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# Desert Botanical Garden (DBG) of CAZRI as Centre for Research and Livelihood Support



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# Desert Botanical Garden (DBG) of CAZRI as Centre for Research & Livelihood Support



DBG-CAZRI is one of the country's unique Lead Garden housing plants from isoclimatic regions of different deserts of the world as well as Indian Thar. Unique germplasm of Aloe, Guggul and Cacti are conserved here. It has played a vital role in restoration of degraded lands, compiling information on traditional ethnomedicinal plants as well as consultant to power plants for the Environmental Impact Assessment (EIA) clearance and green belt development.

**"Together we can achieve so much more"**

## DBG-CAZRI's Mission

- Lead Information Centre of Arid Plants
- Guide Development of Similar Botanical Garden across Arid Zones
- Natural product inventory, development, application in natural resources management and rural livelihood

- Science Consultancy and Advisory to Corporates, Business Houses, Govt. and Semi Govt. Bodies, General Public and Farmers.
- Collaborative Research and Partnerships

## Plant Information Centre

Find out how you can harness DBG-CAZRI's expert knowledge for your diverse needs.

Over 50 years CAZRI has developed substantial in depth plant information for arid zones. Our collections include over 6300 plant specimens in DBG Herbarium, which will be useful as a baseline for accurate scientific identification of the arid zones plants.

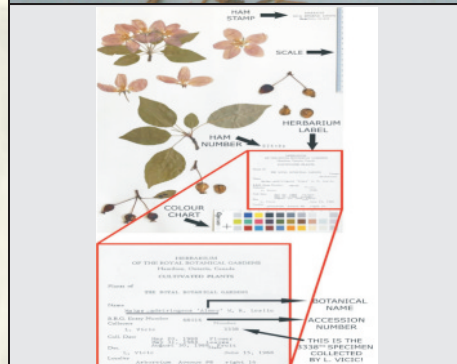
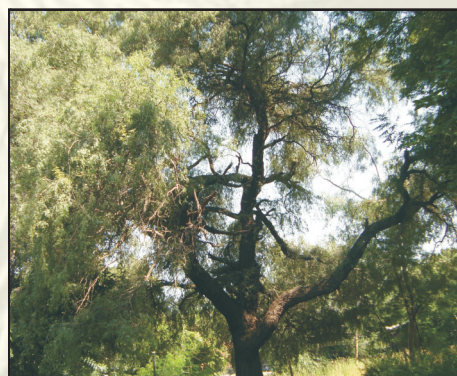
We are also planning to develop a Seed Bank of Arid native plants including wild relatives of crops and medicinal plants that will increase our understanding of the storage, longevity, health and germination of all of those seeds stored within its vaults.

As well as we need to have the plant DNA bank, and the collection of living plants. We also hold major databased information on plant taxonomic information and the uses of plants.

The information will be widely available so as to be useful to all. We also be able to process this information for your organisation's needs, aiding the scientifically accurate and innovative understanding and uses of plants.

Browse the services offered by our Plant Information Service below:

- Plant Identification
- Plant Exchange and Donation
- Plant Interpretation Information
- Digitisation DNA barcoding development and DNA banking



Digitization of Desert Botanical Garden Collections



## Natural Plant Inventory, Development of landscapes and conservation action plans, application in natural resources management and rural livelihood

DBG-CAZRI will work with your organisation to strengthen your brand value. Associate with us in the following areas:

- Restoration of Degraded Lands
- Biodiversity management
- EIA in relation to native flora
- Ethical sourcing and Good Collection Practices
- Designing Green Landscapes, Herbal Gardens and Homesteads Garden

By associating with DBG-CAZRI, you get products benefit from alignment with a brand recognised for environmental sustainability, Economic Benefit and Scientific Backstopping.



### Science Consultancy

Deeper Understanding of Structure, Functions and Uses of Desert Flora in all the 12 arid districts in the past 50 years of public service, CAZRI is now a powerhouse of national plant-based knowledge and skills, with taxonomic

and economic plant databases at our fingertips especially for the welfare of the arid zones.

### Our consultancy services

- Vegetation Survey and Mapping
- Horticultural Services
- Distribution and population status of desert plants distribution
- Landscape Design and Green Belt Development
- Restoration of Degraded Lands
- Assessing Threatened status of desert plants as per IUCN
- Biodiversity policy for livelihood support
- EIA in respect of Flora
- Conservation of Native Flora in Participatory Mode

### Collaborative Research & Partnerships

DBG-CAZRI is committed to working in mutually beneficial corporate partnerships, with a diverse range of academic, institutional, GOs, NGOs and commercial organisations.

### DBG-CAZRI's Corporate Partnerships

We believe that working in partnership with diverse range of academic, institutional, NGOs and commercial organisations enables delivery of our core mission to "inspire and deliver science-based plant conservation and application in arid zones at the national level, enhancing the quality of life", as well as improving the delivery of our country's biodiversity and environmental policies and practice locally.

We would like to engage with organisations that show a commitment to sustainable development and biodiversity management through their policies and practices, as well as a dedication to improving their outcomes in this area. DBG-CAZRI is able to assist companies in a number of different ways, including biodiversity management policy development, on-site botanical inventory and mapping, and community engagement projects assessing indigenous botanical

resource uses and their market intelligence.

### Collaborative Research Projects

Through over 50 years of scientific research and innovation, CAZRI has developed extensive knowledge and experience throughout our diverse departments. DBG-CAZRI can contribute this knowledge to multi-disciplinary research projects on a wide range of research topics such as biodiversity, sustainable livelihoods, climate change and biodiversity offsets for the Indian arid zones and consultancies for the rest of the world.

As a dynamic research institute with a history of delivering world-class projects, we encourage you to contact us to discuss further how DBG-CAZRI resources and knowledge could benefit your next project





## Modernization of Desert Herbaria with Vascular Plant Types Cataloging and Database Development

The DBG-CAZRI will complete cataloging and imaging its approximately 615 vascular plant types specimens. Basic information from all types in these families will be captured in the database.

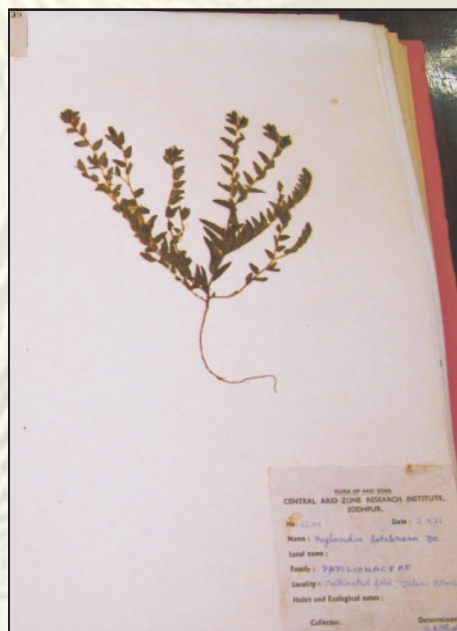
The digitization of the vascular plant type specimens need to be funded by any grant from any source.

To browse the available taxa for the Vascular Plant Types Catalog, you can have access to our database format uploaded in the website in due course.

Note that not all paratypes are indicated as such on specimen annotation labels (they are often only noted as "type" or "cotype"), and known paratypes are not included in this catalog. Specimens of paratypes, can also searched and seen in our catalog.

In the proposed database, vascular Plant Types could be searched by the name of the plant (family, genus, species, or subspecific epithet), author, collector, collector number, barcode number, or type status, by using the Quick Search

box. For searching one or more specific fields in the database, choose the Advanced Search will also be available.



- This information will be used for herbarium management, collection planning, taxonomic, floristic and biodiversity research, and field work planning aiming towards the sustainability and livelihood of the arid zones ecosystem and community.
- DBG-CAZRI digitization program presents an opportunity to advance biodiversity informatics research and increase our understanding of arid zones plant diversity.
- The current implementation of DBG-CAZRI's specimen database closely follows the guidelines for structure suggested by the International Union of Biological Sciences, Commission of Taxonomic Databases Working Group