

Palm parts

by
David Mead

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ABSTRACT

This paper introduces English and Indonesian terminology associated with palm trees, including the parts of a frond, palm flowers, and palm fruits, along with various fibers and other products (toddy, palm cabbage, sago, sago grubs, etc.) derived from palm trees. A few common species (coconut, areca, nipa, sago and sugar palms) are briefly described.

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VERSION HISTORY

Version 1 [16 February 2012] An earlier version of this paper was first circulated February 2004, and it has been sporadically updated through February 2012.

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To discuss the world of palms, their many species and their various uses, would require a book. This article¹ has a more mundane purpose: to give you, the lexicographer, some help with palm terminology as you compile an indigenous language dictionary in Indonesia. By way of introduction for the beginning lexicographer, I mention some of the better-known palm species. As there is some variance in common names, scientific names are always given, appearing in small caps.

Some common palms

The ubiquitous coconut palm (*pohon kelapa*, *COCOS NUCIFERA* L.) needs no introduction.

The sugar palm, also known as the aren, areng or arenga palm (*pohon aren atau pohon enau*, *ARENGA PINNATA* (Wurmb.) Merrill), is readily recognizable from the blackish-grey fibers which grow on its trunk. As its name implies, it is tapped and its sweet sap is drunk fresh, fermented into wine, or boiled to become palm sugar. However, other palm trees can also be tapped for their sap, including the lontar or toddy palm (*pohon lontar*, *BORASSUS FLABELLIFER* L.), the mangrove or nipa palm (*pohon nipah*, *NYPA FRUTICANS* Wurmb), the giant fishtail palm (*pohon nibung besar*, *CARYOTA RUMPHIANA* Martius), other fishtail palm species (*CARYOTA* spp.), and even the coconut palm.

A quid of betel nut (*not*: betelnut, and especially not beetle nut!) consists of three main ingredients, one of which comes from a palm. These ingredients are: (1) leaf of the betel plant (*sirih*, *PIPER BETLE* L.) (the betel plant is a climbing vine of the pepper family, hence its other common name, betel pepper); (2) the white, inner meat (endosperm, *inti biji*) of the ‘nut’ of the areca (uh-REE-kuh) palm (*pohon pinang*, *ARECA CATECHU* L.); and (3) lime, most commonly obtained from processing sea shells or dead coral. In some locales gambier was added to the quid as an astringent. Gambier (*gambir*, *UNCARIA GAMBIR* (Hunter) Roxb.), a straggly bush (not a palm), was an important plantation crop in the early twentieth century because of the resin obtained from its leaves. The crystallized resin was sold in small cubes or blocks as a medicinal and a dye.

In English, ‘sago palm’ refers most commonly to the plant *METROXYLON SAGU* Rottboell. However, at least fourteen other palms can be exploited for their starch, including the aforementioned sugar palm, and all of these can also be referred to in a more general way as sago palms or *pohon sagu*. Where there is a need to distinguish, *M. SAGU* can be referred to in English as ‘true sago palm,’ or in Indonesian as *pohon rumbia*. In sago-based cultures, terms for sago harvesting and preparation may be a very rich area of the

¹ This article would not have turned out half so well (and probably not at all) without the considerable advice and encouragement of Michael Martens. Thanks also to Tom Laskowske for his input to portions of this paper, and for instructing me how to properly cite scientific names.

lexicon, see for example the list of Bacan sago terms provided by Holton (2000) and a similar list in Dedaida (1987) for the Raja Ampat Islands (mostly from the Banlol language).

The best thatch for roofing comes from the true sago palm and from the mangrove palm. Both of these species tend to grow in swampy areas. Sugar palm and coconut palm fronds, and even the fronds of various fan palms, can also be used as roofing but are less durable.

For more information on the process of tapping palm trees for their sap, see Smits (1996) and Flach and Paisooksantivatana (1996). For more information on the science, culture and practicalities of preparing a betel nut quid, see especially Ellen (1991). For more information on sago palms and sago starch production, see Dutton (1994). Pictures of any palm mentioned in this article can be found by visiting the photo gallery of the *Virtual Palm Encyclopedia* (Haynes 1998-2003) or by consulting a standard resource such as Ellison and Ellison's (2001) *Cultivated Palms of the World*.

Leaves

palm frond – *daun palem*

leaf sheath of palm frond – *seludang daun palem*, *upih* (the Indonesian term *upih* most appropriately refers to a wide and thinned out sheath which wraps around the trunk or crownshaft, and which may have a particular use, e.g. as a wrapper)

petiole – *tangkai daun*

rachis – *poros daun*

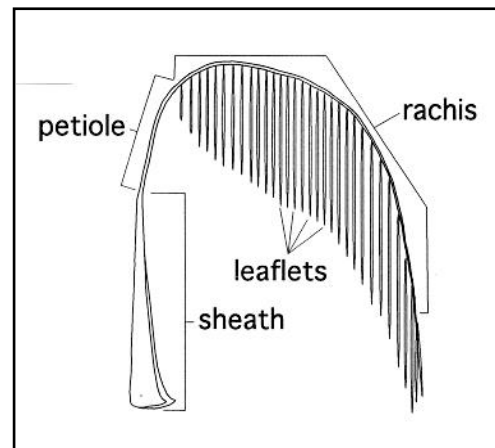
leaflet – *anak daun*, *bagian rangkaian daun*

midrib (or stalk) of palm leaflet – *lidi*

stalk of palm frond – *pelepah* (Indonesian *pelepah* properly refers to the stalk of banana leaves (including the midrib) and palm fronds (including the rachis), but by extension is sometimes used to refer to palm fronds in their entirety)

palm heart, palm cabbage – *umbut*, *sayuran hati palem* (the growth tip of a palm tree buried within the topmost portion of the trunk; in some species the mass of newly formed and developing leaves is eaten as a vegetable, but harvesting it necessarily kills the tree)

young, emergent palm leaves – *daun pucuk muda*, *janur* (often whitish or yellowish in appearance; the Indonesian term *janur* refers specifically to young *coconut* leaves, but note that when such leaves are used as decoration—as at a wedding—they are instead called *gaba-gaba*)



coconut frond stipule, the coarse, burlap-like material found at the base of coconut fronds – *tapas kelapa*, *bahan seperti saringan yg berada di antara batang pohon dan pelepah daun kelapa* (in some locales, used as tinder, gauze, or a sieve, e.g. for sago starch)

Flower

spathe, the unopened inflorescence of a palm – *seludang mayang palem sebelum membuka* (the enclosing bract or sheath, *seludang*, is somewhat pointed and dagger-like)

palm blossom or inflorescence – *mayang* (properly speaking, *mayang* refers to the young spikelet of the palm blossom as it emerges from the sheath; a fully opened palm blossom can be referred to as a *mayang mengurai*)

beat the inflorescence of a palm tree in preparation for tapping – *memukul mayang palem sebelum disadap* (this process is carried out over several days, sometimes over a span of a few weeks) (when tapping sugar palms, it is the *male* inflorescence which is usually tapped)

tap – *menyadap*

palm sap – *nira*

vessel for collecting palm sap – *wadah penampung nira* (if it made from bamboo, as is usual, then it can be called a *bumbung nira*; in some locales, the traditional vessel was a calabash—the dried-out shell of a bottle gourd)

fresh palm toddy, sweet toddy, fresh palm sap served as a drink – *minuman nira*

palm toddy, palm wine – *saguer*, *tuak* (5%–6% alcohol, the result of fresh palm toddy fermenting for a few hours) (because toddy left in collection vessels naturally ferments, the difference between unfermented ‘sweet toddy’ and regular, fermented toddy is one of degree) (sometimes the toddy is flavored with mangosteen leaves, elm bark, mangrove cedar bark, etc.; the tannin imparts a bitter taste but improves storability)

palm vinegar – *cuka jawa*, *cuka yang dibuat dari nira* (the result of continued fermentation)

arrak, distilled palm wine – *arak*, *tuak keras* (20%–60% alcohol)

jaggery, palm sugar – *gula merah* (sold as chunks, it is also called *gula aren bongkahan* or *gula gandu*; sold as loose crystals, it is also called *gula aren bubuk* or *gula semut*)

Fruit

coconut husk – *sabut kelapa*

coir, fibers from the husks (mesocarp) of coconuts – *serabut dari sabut kelapa* (white coir = whitish or yellow fibers from the husks of green coconuts; brown coir = brown fibers from the husks of mature coconuts)

coconut shell (endocarp) – *tempurung kelapa*

pore – *mata kelapa* (there are three pores or sunken ‘eyes’ at the basal end of a coconut)

testa – *testa* (the thin brown layer which adheres to the white coconut meat)

coconut meat (endosperm) – *daging kelapa*² (there may be different terms for the soft, pliable meat of young coconuts versus the hard meat of mature coconuts)

haustorium – *tombong atau tumbang kelapa, lembaga kelapa* (the round, white, edible ‘apple’ or ‘seed bud’ that forms inside of germinating coconuts)

coconut water – *air kelapa*

grated coconut meat – *kelapa parut*

coconut milk – *santan kelapa* (obtaining by mixing grated coconut meat with water and squeezing)

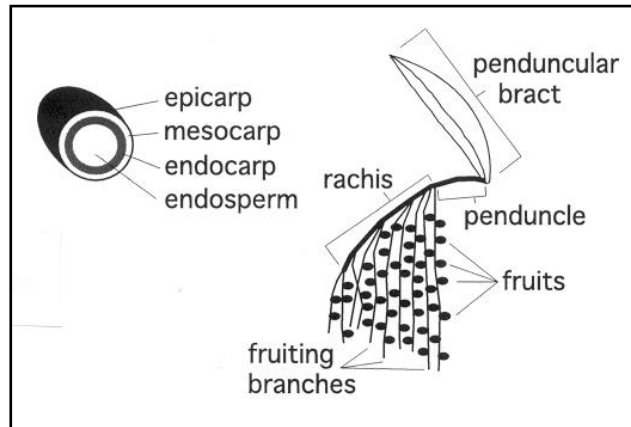
grounds of grated coconut after the milk has been squeezed out – *ampas santan*

coconut oil – *minyak kelapa* (produced locally by boiling coconut milk until only the oil remains)

dregs from processing coconut oil – *bungkil kelapa, ampas minyak, tahi minyak, limbah hasil pengolahan minyak kelapa* (Javanese: *blondo*) (coconut oil is said to be ready—has been boiled enough—when the dregs settle to the bottom) (the dregs can be squeezed to obtain additional oil, and are themselves edible, whether alone, as a topping, or an ingredient in other dishes)

copra – *kopra* (sun-, smoke- or kiln-dried coconut meat, processed commercially into oil)

nata de coco – *nata de coco* (sold as gelatinous cubes; formed by bacterial action on coconut water or diluted coconut milk)



² Sometimes also *inti biji kelapa*, but be careful with this phrase, since in the Indonesian kitchen the term *inti kelapa* commonly refers to a mixture of grated coconut and palm sugar, used as a topping or filling in various cakes or other sweets.

sugar palm fruits – *beluluk* (fruits that have been prepared for human consumption as sweetmeats—by boiling the white endosperm, *inti biji*, of immature sugar palm fruits in a sweet syrup—are marketed as *kolang-kaling* or *buah atep*)

In addition to the above terms, probe whether there are different terms for coconut fruits in various stages of development. For instance, the Kulisusu language of Southeast Sulawesi has eight such terms:

kalo'u-lo'u – a coconut fruit the size of one's fist or smaller

ngkalomba – between *kalo'u-lo'u* and *cipaka* in size and development

cipaka – immature coconut, the meat of which has not yet begun to form

samesisiluno – immature coconut, the meat of which is translucent and very soft and new

kalimbungo – young coconut, the meat of which is whitish but still soft and pliable

wangkara – a half-ripe coconut with semi-firm meat

ni'i mocu'a – a ripe coconut, the water inside sloshes

ni'i mpate'o – a dark-skinned, old coconut, useful for making oil

Grubs and beetles

palm beetle grubs – *lundi* (the larva of various palm beetle or palm weevil species). Note that weevil larvae are legless and wriggly, while rhinoceros beetle larvae (as with the scarab beetle family in general) have six well-developed legs, and tend to lie with their body curled into a 'C' shape. Hispid beetle larvae by contrast have eleven pairs of small 'lateral projections.'

red palm weevil – *kumbang sagu* – RHYNCHOPHORUS FERRUGINEUS Oliver (the most widespread of the 'sago grubs'; the island of New Guinea is home to at least two other RHYNCHOPHORUS species, the adults of which are blackish colored)



common rhinoceros beetle – *kumbang tanduk* – XYLOTRUPES GIDEON L. (a very common and widely distributed rhinoceros beetle, completely black-brown in color; the upper and lower horns in males are forward-facing and bifurcated at the tip, but females lack any horn altogether)



palm rhinoceros beetle, coconut rhinoceros beetle – *bangbung*, *kumbang kelapa*, *kumbang tanduk kelapa* – ORYCTES RHINOCEROS L. (so called after its favored host, the coconut palm; it is a black beetle, males having a single, backward-curving horn; larvae develop in rotten wood, while adults bore into the palm heart, damaging the still-unfolded leaves)

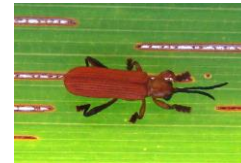


coconut leaf beetle, coconut hispine beetle, coconut hispid – *kumbang bibit kelapa* – PLESISPA REICHEI Chapuis and BRONTISPA LONGISSIMA Gestro (both larvae and adults feed on the young, unfolded leaves, which consequently emerge with a desiccated or burned appearance; adult beetles are about a centimeter long and usually two-toned in both species with black head and wing covers (elytra), and yellowish to reddish-brown thorax; see Brontispa Action Team. (2007) for how to differentiate these species)



nipa palm hispid beetle – *kumbang bibit nipah* – OCTODONTA NIPAE Maulik (similar to P. REICHEI, but infesting mangrove palms)

coconut leafminer beetle – *penambang daun kelapa* – PROMECOTHECA CUMINGII Baly (this species feeds on coconut, areca, sago and African oil palms; adults feed on leaflets, leaving characteristic ‘feeding grooves’ of less than 1 cm up to 5 cm long, while the burrowing larvae make characteristic ‘blister mines’)



The above is merely a starter list. For other beetles and insects which you may encounter on palms, see Howard et al. (2001). The online resource “Screening Aid to Pests” by Redford et al. (2010) may also be useful, although coverage is limited to species occurring in the United States and the Caribbean.

Micellaneous

adventitious root – *akar adventif* (a root growing from an unusual position, for example the prop roots of coconut palms and corn plants)

palm pith – *gumbar* (the pithy core of the trunks of certain palms, from which sago starch is extracted).³ Conversely, in Indonesian the hard exterior of palms with a pithy core is called *ruyung*.⁴

gebanga, leaf fiber from the gebang palm – *agel, agal, tali agal* (long fibrous strips obtained by first removing the epidermis from young leaves of the gebang palm, *pohon gebang*, CORYPHA UTAN Lamk)

black fiber, kittul – *serat hitam dari seludang daun nibung* (fibers resembling horsehair, obtained from the leaf sheaths of fishtail palms (CARYOTA L.), used for thatch, cordage, and in brushes and brooms)

³ Not all palm trunks have a pithy core. When a tree has a layer of soft wood surrounding a hard core, the outer soft layer is called sapwood (Indonesian *gubal*) and the inner hard core is called the heartwood (Indonesian *teras*).

⁴ Compare *jika tidak dipecah ruyung, di mana boleh mendapat sagu?* a phrase roughly meaning ‘how do you expect to succeed, if you don’t put forth the effort?’

ijuk fiber – *ijuk* (long, black-grey fibers from the trunk of the sugar palm, extremely durable even in seawater)

stout bristles found among the ijuk fibers – *sagar, lidi ijuk* (despite being identified colloquially as a kind of *lidi*, these bristles come from the trunk near the leaf bases, *not* from the frond leaflets; local uses may include as pens, as darts, or as fasteners; bundled together to make a kind of torch; or used in fish trap construction)⁵

tinder – *rabuk* (in particular a very fine, cottony or dusty material obtained from the leaf sheaths of sugar palm fronds and other palms and bamboos, used for catching and holding a spark; also used as caulking for boats)

torch made from a dried palm frond – *andang, obor yang dibuat dari daun palem yg kering*

notches cut in a tree trunk to assist in climbing - *gubang, takik-takik pd pohon untuk tumpuan memanjat*

climbing strap – *sengkelit* (a rope tied from one ankle to the other to make it easier to climb a tree, especially a palm tree)

pointed iron stake used for husking coconuts – *sula, tongkat besi yg runcing ujungnya untuk mengupas kelapa*

coconut scraper – *kukur kelapa* (the common model I've seen consists of a long heavy block of wood with a metal scraper projecting from one end; a person sits straddling the block to use it)

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⁵ In Batak these bristles are called *tarugi*. Furthermore, Batak speakers distinguish between bristles which are round in cross-section (*tarugi jantan*, literally ‘male bristles’) versus bristles which are more oval in cross-section and have a characteristic longitudinal slit (*tarugi boru-boru*, literally ‘female bristles’) (Teygeler 1993:605–607). Whether other languages make such a distinction is unknown to me.

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