Sw.) DC.	Leguminosae	Algaroba, Mesquite	जगली क/कर
Phoenix dactylifera L.	Arecaceae	Date Palm	खजूर
Argemone mexicana L.	Papaveraceae	Mexican Prickly Poppy	सत्यानाशी, कटैला
Aloe vera (L.) Burm.f.	Xanthorrhoeaceae	Aloe	घृतकुमारी
Bryophyllum pinnatum (Lam.) Oken	Crassulaceae	Patharchatta	पत्थरचट्टा
Calotropis procera (Aiton) Dryand.	Apocynaceae	Rubber Bush, Sodom Apple	आक, मदार
Hylocereus undatus (Haw.) Britton & Rose	Cactaceae	Dragon Fruit	ड्रेगन फल
Ziziphus nummularia (Burm.f.) Wight & Arn.	Rhamnaceae	Jhar Beri	झाड़ बेर

- Shiv Nadar University has a unique Thematic Botanic Garden, conceptualized and established with the objective of increasing awareness about a wide variety of plants with which we deal in our daily life and conserving their unique germplasm for education and research purpose. The Garden has 12 Theme Gardens as listed below:

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- Medicinal Plants Garden
- Ferns and Fern-Allies Garden (Fern House)
- Rare, Endangered & Threatened (RET) Plants Garden
- Palm Garden
- Gymnosperms Garden
- Ficus Garden
- Hydrophytes Garden (Aquatic Plants)
- Butterfly Garden
- Bamboo Garden (Bambusetum)
- Fruit Plants Garden
- Spices, Condiments and Herbs Garden
- Xerophytes Garden (Arid & Semi-Arid Zone Plants promoting water conscious planting)