

Indonesia

Total no. of Botanic Gardens recorded in Indonesia: 5

Approx. no. of living plant accessions recorded in these botanic gardens: 80,000

Approx. no. of taxa in these collections: 25,000

Estimated % of pre-CBD collections: 90%

Notes: The four major botanic gardens of Indonesia (headquarters at Bogor) have implemented a computer-based plant records system on their living collections, which, as of 1999, contained 45,000 records in electronic form. No analysis of the number of pre-CBD and post-CBD collections has been undertaken by the institution, although as reasonable records are held (including the dates of incorporation of accessions into the collection) this would theoretically be possible. In the 1990s the Indonesian Botanic Gardens undertook a very extensive programme of exploration and collection of native Indonesian plants. While pre-CBD collections are represented by a high proportion of non-native plants (perhaps 50%), post CBD collections are dominated by collections made within Indonesia.

The State botanic gardens of Indonesia (Kebun Raya Indonesia) have traditionally provided access to their living and preserved plant collections for scientific purposes to other institutions in Indonesia and the rest of the world. Herbarium specimens are available on loan to bona fide research workers, nationally and internationally. These botanic gardens are also currently reviewing their institutional policies with regard to access to their living collections and benefit sharing. However, to date, material continues to be distributed nationally and internationally not subject to any specific agreements with the recipient institutions.

Location: BALI

Founded: 1959

Garden Name: Cabang Balai Kebun Raya Eka Karya Bali

Address: P.O.Box 424, Denpasar, BALI.

Status: State

Herbarium: Yes Approx. no. of herbarium specimens: +1,000

Ex situ Collections:

Ferns, orchids, annual plants, ornamental plants, cacti. In 1989 the Garden recorded a total of 2,454 specimens in cultivation, representing 498 species. The collection has therefore grown considerable from this total during the 1990s.

No. of taxa: 4,275 (representing 650 species, 112 families, 403 genera).

Rare & Endangered plants: *Pinanga javana*, *Dicksonia blumii*, *Lithocarpus* sp., *Podocarpus imbricatus*, *Casuarina junghuhniana*. Approximately 50 species listed in the IUCN Red Data Book (1998), including Gramineae, Lauraceae, Melastomaceae, Myrtaceae, Orchidaceae, Palmae and Zingiberaceae

- Juanda Urban Forest Park in BANDUNG, West Java, was opened in the 1960s. It includes native and exotic trees (2,500, representing 108 spp.) and a variety of shrubs. Notable plants in the collection include *Cedrela mexicana*, *Eriobotria javanica*, *Pometia pinnata* and *Calophyllum falcatum*.
- Bundayati Urban Forest Park (also known as Bundayati Tourist Park), BENGKUKU, includes a collection of native trees. By 1994 2,000 trees had been planted, representing 255 species, 161 genera and 60 families. A plot of *Amorphophallus titanum* has been developed.

Location: BOGOR

Founded: 1817

Garden Name: UPT Balai Pengembangan Kebun Raya-LIPI

Address: Jalan Ir. H. Juanda No. 13, PO Box 309, BOGOR, 16003 Java.

Status: State

Herbarium: Yes Approx. no. of herbarium specimens: 2,000,000

Ex situ Collections:

Arecaceae, Orchidaceae, Dipterocarpaceae, Palmae, tropical fruits, Musaceae, Dioscoreaceae.

Extensive collection of tropical woody species, mainly from unlocalised origins, including species of Burseraceae, Dipterocarpaceae, Leguminosae, Meliaceae. Extensive collections of native plants and from other countries in South-east Asia. Collections include approximately 300 taxa listed in the IUCN International Red Data Book (1998), including 150 orchid species.

No. of taxa: 52,927
Rare & Endangered plants: Unknown
Special Conservation Collections: Endangered Indonesian fruits, orchids, etc.

Location: BOGOR
Founded: Unknown
Garden Name: Arboreta and Experimental Gardens of Silviculture
Address: Forest Research Institute, BOGOR, Java.
Status: State.
Herbarium: No.
Ex situ Collections:
Collections include accessions of rare and endangered species of Calamus (Palmae).
No. of taxa: Unknown.
Rare & Endangered plants: Unknown

Location: CIANJUR
Founded: 1862
Garden Name: Cabang Balai Kebun Raya Cibodas
Address: Sindanglaya, CIANJUR, West Java.
Status: State
Herbarium: Yes Approx. no. of herbarium specimens: 5,000
Ex situ Collections:
Extensive collection of sub-tropical woody plants (eg. Eucalyptus, conifers), tropical and sub-tropical ornamentals (eg. Aloe, Agave, Acacia, Callistemon and Camellia) and Palmae. A catalogue of collections produced by the garden in 1988 indicated that the collection at that time included 1,017 species, made up of 5,371 specimens (but excluded greenhouse collections of orchids, cacti and exotic ornamentals). In 1989 the garden reported 1,170 orchid species in cultivation.
No. of taxa: +2,000
Rare & Endangered plants: Stelechocarpus burahol, Cynometra cauliflora.

- The Wiladatika Flower Garden, Kwartir Nasional Gerakan Pramuka, CIBUBUR, Jakarta, West Java was established in 1976. It includes collections of orchids, ornamental plants, fruit and estate crops and spices.
- Bukit Suharto, EAST KALIMANTAN, includes a collection of native trees.
- The establishment of another botanic garden in East Kalimantan has been proposed: Bundayati Bulungan, Bulungan Regency, EAST KALIMANTAN, in 1997 but no recent information of the status of this project is available.
- The Perhutani Bamboo Germplasm Collection Garden, HUAR BENTES, Jasinga, West Java, was established in the 1990s.

Location: LAWANG
Founded: 1939
Garden Name: Purwodadi Botanic Garden
Address: PO Box 5, LAWANG 65201, East Java.
Status: State
Herbarium: Yes Approx. no. of herbarium specimens: 4268
Ex situ Collections:
Orchidaceae, Musaceae, Ferns, native plants of Indonesia. Drought tolerant plants from east Java. In 1985, the garden recorded a total of 11,413 specimens in cultivation, representing 2,598 species, of which there were 531 orchid species, 44 zingibers, 124 banana variety clones and many tree, shrub and medicinal species.
No. of taxa: 12,638
Rare & Endangered plants: varieties of bananas, sugar cane and yams, Feroniella lucida, Pleiospermium littorale, Mesona ferrea, Stelechocarpus burahol, Garcinia dulcis.

- The State Ministry for Research and Technology has established the Puspipstek Serpong Botanical Garden, SERPONG, surrounding laboratories at this science city and containing a variety of woody species in germplasm collections.

- The Horticultural Research and Development Centre of the Department of Agriculture has established the Paseh Fruit Germplasm Garden in cooperation with the Municipality of SUBANG in West Java. It contains a variety of woody germplasm collections.
- SUMATRA Two botanic gardens are known to exist also in Sumatra under the direction of the Forest Service: Sibolangit Garden in North Sumatra (south west of Medan) and Setia Mulia Garden in West Sumatra, east of Padang. Little effort has been put into developing these gardens recently and although both are state owned, no information is available on their current status or collections.
- The establishment of an arboretum, the Toraut Arboretum, was proposed by the Wallacea Development Institute, Wallacea, Jakarta in 1993. It would be associated with the Dumoga Bone National Park and maintain an ex situ collection of native species of the Park. No recent information on the status of this arboretum is available.

Key reference:

Darnaedi, D., and Rifai, M.A., (1997). *Proceedings of the Second Conference of International Association of Botanical Gardens - Asian Division*. IABG-AD, Bogor, Indonesia.