## The Indian Botanic Garden, Calcutta

S. K. BASU

Indian Botanic Garden

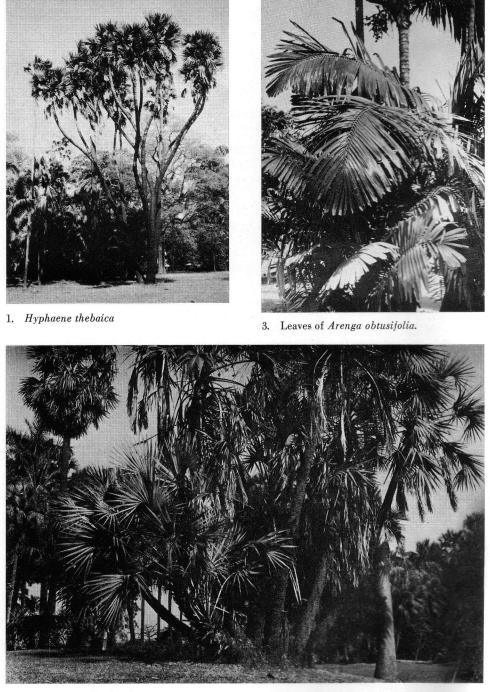
The Indian Botanic Garden, Calcutta, is located near sea-level (4.5 m. alt.) in the state of West Bengal in the eastern part of India. It comprises an area of 109.29 hectares or about 270 acres. The approximate annual rainfall is 1536 mm. (about 61.4 inches) and temperatures range from 21° to 31° C. or about 70° to 88° F.

The garden was established in 1787 by a British Colonel named Robert Kyd under the management of the then East India Company. With nearly two centuries of glorious history, the garden has become one of the leading botanical research institutes in the East. At present, the garden is under the Botanical Survey of India, Ministry of Education, Government of India, and includes within it the National Herbarium of about three million specimens of dried plants.

A plant population of more than 12.000 species is spread over the landscape. Among others, palms play a dominant part in enhancing the picturesque and scientific aspects of the garden. On entering the main gate of the garden, and extending up to the Kyd monument, an appreciable area is covered by stately palms as hedges, groves, avenues, or as isolated groups of different species. The species which are seen from the entrance leading towards the center of the garden are Livistona rotundifolia, L. chinensis, Licuala grandis, L. spinosa, Corypha elata, Acoelorrhaphe Wrightii, Areca triandra, Ptychosperma Macarthurii, Arenga pinnata, Orbignya Cohune, Caryota mitis, C. urens, Chrysalidocarpus lutescens, C. madagascariensis, Calamus arborescens, Bactris major, Rhapis excelsa, Borassus flabellifer, Cocos nucifera. Phoenix sylvestris, P. rupicola, Roystonea regia, among others.

The palmyra avenue, with tall rows of graceful Borassus flabellifer on both sides from the main entrance leading towards the northwest part of the garden, and the avenue of Roystonea regia, connecting the old water gate with Kyd Monument, present magnificent sights to visitors. Along the stretch of marshy land at the southeast corner of the garden by the river bank, large collections of Corypha elata and Phoenix sylvestris at different stages of growth present a contrasting scene. An interested visitor may also find some Corypha plants either in flowering or fruiting stages.

Further northwest from the Kyd Monument is situated the large palm house, a large circular greenhouse for the more unfamiliar but very interesting palms. At the center of the palm house, beneath a central dome, is grown a double coconut, Lodoicea maldivica, of imposing stature with its giant leaves spreading gracefully. Around the Lodoicea there are good specimens of Acanthophoenix crinita, Ptychoraphis singaporensis, Aiphanes caryotaefolia. At the corners of the radiating paths, four beautiful specimens of large Orbignya Cohune are grown. Raphidophora and some aroids growing on the Orbignya palms add further to the stately appearance of the palms. Seedlings beneath these palms have simulated a habitat and condition comparable to those obtained in a natural tropical rain forest. There are also specimens of Licuala peltata, Livistona australis, Bentinckia nicobarica, Elaeis guineensis, Thrinax parviflora, Washingtonia robusta, Rhapis humilis, Rhapis 116

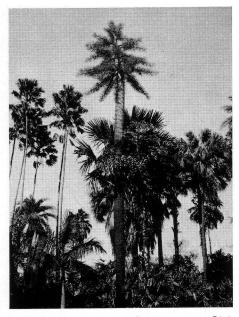


<sup>2.</sup> Hyphaene sp. (indica?).

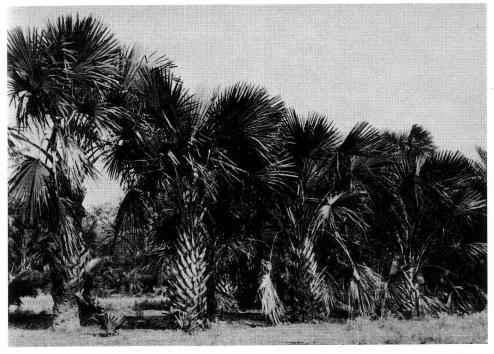
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4. Leaves of Arenga undulatifolia.



5. Inflorescence of Corypha elata among Livistona rotundifolia, L. chinensis, Licuala spinosa, Roystonea, Caryota and other palms.

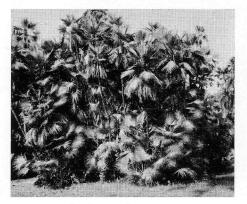


6. Rows of young Corypha elata.



7. Latania Loddigesii.

excelsa, Pritchardia pacifica, Heterospathe elata, Mascarena Verschaffeltii and many other species which are growing in the open. A little beyond the large palm house is the small palm house in which also flourish similar species, quite in a similar pattern. Two large cardamon trees, Cinnamomum zeylanicum, are also attractions of the conservatory. Other interesting species in the vicinity are Latania Loddigesii, Arenga un-



8. Acoelorrhaphe Wrightii.



9. Orbignya Cohune.

dulatifolia, A. obtusifolia, Hyphaene thebaica, Corypha umbraculifera, Howeia Belmoreana, Salacca edulis.

The nursery no. 1 located opposite the river Hooghly also contains large numbers of palms in pots. This collection includes, besides several of the already mentioned species, several newly acquired ones such as Archontophoenix Alexandrae, Sabal Palmetto, Trachycarpus Fortunei, Arenga Engleri, Coccothrinax inaguensis, C. Dussiana, Chamaedorea elegans, Phoenix Roebelenii, Calamus ciliaris and others which are interesting as new introductions to the Indian Botanic Garden.

The garden, with its rich collection of palms, is a treasure house for palm lovers from all over the world. To appreciate fully the palm wealth of this garden, the following enumeration of the species, flourishing in all their splendor and luxuriance is given.

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<sup>10.</sup> Calamus leptospadix.

## ENUMERATION OF PALMS AT THE INDIAN BOTANIC GARDEN

Acoelorrhaphe Wrightii, Actinorhytis Calapparia, Aiphanes caryotaefolia, Archontophoenix Alexandrae, Areca Catechu, A. triandra, Arenga Engleri, A. obtusifolia, A. pinnata, A. undulatifolia, A. Wightii, Bactris major, Bentinckia nicobarica, Borassus flabellifer, Calamus arborescens, C. ciliaris, C. erectus, C. Guruba, C. leptospadix, C. longisetus, C. Rotang, C. viminalis, Caryota mitis, C. urens, Chamaedorea elegans, Chrysalidocarpus lutescens, C. madagascariensis, Coccothrinax Dussiana, C. inaguensis, Cocos nucifera, Corypha elata, C. Taliera, C. umbraculifera, Daemonorops didymophylla, D. Jenkinsiana, Dictyosperma album, Elaeis guineensis, Heterospathe elata, Howeia Belmoreana, Hyphaene indica, H. thebaica, Latania Loddigesii, Licuala grandis, L. pelt-ata, L. spinosa, Livistona australis, L. chinensis, L. decipiens, L. humilis, L. rotundifolia, L. Saribus, Lodoicea maldivica, Orbignya Cohune, Orbignya (Attalea speciosa), Phoenix Loureirii, P. paludosa, P. reclinata, P. Roebelenii, P. rupicola, P. sylvestris, Plectocomia assamica, Pritchardia pacifica, Ptychoraphis singaporensis, Ptychosperma elegans, P. Macarthurii, Rhapis excelsa, R. humilis, Roystonea regia, Sabal Blackburniana, S. mexicana, S. minor, S. Palmetto, Salacca edulis, Scheelea insignis, Thrinax parviflora, Trachycarpus Fortunei, Washingtonia robusta.