The Palms of Chapman Field

Chapman Field, before we say any more, is an unofficial synonym for the U. S. Plant Introduction Garden, Coconut Grove, Florida. The palm collections there are among the best and most impressive in the country. They contain many palms seldom met with in American gardens and are especially noteworthy for the greater age and larger size of numerous specimens.

This article is a continuation in a series of efforts to learn what palms are actually in cultivation in this part of the world by recording lists of the palms growing in various gardens. Not all the palms in the Introduction Garden list, appended below, have yet reached full size, but all have been in the ground long enough and have grown sufficiently well to assure their continuing to thrive under the conditions obtaining at the Garden.

Massive plantings of Phoenix species along the drainage canal, with tall specimens of Elaeis guineensis and many other palms adding to the ranks of magnificent fronds, are a sight to stir the admiration of any palm lover. Besides a wealth of gorgeous palms throughout the section, there are some not gorgeous but still fetching enough, some thoroughly ungorgeous but still of compelling interest (for example, two bifurcate Hyphaene palms), and some that are more noble than they are gorgeous (e. g., the appropriately named Bismarckia nobilis). The Garden, in short, is not a carbon copy of other notable palm plantings in the area, and the fancier could spend two full days or more in profitable observation there.

As noted elsewhere in this number of PRINCIPES, there is a dearth of Borassus palms in American gardens. Not so, however, at the Introduction Garden; 16 Borassus palms all listed there as *B. flabellifer* have been in the ground 15 years or longer, and although several are still quite small, three of the largest have flowered. Unluckily these three are all males. A few of the specimens may prove to be *B. ethiopum* instead of *B. flabellifer*. Acccording to Dr. Fairchild, the seed resulting in the largest specimen - now a ponderous tree grown in a pothole - was shipped in 1927 from West Africa, and the tree probably is, as he believed, *B. ethiopum*.

The practice in listing the palms at the Garden has been to decapitalize all specific names. In the list below we have capitalized the initial letters of certain of those specifics only because of our adoption of Bailey's procedure on that score. The names themselves have not been altered, though a few of them are not currently of wide recognition; but such binomials as *Caryota plumosa*, if not taxonomically acceptable, nevertheless represent distinctive species differing from other palms of the genus in the Garden.

The list is not a complete one, having been held, rather, within the limits defined below.

LIST OF PALMS DEFINITELY ES-TABLISHED AT THE U. S. PLANT IN-TRODUCTION GARDEN, COCONUT GROVE, FLORIDA, AT AUGUST 15, 1956.

Acrocomia armentalis sclerocarpa Adonidia Merrillii Aiphanes caryotaefolia Lindeniana Archontophoenix Alexandrae Areca Cathecu Arecastrum Romanzoffianum Arenga Ambong saccharifera Wightii Arikuryroba schizophylla Astrocaryum alatum Murumuru Standleyanum Attalea crassispatha Bactris balanoidea Bentinckia nicobarica Bismarckia nobilis Borassus flabellifer Brahea dulcis

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Butia Bonnetii capitata Caryota Cumingii mitis plumosa urens Chamaedorea Arenbergiana concolor erumpens oblongata Tepejilote Chamaerops humilis Chrysalidocarpus lucubensis lutescens madagascariensis Coccothrinax argentata argentea crinita Dussiana Martii Cocos nucifera Copernicia Burretiana cerifera Curbeloi gigas Torreana Yarev Corozo oleifera Corypha elata talliera umbraculifera Cryosophila Warscewiczii Daemonorops niger Desmoncus oxyacanthos Dictvosperma album album var. rubrum aureum Diplothemium caudescens Drymophloeus Beguinii olivaeformis Elaeis guineensis Eleutheropetalum Ernesti-Augusti Sartori Ervthea aculeata armata Pimo Eupritchardia affinis Lowreyana pacifica Thurstonii Gaussia attenuata Geonoma sp. (Colombian)

Glaziova Treubiana Guilielma Gasipaes Heterospathe elata Hexopetion mexicanum Hyphaene turbinata Latania borbonica Loddigesii Licuala grandis spinosa Livistona altissima chinensis decipiens Hoogendorpii Mariae Saribus Mascarena lagenicaulis Verschaffeltii Mauritia flexuosa Nannorhops Ritchieana Nipa fruticans Oothrinax anomala Opsiandra Maya Orbignya Cohune speciosa spectabilis Paurotis Wrightii Pelagodoxa Henryana Phoenix abyssinica acaulis canariensis dactvlifera farinifera pusilla reclinata Roebelenii rupicola sylvestris tomentosa zevlanica Pinanga Kuhlii Pseudophoenix saonae Sargentii vinifera Ptychosperma elegans Raphia vinifera Rhapis excelsa Rhyticocos amara Roystonea borinquena elata regia Sabal Beccariana causiarum

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glaucescens mauritiaeformis mexicana nematoclada Palmetto minor texana umbraculifera Scheelea butyracea gomphococca Humboldtiana Lauromuelleriana Siphokentia Beguinii Syagrus coronata orinocensis Thrinax microcarpa Morrisii parviflora punctulata Trachycarpus Martiana Trithrinax acanthocoma brasiliensis Vitiphoenix sp. Washingtonia robusta

Brevities

Palm Fertilizers

From time to time we receive inquiries from members about the best kind of manufactured fertilizer to use for feeding palms. In the absence of field tests and conclusions to be drawn from them, the inquiries cannot be answered with any exactitude. Moderate applications of 4-7-5 are usually beneficial if not allowed to come into contact with the roots. Potash is indicated of course when the effort is to slow foliage growth and to improve the yield of fruit, as with coconuts.

The Wilson & Toomer Fertilizer Company of Jacksonville manufactures a "Palm Special" fertilizer. We inquired the formula of them and quote from their reply.

"We have a mixture registered with the State Department as W & T's Palm Special (5-7-4), which analyzes 25% Natural Organic Nitrogen derived from Castor Pomace, Tankage and Ground Tobacco Stems with 1% MgO or water soluble Magnesia derived from Sulphate of Potash with Magnesia, balance of Potash from Muriate. This mixture, also, contains 3% MnO from Manganese Sulphate, .25% CuO from Copper Sulphate, .25% ZnO from Zinc Sulphate, .50% Fe203 from Iron Sulphate, .10% B203 from Borax and 3% from Sulphur."

The quotation is for the members' information, but is in no sense a recommendation of the fertilizer by the Society. Various manufacturers will prepare fertilizers mixed to the customer's specifications, if ordered in sufficient quantities.

Arenga Engleri

Confusion of species in the larger genera, such as Geonoma, is hardly to be wondered at because of the great multiplicity of species. But even the genus Arenga, with only a very few species, is still posing some questions for the growers.

Arenga Engleri is a current cause of wonderments, at least in Florida. At times it has been thought to be one and the same as *Wallichia caryotoides*, a palm of another genus; but here the question arises as to whether one plant has been propagated under two different names.

Arenga Engleri and A. tremula (A. Ambong) are sufficiently alike to raise doubts of their being two well-defined species. Seeking some word from a scientist who has studied the subject, we asked Professor H. H. Bartlett for an opinion. "They seem to me," he replied, "not to be specifically different." And he adds, "I had much experience with A. tremula in the Phillipines and took various photographs of it growing wild at several localities and also (before the war) in the remnant of the old Botanical Garden that was established in Spanish days outside the wall at Manila. I also met with it in