### **Edible Palms and Their Uses**

Edible Palms and Their Usesl

Jody Haynes 2 & John McLaughlin 3

Palms represent the third most important plant family with respect to human use (Johnson, 1998). Numerous edible products are obtained from palms, including the familiar date palm fruits, coconut palm nuts, and various palm oils. Some less well-known edible palm products include palm "cabbage" or "heart-of-palm", immature inflorescences, and sap from mature inflorescences.

This article presents a fairly comprehensive list of 'edible' uses for palms worldwide. Since this was designed as a guide for the average homeowner or palm enthusiast, it includes only those uses that do not require extensive processing.

Although most palm products are not available commercially, heart-of-palm is the basis for a large industry in Central and South America. This industry primarily exploits the following three species, listed in descending order of importance (D. Johnson, pers. comm..): Euterpe oleracea, Bactris gasipaes, and E. edulis.

In smaller, localized regions of South America, palms used for this purpose occur in the genera Iriartea, Geonoma, and Syagrus, whereas Roystonea species are occasionally used in the Caribbean, Borassus aethiopium is commonly used in Africa, numerous Dypsis species are widely used in Madagascar, and various rattan genera (such as Calamus and Daemonorops) are used in Southeast Asia.

It is important to note that most palms harvested commercially for cabbage are cut from wild populations. In areas such as Brazil, Paraguay, and the Dominican Republic, over-exploitation has destroyed native palm stands and, in at least one case (D.R.), the entire export trade in palm cabbage. If you purchase heart-of-palm, please take the time to make sure that it comes from plants cultivated for that purpose.

The list of palms below represent a broad range of species and their uses in various parts of the world. Some of the species listed are not suitable for south Florida conditions, and this is noted where applicable. Also provided for each species listed—when known—is the palm's common name(s), any known synonyms, its country or region of origin, and whether it is solitary or clustering.

The term 'destructive,' as it is applied below, means that the entire plant is destroyed for a given use, while 'nondestructive' generally means that individual stems are harvested from a clustering species but the entire plant is not killed.

At the end of the article, the palms from the alphabetical list are organized into tables based on their uses. Of course, the fact that an item is edible does not mean that it is pleasant to consume!

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#### The Palms (in Alphabetical Order): A

| Acanthophoenix rubra (solitary - Mascarene Islands)   | Edible cabbage   |
|---|--|
| Actinorytis callaparia (solitary - New Guinea, Solomon Islands)   | Seeds are sometimes used as a substitute for betelnut (which come from Areca catechu), but are very strong in a narcotic way and reportedly 'knock you out' for several hours; edible palm heart (destructive) |
| Acrocomia aculeata (syn. A. lasiospatha, A. sclerocarpa) - Macaw or mucuja palm (solitary – Martinique, Dominican Republic, Costa Rica) | Young leaves eaten as a vegetable; edible sweet kernel in seed; oily, somewhat bitter edible fruit; wine produced by this palm has the local name of coyol in Costa Rica (semi-destructive)                    |
| Adonidia merrillii (syn. Veitchia merrillii) –<br>Christmas, manilla, adonidia palm (solitary<br>- Phillipines)                         | Seeds sometimes used as substitute for betelnut  |
| Aiphanes spp Ruffle palms (solitary - Central and South America)  | Fruit and endosperm (flesh inside hard seed) edible  |
| Allagoptera arenaria (syn. Diplothemium maritimum) - Seashore palm, cacandó is local name - (clustering - East coast of Brazil)         | Sweet, though fibrous fruit  |
| A. brevicalyx – Buri da praia is local name (clustering – Brazil)   | Edible fruit   |

| A. campestris – Buri is local name (clustering – Brazil, Paraguay, Argentina)  | Edible immature fruit   |
|--|---|
| A. leucocalyx – (clustering – Brazil,<br>Bolivia, Paraguay, Argentina)   | Mesocarp and seeds edible   |
| Alloschmidia glabrata (solitary – New Caledonia – not suitable to high pH soils)   | Edible palm heart (destructive)   |
| Aphandra natalia – Piassaba is the local name (solitary – Ecuador, Peru, Brazil)   | Edible immature fruit   |
| Archontophoenix spp. (solitary - Australia)  | Edible cabbage  |
| Areca catechu (syn. A. hortensis) - Betelnut<br>palm, catechu (solitary probably originated<br>in Malaysia or the Phillipines, but is now<br>widely distributed in many tropical regions)                                  | Seed is the source of the betel nut which is chewed by millions of people as a stimulant; edible cabbage  |
| A. caliso (Phillipines); A. concinna -<br>Lenateri is local name (Sri Lanka, Ceylon);<br>A. guppyana (New Guinea, Solomon<br>Islands); A. laxa<br>(Andaman Islands); A. triandra var. triandra<br>(much of Southeast Asia) | Seeds sometimes used as substitute for betelnut   |
| A. ipot – Bungang-ipot is local name; A. hutchinsoniana – Bunga is local name; A. macrocarpa – Bungang-lakihan is local name; A. parens – Takobtob is local name (solitary - Phillipines)                                  | Edible cabbage (destructive)  |
| A. listeri (solitary - Christmas Island)   | Edible cabbage (destructive)  |
| A. macrocalyx (solitary - Irian Jaya)  | Nuts used as betel substitute; edible heart (destructive)   |
| Areca spp. (Southeast Asia)  | Seed of many other species used as betelnut substitute  |
| Arenga pinnata (syn. A. saccharifera) -<br>Areng or black sugar palm (solitary - India,<br>Southeast Asia, Malaysia, Indonesia)  | The sugary sap from the cut inflorescence makes a fresh drink called saguir, but is also dried into arenga sugar and fermented into arrack, a distilled liquor; the bud and seed are also edible (but the fruit contains calcium oxalate and is not edible); edible cabbage; sago, a starch, is also made from the pith |
| A. microcarpa (clustering – Irian Jaya,<br>Papua New Guinea)   | Edible palm heart (nondestructive)  |
| A. obtusifolia – Langkap is local name<br>(clustering – Peninsular Malaysia, Sumatra,<br>Java)   | Edible palm heart (non-destructive) and endosperm   |
| A. undulatifolia - Oren Gelora is local name (clustering - Borneo, Phillipines)  | Edible cabbage  |
| A. wightii – Dhudasal, alam panei are local names (clustering – India)   | Peduncle tapped for sap   |
| Astrocaryum acaule (Brazil)  | Fibrous and fleshy fruit rich in Vitamin A  |
| A. aculeatum – Chonta is local name<br>(Colombia, Venezuela, Trinidad, Guyana,<br>Suriname, Brazil, Bolivia)   | Fruit mesocarp edible   |

| A. campestre – Jarivá is local name (Brazil, Bolivia)   | Edible fruit  |
|---|---|
| A. jauari – Jauari is local name (Columbia, Venezuela, Guyana, Suriname, Peru, Brazil)  | Edible palm heart   |
| A. mexicanum - Chocho or waree palm (solitary - Mexico to Guatemala)  | Shoots, heart (destructive), and flowers edible                                 |
| A. murumuru (clustering – Colombia,<br>Venezuela,<br>Guianas, Ecuador, Peru, Brazil, Bolivia)   | Edible fruit with juicy, aromatic flavor  |
| A. tucuma (Brazil)  | Fibrous and fleshy fruit rich in Vitamin A                                      |
| A. vulgare (Suriname, French Guyana, Brazil)  | Fruit mesocarp used to make mash  |
| Attalea allenii – Taparín is local names (solitary – Panama, Colombia)  | Fruit edible  |
| A. butyracea (syn. Scheelea bassleriana, S. brachyclada, S. butyracea) - Palma del vino or American oil palm (solitary - South America) | Sweet sap from severed trunk is fermented into wine (destructive); fruit edible |
| A. cohune (syn. Orbignya cohune) - Cohune or<br>American oil palm (solitary - southern<br>Mexico to Belize)                             | Edible fruit, nuts, and heart (destructive)                                     |
| A. crassispatha (solitary – Haiti)  | Fruit eaten by children   |
| A. maripa (syn. Maximiliana regia, M. maripa) - Inaja or curcurite palm (solitary - Brazil)   | Edible leaf bud (destructive) and fruit   |
| A. martiana - Urucuri palm (solitary -<br>Amazonia)   | Cultivated in Trinidad for its fruit, which reportedly tastes like dates        |
| A. spectabilis - American oil palm (solitary - Amazonia)  | Edible fruit  |

## The Palms (in Alphabetical Order): B

| Bactris brongniartii – Marajá and chacarrá<br>are local names (clustering – Colombia,<br>Venezuela, Guianas, Peru, Brazil, Bolivia) | Edible fruit  |
|---|---|
| B. concinna – Shiní is local name (clustering - Amazonia)   | Edible fruit  |
| B. gasipaes - Peach palm or pejibaye<br>(clustering - Central America to<br>Amazonian Brazil)                                       | Fruit is delicious, boiled or roasted; this palm is the basis for a commercial (nondestructive) heart-of-palm industry in Central and South America |
| B. guineensis - Tobago cane (clustering - South America, West Indies)   | Edible fruit; fruit also used to make a wine  |
| B. macana – Contilla is local name (clustering – Colombia, Venezuela, Peru,   | Edible fruit  |

| Brazil, Bolivia)  |  |
|---|--|
|   |  |
| B. major - Maraja palm (clustering –<br>Central America and northern South<br>America)  | Edible fruit and wine  |
| B. maraja - Maraja palm (clustering -<br>South America, West Indies)  | Edible fruit and wine  |
| B. plumeriana – Coco macaco is local<br>name (clustering – Cuba, Dominican<br>Republic, Haiti, Jamaica)                                       | Edible fruit   |
| Balaka longirostris – Mbalaka is local<br>name (solitary – Fiji – not suitable to high<br>pH soils)   | Edible kernel  |
| Borassodendron borneense – Bidang is local name (solitary – Borneo)   | Edible palm heart (destructive) and immature fruit endosperm   |
| Borassus aethiopium – African palmyra<br>palm (solitary – Tropical Africa)  | Important food source providing edible fruit, nuts, and cabbage (destructive); sap from cut inflorescence provides a drink; sap also processed into wine, alcohol, or vinegar and dried into sugar cakes; the sinker (first bladeless juvenile leaf from the seed) is a delicacy |
| B. flabellifer - Tal-gas or palmyra palm<br>(solitary - India, Sri Lanka, Southeast Asia,<br>New Guinea)                                      | Similar uses as listed for B. aethiopium above; this palm has over 5000 uses in Sri Lanka  |
| B. madagascariensis – Dimaka and<br>marandravina are local names (solitary –<br>Madagascar)   | Edible palm heart (destructive)  |
| Brahea aculeata - Palmilla is local name (solitary – Mexico – not suited to humid tropics)  | Edible fruit   |
| B. edulis - Guadalupe palm (solitary - endemic to Guadalupe - not suited to humid tropics)  | Named "edulis" for its edible fruit  |
| B. dulcis - Rock or sombrero palm (solitary - Mexico – not suited to humid tropics)   | Named "dulcis" for the flavor of its fruit   |
| Butia capitata (syn. Cocos australis, C. capitata) - Pindo or jelly palm (solitary - Brazil, Uraguay – cold-hardy palm not suited to tropics) | Excellent edible fruit, either fresh or when made into jelly   |
| B. eriospatha – Butia is local name (solitary – Brazil)   | Fruit used to flavor alcoholic drink   |
| B. yatay - Yatay palm (solitary -<br>Argentina, Uruguay)  | Edible fruit   |

# The Palms (in Alphabetical Order): C

| Calamus paspalanthus - Rattan | Edible palm heart (non-destructive), sour fruit |
|-------------------------------|---|
| Caramus pasparammus - Kattan  | Earlie paint heart (non-destructive), sour muit |
| palm (clustering/climbing -   |   |
| paini (ciusternig/ciinionig - |   |

| Southeast Asia)  |  |
|--|--|
| C. rotang - Rattan palm<br>(clustering/climbing - Southeast<br>Asia)   | Fruit eaten fresh or pickled   |
| C. tonkinensis - Rattan palm, may dang is local name (clustering/climbing - Vietnam)                                       | Seeds chewed   |
| C. vanauatuensis – Loya ken is local name (clustering/climbing – Vanuatu)  | Stem sap drunk and used as ointment  |
| Calamus spp Rattan palms<br>(clustering/ climbing – Southeast<br>Asia)   | Palm hearts of many species eaten cooked in parts of Asia (non-destructive); fruit of many species edible  |
| Calospatha scortechinii – Rotan<br>demuk is local name<br>(clustering/climbing – Peninsular<br>Malaysia)                   | Fruit edible   |
| Carpoxylon macrospermum –<br>Carpoxylon palm, bungool is local<br>name (solitary – Vanuatu)                                | Fruit eaten  |
| Caryota mitis – Clustering fishtail palm (clustering – Southeast Asia)   | Edible palm heart (non-destructive)  |
| C. no – Giant fishtail palm, entibap mudol is local name (solitary – Borneo)   | Edible palm heart (destructive)  |
| C. rumphiana – Solitary fishtail<br>palm, takipan is local name<br>(solitary – Phillipines, Indonesia)                     | Edible palm heart (destructive)  |
| C. urens - Toddy fishtail, jaggery<br>palm, or kitul (solitary - India,<br>Myanmar, Sri Lanka, Ceylon)                     | Sweet sap from inflorescence can be drunk fresh (toddy) or boiled to produce sugar (jaggery); toddy can be fermented and distilled to alcohol (arrack) or to vinegar; palm heart also used locally as flour (destructive), especially for control of diabetes and in auruvedic medicines; fruit contains calcium oxalate and is not edible |
| Chamaedorea elegans - Parlour<br>palm, Neanthe Bella (solitary -<br>Central America)                                       | Unopened inflorescences eaten raw or cooked  |
| C. tepejilote - Tepejilote palm<br>(solitary - Central America)  | A substantial industry has developed around this palm in South America, where selectively propagated plants are grown for the young male inflorescences, called pacaya   |
| Chamaerops humilis - Mediterranean or European fan palm (clustering - western Mediterranean – not suited to humid tropics) | Fruits are eaten in Morocco; heart ("palmito") is consumed in Spain (nondestructive); young suckers are eaten cooked in Italy  |
| Clinostigma harlandii – Ngami igh is local name (solitary – Vanuatu – requires tropical conditions)                        | Fruit mesocarp and palm heart edible (destructive)   |

| Coccothrinax argentea - Silver<br>palm (solitary - Caribbean)                                   | Very young leaves eaten as a vegetable, raw or cooked  |
|---|--|
| Cocos nucifera - Coconut palm (solitary - tropical and subtropical regions worldwide)           | This palm has literally thousands of uses, but here are just a few:  Coconut water is the juice in the full size but still immature fruit; it is a natural drink with similar constituents to athletes' dehydration aids (and has also been used to replace blood plasma in emergency surgery).  Coconut milk and coconut cream are emulsions of coconut oil and water obtained by shredding and squeezing fresh endosperm (kernel or meat from inside nut). These products, along with coconut oil itself, contain no cholesterol and, when used in cooking, are readily digestible and enhance the quality of the food. Interesting medical research suggests that coconut oil is beneficial as part of AIDS treatment.  Endosperm can be shredded and dried (and sometimes sweetened)—which is known as desiccated coconut.  Sap can be tapped from the inflorescence and drunk fresh (toddy) or boiled to produce sugar (jaggery); toddy can be fermented and distilled to alcohol (arrack) or to vinegar.  The haustorium inside the sprouted nut slightly resembles an "apple".  Coconut heart can be obtained from any palm more than three years old and heart from a mature palm can produce up to 70 side salads. When fresh, it is sweeter and "nuttier" than heart-of-palm from other species (destructive, but recommended for those areas where palms are over-aged or are threatened by lethal yellowing disease and need to be replaced by high yielding, disease resistant varieties).  Coconut pollen, collected naturally by bees or mechanically by plant breeders, can be found in health food stores |
| Corypha utan (syn. C. eltata) –<br>Gebang palm (solitary – Indonesia,<br>Malaysia, Phillipines) | Sap from inflorescence used to make wine and sugar; edible palm heart (destructive); edible fruit  |
| Cryosophila nana - Root-spine<br>palm (solitary - Mexico)                                       | Fruit eaten fresh or fermented into wine   |
| C. williamsii – Mojarilla is local<br>name (solitary – Honduras)                                | Edible palm heart (destructive)  |
| Cyphosperma tanga – Tangga is local name (Fiji)   | Seed and palm heart edible   |

# The Palms (in Alphabetical Order): D

| Daemonorops cristata - Rattan palm, wi getah is local name (clustering/climbing - Sarawak)                 | Fruit exudates used as gum; fruit eaten by children                             |
|--|---|
| D. didymophylla - Rattan palm, wi getah and rotan jernang are local names (clustering/ climbing - Sarawak) | Sarcotesta sweet and juicy; fruit used in traditional medicine                  |
| D. fissa - Rattan palm, rotan kotok is local name (clustering/climbing - Sarawak)                          | Fruit slightly sweet, edible; palm heart edible, sold locally (non-destructive) |
| D. periacantha - Rattan palm, wi empunok is local name (clustering/climbing - Sarawak)                     | Edible palm heart (non-destructive) and fruit                                   |
| D. scapigera - Rattan palm (clustering/climbing - Borneo)  | Edible fruit  |

| Daemonorops spp. – Rattan palms (clustering/climbing – Southeast Asia)   | Fruit and palm heart (non-destructive) of many species edible |
|--|---|
| Desmoncus cirrhiferus – New World rattan palm, matamba<br>and bora negra are local<br>names (clustering/climbing – Colombia, Ecuador)  | Fruit edible  |
| Dypsis ampasindavae – Lavaboka is local name; D. ankaizinensis – laboka and hovatra are local names; D. basilonga – madiovozona is local name; D. canaliculata – lopaka and monimony are local names; D. hovomantsin – hovomantsina is local name; D. ligulata; D. perrieri – besofina and menamosona are local names; D. pilulifera – ovomamy is local name; D. prestoniana – tavilo is local name; D. tsaratananensis – kindro is local name; D. tsaravoasira – tsaravoasira is local name (Madagascar) D. baronii – farihazo and tongalo are local names; D. madagascariensis – hirihiry and kizohazo are local names; D. utilis – vonitra is local name (Madagascar) | Edible fruit and palm heart                                   |

### The Palms (in Alphabetical Order): E, F

| Eleiodoxa conferta (clustering, closely related to Salacca - Indonesia, Malaysia)  | Edible fruit, used to make pickles and relishes; edible palm heart (non-destructive)                                  |
|--|---|
| Eugeissona brachystachys – Tahan bertam is local<br>name (clustering – Peninsular Malaysia – requires<br>tropical climate) | Edible immature endosperm   |
| E. insignis – Pantu kejatau is local name (clustering – Sarawak – requires tropical climate)                               | Palm heart and young fruit edible (non-destructive)   |
| E. tristis – Bertam is local name (clustering – Peninsular Malaysia, Thailand – requires tropical climate)                 | Edible immature fruit   |
| E. utilis – Nanga is local name (clustering – Borneo – requires tropical climate)  | Palm heart edible (non-destructive); purple flower pollen used as condiment   |
| Euterpe catinga (Colombia, Venezuela, Peru, Brazil – requires tropical climate)  | Fruits used to make drink   |
| E. edulis – Assai palm, palmito, jucara, yayin (solitary - Ecuador, Argentina – requires tropical climate)                 | Reduced to rarity through commercial harvesting (destructive) of heart-of-palm; named "edulis" for its edible cabbage |
| E. oleracea - Assai or acai palm (clustering – Brazil – requires tropical climate)   | Fruit used locally to make a popular thick liquid called acai or assai; terminal bud also edible                      |
| E. precatoria – Paná is local name (Amazonian – requires tropical climate)   | Edible palm heart   |

### The Palms (in Alphabetical Order): G, H, I

| Gastrococos crispa - Cuban belly palm (solitary - Cuba)   | Endosperm of seeds sometimes eaten in Cuba, which reportedly tastes like coconut  |
|---|---|
| Geonoma spp. (solitary - Central and South America)   | Reduced to rarity due to harvesting of edible cabbage (destructive)   |
| Gulubia cylindrocarpa – Niulip is local<br>name (solitary – Vanuatu – requires<br>tropical climate)       | Edible fruit and palm heart (destructive)   |
| Heterospathe elata - Sagisi palm (solitary - Phillipines)   | Seed sometimes used as a substitute for betelnut  |
| H. elmeri (solitary – Phillipines)  | Seed sometimes used as a substitute for betelnut  |
| Hyophorbe spp Bottle and spindle palms (solitary - Mascarene Islands)                                     | Edible seeds  |
| Hyphaene dichotoma (syn. H. indica) –<br>Indian doum palm, oka mundel is local<br>name (solitary – India) | Fibrous fruit mesocarp and unripe kernel eaten  |
| H. petersiana – African ivory nut palm (solitary – tropical Africa).                                      | Palm wine made by fermenting mesocarp pulp and from sap by tapping flower bud (non-destructive); fibrous mesocarp also eaten fresh; palm wine distilled into spirits; palm heart edible (destructive) |
| H. thebaica – Doum or gingerbread palm (solitary - Coastal northern and eastern Africa).                  | Second common name comes from the flavor of the fruit   |
| Iriartea spp. – Stilt-root palms (solitary - Central and South America – requires tropical climate).      | Edible terminal bud (destructive). Juania australis - Chonta is local name (solitary - Juan Fernandez Islands). Edible fruit  |

## The Palms (in Alphabetical Order): J, K, L

| Jubaea chilensis - Chilean wine palm (solitary - Chile - adapted to Mediterranean climates and unsuitable for humid tropics) | Sweet sap from which wine, palm honey, or sugar can be produced (destructive); edible fruit called "coquito nuts" which taste like coconut |
|--|--|
| Jubaeopsis caffra - Kaffir or pandoland palm (clustering - South Africa - not suited to humid tropics)                       | Edible seeds   |
| Kentiopsis pyriformis (solitary – New Caledonia – requires tropical climate)   | Destruction of this palm for its edible heart has resulted in its critical endangerment  |
| Latania spp Latan palms (solitary - Mascarene Islands)   | Edible seeds   |
| Leopoldinia piassaba – Piassaba and chiquichique are local names (solitary – Colombia, Venezuela, Brazil)                    | Thin flesh of fruit agitated with water to a make a popular local drink  |
| Licuala valida – Pala (solitary – Sarawak)   | Palm heart edible (destructive)  |
| Linospadix monostachya - Walking stick palm (solitary – northern Australia)  | Long strings of waxy, red, ovoid fruit are pleasant to chew but not substantial as food  |
| Livistona australis - Australian fan palm (solitary -  | Young tender leaves  |

| Australia)   | edible (non-destructive)                                 |
|--|--|
| Livistona spp. (solitary - Australia)                          | Edible cabbage (destructive)                             |
| Loxococcus rupicola - Dotalu is local name (Ceylon, Sri Lanka) | Seeds used as substitute for betelnut; edible palm heart |

## The Palms (in Alphabetical Order): M, N, O

| Marojejya insignis – menamosa and beondroka are local names (solitary - Madagascar – requires tropical climate)   | Edible palm heart (destructive)   |
|---|---|
| Mauritia flexuosa - Ita palm or 'Tree of Life' (solitary - South America – requires tropical climate)   | Fruit edible after cooking; edible sap; pulp can<br>be eaten directly or dried and made into flour or<br>fermented into alcohol (destructive) |
| Mauritiella aculeata (clustering - South America – requires tropical climate)   | Fruit edible after cooking  |
| Nannorrhops ritchiana - Mazari palm (clustering - Middle East, Pakistan, Afghanistan - not suited to humid tropics)   | Edible seeds, harvested locally; very young leaves eaten as a vegetable, raw or cooked  |
| Neoveitchia storckii (solitary - Fiji)  | Immature fruit edible   |
| Nypa fruticans - Mangrove palm or nipah, golpata is local name (clustering - Asia, Western Pacific)   | Sweet sap from inflorescence can be boiled to produce sugar; immature fruit edible  |
| Oenocarpus bacaba (syn. Jessenia bacaba) - Bacaba<br>wine palm (solitary - Central America to Brazil/Bolivia<br>– requires tropical climate)                                | Fruit is source of colorless, sweet oil; fruit also fermented into wine   |
| O. bataua (syn. Jessenia polycarpa – Trinidad to<br>Panama); O. distichus (Brazil). [both require tropical<br>climate]  | Edible fruit; sap used locally as a beverage or boiled as oil   |
| O. distichus – Bacaba palm (solitary – Brazil, Bolivia – requires tropical climate)   | Fruit used to make a beverage   |
| O. mapora (syn. O. multicaulis) – Jephue isá is local<br>name (solitary – Costa Rica, Panama, Colombia,<br>Venezuela, Peru, Bolivia, Brazil – requires tropical<br>climate) | Edible fruits   |
| Oncosperma horridum – Nibong (clustering – Sarawak)   | Palm heart edible (nondestructive)  |
| O. tigillarium (syn. O. filamentosum) - Nibung palm or<br>katu kittul (clustering - Sumatra, Borneo, Java,<br>peninsular Malaysia)  | Heart used as a vegetable (cooked or raw) and in salads (non-destructive)   |
| Oncosperma spp (solitary or clustering)   | Seeds sometimes used as a substitute for betelnut in the Philippines  |

### The Palms (in Alphabetical Order): P, Q, R

|          | Edible fruit (endocarps), with the local names of "coco", "coquillo", "janchicoco" or "monococo"; local people also |
|----------|---|
| tropics) | make a refreshing drink from the sap. Pelagodoxa  |

|  | henryana - (solitary - Marquesas Islands – requires tropical climate). Edible seeds   |
|--|---|
| Phoenix acaulis – Date palm, khajur is local name (solitary – India)   | Edible fruit and heart (destructive)  |
| P. canariensis - Canary Island date palm (solitary - Canary Islands).  | Fruit have been eaten by humans in times of need and used as animal fodder in the Canary Islands; sap is still extensively extracted in La Gomera (Canaries) to produce "Miel de Palma", which is the condensed sap that tastes somewhat like maple syrup |
| P. dactylifera - Edible or 'true' date palm<br>(solitary or clustering - North Africa, Middle<br>East, India - not suited to humid tropics).   | Fruit is of singular importance, as it is a staple part of the diet of millions of people; sap from tapped inflorescence used to make sugar (non-destructive)   |
| P. farinifera – Date palm; P. loureirii – Date palm, khajoor is local name; P. paludosa – Date palm, hantal is local name (solitary - India)   | Edible fruit  |
| P. pusila - Date palm (solitary)   | Edible fruit  |
| P. reclinata - Senegal date palm (clustering - tropical Africa).   | Sap from tapped inflorescence used to make sugar (nondestructive); edible fruit and seeds; roasted seeds used as coffee substitute  |
| P. sylvestris - Silver date or sugar date palm,<br>khajuriis and thakil are local names (solitary –<br>India, Nepal)   | Sap from tapped inflorescence used to make wine or sugar (non-destructive); edible fruit  |
| P. zeylanica - Date palm, indi is local name (solitary - Sri Lanka)  | Edible fruit  |
| Phytelephas macrocarpa (syn. P. microcarpa) – American ivory nut palm, yarina and col ecu are local names (solitary - South America – source of vegetable ivory – requires tropical climate) | Palatable liquid in immature fruit; immature fruit endosperm also edible  |
| Pinanga duperreana – Sla condor is local name (Kampuchea, Laos, Vietnam)   | Edible palm heart; nuts used a betel substitute   |
| P. mooreana – Pinang murind is local name (Sarawak).   | Fruit edible  |
| Pinanga spp Pinang palms (solitary or clustering - southern China, northern India, Southeast Asia, Phillipines, Indonesia, New Guinea)   | Seeds sometimes used as substitute for betelnut   |
| Plectocomiopsis geminiflora – Rattan palm, ialis and rotan pa are local names (clustering/climbing – Malaysia; Indonesia; Brunei; Thailand)  | Palm heart edible (nondestructive)  |
| Polyandrococos caudescens - Buri palm (solitary - Brazil)  | Succulent edible fruit  |
| Prestoea spp. (solitary – Central America,<br>Puerto Rico)   | Reduced to rarity in parts of their ranges due to harvesting of edible cabbage (destructive)  |

| Pritchardiopsis jeanneneyi (solitary – New Caledonia)  | Destruction of this palm for its edible heart has resulted in its near extinction  |
|--|--|
| Pseudophoenix ekmanii – Cacheo is local<br>name (solitary – Dominican Republic)  | Former source of palm wine by felling tree (destructive)   |
| P. vinifera - Cherry or wine palm, cacheo and katié are local names (solitary – Dominican Republic, Haiti)   | Sweet sap was once extracted by tapping the bulge in the trunk and fermented into wine (damaging) or felling the tree (destructive)  |
| Ptychococcus spp. (solitary - New Guinea, Solomon Islands)   | Edible seeds   |
| Raphia hookeri, R. vinifera - Raffia palms (clustering - Africa)   | Juice produced after removing immature inflorescence used to make palm wine  |
| Ravenea albicans – hozatsiketra is local name;<br>R. dransfieldii – anivo and ovotsarorona are<br>local names; R. glauca – anivo and sihara are<br>local names (solitary – Madagascar) | Edible palm heart (destructive)  |
| R. sambiranensis – anivo and mafabely are local names (solitary – Madagascar)  | Edible fruit and palm heart (destructive)  |
| Rhopalostylis sapida - Nikau palm (solitary - New Zealand, Chatham Islands - not adapted to hot, humid tropics)  | Young inflorescence, sap, and heart (destructive) edible; pith is slightly laxative and was eaten by pregnant women to relax pelvic muscles, and the sap was drunk as a further aid to ease labour in childbirth |
| Roystonea spp. (syn. Oreodoxa spp.) - Royal palms (solitary - southern Florida, Caribbean, Central and South America)  | Many used as a source of cabbage (destructive); fruits are a source of oil   |

# The Palms (in Alphabetical Order): S, T, U

| Sabal mexicana - Mexican sabal palm, jippa<br>joppa, palma de sombrero, soyate (solitary –<br>southern Texas, Mexico) | Shoots, fruit, and especially heart (destructive) edible                     |
|---|--|
| S. palmetto - Sabal or cabbage palm (solitary - southeastern U. S., Bahamas, West Indies)                             | Terminal bud harvested for cabbage (destructive); fruit edible but stringent |
| S. pumos (solitary- Mexico).  | Edible fruit   |
| Salacca affinis – Salak, ridan are local names (clustering – Malaysia, Indonesia)                                     | Edible fruit and palm heart (non-destructive)                                |
| S. glabrescens – Salak is local name (clustering – Peninsular Malaysia, Thailand).                                    | Edible fruit   |
| S. vermicularis – Kepla is local name (clustering – Borneo)   | Edible fruit and palm heart (nondestructive)                                 |
| S. wallichiana (clustering – Peninsular Malaysia,<br>Thailand; Vietnam; Laos; Kampuchea; China;<br>Myanmar)           | Edible fruit used in curry   |
| S. zalacca – Salak is local name (clustering – Java and Sumatra)  | Edible fruit   |
| Salacca spp Salak or snake palms (clustering -  | Edible fruit and nuts in many other species                                  |

| Indonesia, Malaysia)  |  |
|---|--|
| Sclerosperma spp  | Edible seeds   |
| Serenoa repens - Saw palmetto (clustering - southeastern U. S.).  | Fruit is edible and is used medicinally to treat prostate cancer, among other things; honey from bees that visit the flowers is prized |
| Syagrus cardenasii – Corocito is local name (Bolivia)   | Edible fruit   |
| S. comosa – Babo is local name (solitary - Brazil)  | Edible fruit and palm heart (destructive)  |
| S. coronata - Licury palm; S. flexuosa – Acum is local name (solitary - Brazil)   | Edible fruit   |
| S. oleracea – Catolé is local name (solitary – Brazil)  | Edible fruit and palm hear   |
| S. romanzoffiana – Queen palm, pindó is local<br>name (solitary – Brazil, Paraguay, Argentina,<br>Uruguay, Bolivia)     | Edible fruit and palm heart (destructive)  |
| S. schizophylla - Arikury palm, aricuriroba is local name (solitary - Brazil)   | Edible fruit   |
| S. smithii – Catolé is local name (solitary –<br>Colombia, Peru, Brazil)  | Edible seeds   |
| Trachycarpus fortunei - Chinese windmill or chusan palm (solitary or clustering – China – not adapted to humid tropics) | Unopened inflorescences eaten raw or cooked; edible flowers; roots, leaves, and flowers contain medicinal compounds                    |

# The Palms (in Alphabetical Order): V-Z

| Veitchia arecina – Veitchia palm (solitary – Vanuatu)  | Palm heart harvested locally for tourist restaurants (destructive)                           |
|--|--|
| V. joannis – Joannis palm, niusawa is local name (solitary – Fiji)   | Seed and palm heart edible (destructive)   |
| V. vitiensis – Kaivatu is local name (solitary – Fiji)   | Palm heart (destructive), seed, and inflorescence all edible                                 |
| Voanioala gerardii – Forest coconut palm, voanioala is local name (solitary – Madagascar)                                | Edible palm heart (destructive)  |
| Washingtonia filifera - California fan palm, desert palm (solitary - California, Arizona – not adapted to humid tropics) | Edible fruit   |
| W. robusta - Mexican fan palm (solitary - Mexico, Baja<br>California)  | Edible fruit   |
| Welfia spp. (solitary – Central America – requires tropical climate)   | Reduced to rarity in parts of their ranges due to harvesting of edible cabbage (destructive) |

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| Table 1. Palms with edible vegetative parts |                     |                       |
|---|---------------------|-----------------------|
| Destructive cabbage:                        |                     |                       |
| Acanthophoenix rubra                        | Acrocomia aculeata  | Alloschmidia glabrata |
| Archontophoenix spp.                        | Areca listeri       | A. macrocalyx         |
| Areca spp. (Phillipines)                    | Arenga pinnata      | A. undulatifolia      |
| Astrocaryum mexicanum                       | Attalea cohune      | A. maripa             |
| Borassodendron borneense                    | Borassus aethiopium | B. flabellifer        |

| B. madagascariensis         | Caryota no             | C. rumphiana                |
|-----------------------------|------------------------|-----------------------------|
| C. urens                    | Clinostigma harlandii  | Cocos nucifera              |
| Corypha utan                | Cryosophila williamsii | Dypsis spp. (Madagascar)1   |
| Euterpe edulis              | Geonoma spp.           | Gulubia cylindrocarpa       |
| Hyphaene petersiana2        | Iriartea spp.          | Kentiopsis pyriformis       |
| Licuala valida              | Livistona spp.         | Marojejya insignis          |
| Mauritia flexuosa           | Phoenix acaulis        | Prestoea spp.               |
| Pritchardiopsis jeanneneyi  | Ravenea albicans       | R. sambiranensis            |
| Rhopalostylis sapida        | Roystonea spp.         | Sabal mexicana              |
| S. palmetto                 | Syagrus comosa         | S. oleracea                 |
| S. romanzoffiana            | Trachycarpus fortunei  | Veitchia arecina            |
| V. joannis                  | V. vitiensis           | Voanioala gerardii          |
| Welfia spp.                 |                        |                             |
| Non-destructive cabbage     |                        |                             |
| Arenga microcarpa           | Arenga obtusifolia     | Astrocaryum jauari2         |
| Bactris gasipaes            | Calamus spp.           | Caryota mitis               |
| Chamaerops humilis          | Cyphosperma tanga3     | Daemonorops spp.            |
| Eleiodoxa conferta          | Eugeissona insignis    | E. utilis                   |
| Euterpe oleracea            | E. precatoria3         | Oncosperma horridum         |
| O. tigillarium              | Pinanga duperreana3    | Plectocomiopsis geminiflora |
| Salacca affinis             | S. vermicularis        |                             |
| Other non-destructive uses: | '                      |                             |
| Inflorescence:              | Chamaedorea elegans    | C. tepejilote               |
| Rhopalostylis sapida        | Veitchia vitiensis     |                             |
| Immature leaf:              | Coccothrinax argentea  | Livistona australis         |
| Nannorrhops ritchiana       |                        |                             |
| Pollen:                     | Eugeissona utilis      |                             |

- 1 Some of these species may be clustering palms; for those that are clustering, harvesting of palm hearts would not be destructive.
- 2 This species, although multi-trunked, is not clustering and, therefore, the harvesting of a "branch" would be considered destructive.
- 3 Growth habit for these species is unknown; therefore, it is also unknown if harvesting palm heart of these species is destructive or non-destructive.

#### Table 2. Palms with edible fruit

| Eaten raw:                   |                        |                            |
|------------------------------|------------------------|----------------------------|
| Acrocomia aculeata           | Aiphanes spp.          | Allagoptera arenaria       |
| A. brevicalyx                | A. campestris          | A. leucocalyx              |
| Aphandra natalia             | Astrocaryum acaule     | A. aculeatum               |
| A. campestre                 | A. murumuru            | A. tucuma                  |
| A. vulgare                   | Attalea allenii        | A. butyracea               |
| A. cohune                    | A. crassispatha        | A. maripa                  |
| A. martiana                  | A. spectabilis         | Bactris brongniartii       |
| B. concinna                  | B. plumeriana          | Borassodendron borneense   |
| Borassus aethiopium          | B. flabellifer         | Brahea aculeata            |
| B. edulis                    | B. dulcis              | Butia capitata             |
| B. eriospatha                | B. yatay               | Calamus paspalanthus       |
| C. rotang                    | Calamus spp. (SE Asia) | Calospatha scortechinii    |
| Carpoxylon macrospermum      | Chamaerops humilis     | Clinostigma harlandii      |
| Cocos nucifera               | Corypha utan           | Cryosophila nana           |
| Daemonorops cristata         | D. didymophylla        | D. fissa                   |
| D. periacantha               | D. scapigera           | Daemonorops spp. (SE Asia) |
| Desmoncus cirrhiferus        | Dypsis baronii         | D. madagascariensis        |
| D. utilis                    | Eleiodoxa conferta     | Eugeissona brachystachys   |
| E. insignis                  | E. tristis             | Euterpe catinga            |
| Gulubia cylindrocarpa        | Hyophorbe spp.         | Hyphaene dichotoma         |
| H. petersiana                | H. thebaica            | Juania australis           |
| Linospadix monostachya       | Maximiliana regia      | Nannorrhops ritchiana      |
| Neoveitchia storckii         | Nypa fruticans         | Oenocarpus bataua          |
| O. mapora                    | Phoenix acaulis        | P. canariensis             |
| P. dactylifera               | P. farinifera          | P. pusila                  |
| P. reclinata                 | P. sylvestris          | P. zeylanica               |
| Phytelephas macrocarpa       | Pinanga mooreana       | Polyandrococos caudescens  |
| Ravenea sambiranensis        | Sabal palmetto         | Sabal pumos                |
| Salacca spp.                 | Serenoa repens         | Syagrus cardenasii         |
| S. comosa                    | S. coronata            | S. flexuosa                |
| S. oleracea                  | S. schizophylla        | S. smithii                 |
| Syagrus spp. (South America) | Washingtonia filifera  | W. robusta                 |
| Fruit eaten cooked:          |                        |                            |
| Bactris gasipaes             | B. guineensis          | B. major                   |
| B. maraja                    | Cocos nucifera         | Mauritia flexuosa          |

| Mauritiella aculeata         |                      |                    |  |  |
|------------------------------|----------------------|--------------------|--|--|
| Fruit eaten pickled:         |                      |                    |  |  |
| Calamus rotang               | Eleiodoxa conferta   | Eleiodoxa conferta |  |  |
| Fruit made into fresh drink: |                      |                    |  |  |
| Euterpe oleracea             | Leopoldinia piassaba | O. distichus       |  |  |
| Phytelephas macrocarpa       |                      |                    |  |  |
| Fruit processed into jelly:  |                      |                    |  |  |
| Butia capitata               |                      |                    |  |  |
| Fruit fermented into wine:   |                      |                    |  |  |
| Bactris guineensis           | B. major             | B. maraja          |  |  |
| Cryosophila nana             | H. petersiana        | Oenocarpus bacaba  |  |  |

| Table 3. Palms with edible seeds. |                          |                          |  |  |
|-----------------------------------|--------------------------|--------------------------|--|--|
| Chewed as stimulant:              |                          |                          |  |  |
| Acrocomia aculeata                | Aiphanes spp.            | Allagoptera leucocalyx   |  |  |
| Arenga obtusifolia                | A. pinnata               | Attalea cohune           |  |  |
| Balaka longirostris               | Borrasodendron borneense | Borassus aethiopium      |  |  |
| B. flabellifer                    | Cyphosperma tanga        | Eugeissona brachystachys |  |  |
| Gastrococos crispa                | Hyophorbe spp.           | Hyphaene dichotoma       |  |  |
| Jubaea chilensis                  | Jubaeopsis caffra        | Latania spp.             |  |  |
| Nannorrhops ritchiana             | Parajubaea cocoides      | P. torallyi              |  |  |
| Pelagodoxa henryana               | Phytelephas macrocarpa   | Ptychococcus spp.        |  |  |
| Salacca spp.                      | Sclerosperma spp.        | Veitchia vitiensis       |  |  |
| Actinorytis callaparia            | Adonidia merrillii       | Areca catechu            |  |  |
| A. concinna                       | A. guppyana              | A. ipot                  |  |  |
| A. macrocalyx                     | Areca spp. (SE Asia)     | Calamus tonkinensis      |  |  |
| Heterospathe elata                | H. elmeri                | Loxococcus rupicola      |  |  |
| Oncosperma spp.                   | Pinanga spp.             |                          |  |  |

| Table 4. Palms with edible sap |  |
|--------------------------------|--|
| Destructive:                   |  |
| Drunk fresh:                   |  |

| Mauritia flexuosa1         |                      |                       |  |  |
|----------------------------|----------------------|-----------------------|--|--|
| Dried into sugar:          | ·                    |                       |  |  |
| Jubaea chilensis           |                      |                       |  |  |
| Boiled into honey:         | '                    | 7                     |  |  |
| Jubaea chilensis           |                      |                       |  |  |
| Fermented into wine:       |                      |                       |  |  |
| Attalea butyracea          | Jubaea chilensis     | Pseudophoenix ekmanii |  |  |
| P. vinifera                |                      |                       |  |  |
| Non-destructive:           | '                    | 7                     |  |  |
| Drunk fresh:               |                      |                       |  |  |
| Arenga pinnata             | A. wightii           | Borassus aethiopium   |  |  |
| B. flabellifer             | Caryota urens        | Calamus vanauatuensis |  |  |
| Cocos nucifera             | Corypha utan         | Hyphaene petersiana   |  |  |
| Oenocarpus bataua          | O. distichus         | Parajubaea cocoides   |  |  |
| P. torallyi                | Rhopalostylis sapida |                       |  |  |
| Dried into sugar:          |                      |                       |  |  |
| Arenga pinnata             | Borassus flabellifer | Nypa fruticans        |  |  |
| Phoenix dactylifera        | P. reclinata         | P. sylvestris         |  |  |
| Fermented into wine/alcoho | l:                   |                       |  |  |
| Acrocomia aculeatea        | Arenga pinnata       | Bactris guineensis    |  |  |
| B. major                   | B. maraja            | Borassus flabellifer  |  |  |
| Caryota urens              | Cocos nucifera       | Phoenix sylvestris    |  |  |
| Raphia hookeri             | R. vinifera          |                       |  |  |
| Fermented into vinegar:    |                      |                       |  |  |
| Bactris guineensis         | B. major             | B. maraja             |  |  |
| Borassus flabellifer       | Caryota urens        | Cocos nucifera        |  |  |
| Boiled into honey/syrup:   |                      |                       |  |  |
| Phoenix canariensis        |                      |                       |  |  |
| 10 1 4 1 10 11             | • 1                  |                       |  |  |

<sup>1</sup> Sap harvest method for this species unknown