

Edible

Leaves,
Tasty Roots,

& Forgotten Vegetables
of tropical Mesoamerica



ASOCIACION
FLAAR
MESOAMERICA

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This exhibit concept would cover everything edible besides fruits and nuts; and would also cover those flavorings beyond the many used for cacao.

Some plants with interesting chemicals will pop up in all edible categories, but plants used exclusively for alcohol, smoking, and drugs will not be featured in this particular exhibit of edible plants. Those should be in a single separate photo exhibit to explain the dangers to health caused by such plants. We would tend to avoid an exhibit focused on alcohol, smoking, and drugs, though we should point out that both the Aztecs, Teotihuacanos, and Maya peoples a thousand+ years ago would have eagerly consumed many of these chemicals via plant parts.

For the present Food concept, we prefer to focus on plants for the entire family: children, parents, grandparents. And definitely we prefer to concentrate on natural foods which are good for your health.

The list below is to give an idea of the wealth of plants available to choose from. The length of this list is also to indicate why this exhibit should best be physically separate from the cacao theme and separate from the fruits & nuts theme.

Out of the entire list we will select those edible plants which are inspiring, unique, fascinating to an audience in North America, and which are accessible for us to photograph at a realistic cost. If ample funds are available, logically we would include a larger percent of the species.

People today are overexposed to images on TV, in movies, and on the Internet. People are watching YouTube and spending more time on their iPads and comparable electronic tools (and toys). So it helps when the goal is to provide scientific information to a general audience, to have stunning photographs to capture everyone's attention.

So our goals with this exhibit theme are multiple:

- To emphasize healthy diets
- To show how many exotic food plants we are missing in our modern trends
- To provide a feast for the eyes and attention span of the visitors
- To provide botanists with helpful images for their further studies of these plants.

Edible plants,

Grains

Maize, *Zea mays*, corn

Teosinte, *Zea luxurians*,

Grain amaranth, *Amaranthus cruentus*, is primarily known for non-Maya Mexico but in fact is used by Highland Maya also.





Vegetables

We discuss the botanical distinctions between what is a vegetable and what is a fruit in the upcoming detailed “chapters” on each theme.

Beans

Chaya, *Cnidoscolus aconitifolius*, toxic unless cooked.

Chayote, dark green güisquil, *Sechium edule*; *Sechium compositum*

Chile peppers, sweet

Chile peppers, picante

Perulero, smaller, smoother surface, another kind of güisquil. Also name of a town in Guatemala.

Squash of dozens of species

- Ayote
- Calabaza
- Calabazita
- Chilacayote, *Cucurbita ficifolia*
- calabaza melon (Mexico), melo-cotón (Guatemala), *Sicana odorifera*. However this is from South America and not yet convincingly documented to be preHispanic in the Maya area (but it is cultivated as food and as an ornamental today).

Sometimes it is only the seed of a squash that is eaten (pepitorio) other times the flesh; other species both.

Maracuya Chino (the name in Panama, Chízmar 2009:153-154), *Cionosicyos macranthus*. Some botanical web sites list this for only lower Central America; others say “Mexico south to...” Is not a passion flower but a member of the Cucurbitaceae plant family.

Bitter melon, condiamor, *Momordica charantia* (Chízmar 2009:155-157). Read warnings in botanical web sites before eating this fruit.

Rytidostylis carthagenensis (Chízmar 2009:158-160). Bizarre super-fine “hairy” type vegetable with remarkable flower (nothing like any wiskil).

Tomato, *Lycopersicon lycopersicum*

Tomatillo, tomate verde, miltomatl, *Physalis ixocarpa*

Tree tomato *Cyphomandra betacea* (Stross, course outline), tamarillo. However this plant is not (yet) documented as pre-Columbian in Mesoamerica, so should not be in the list of preHispanic Maya foods.



Calabaza

Edible Leaves

Often it is easier to have a plant included in several theme-sections if different parts of the plant have different uses. Edible leaves is a category in a brief discussion of ethnobotany by Ana Lucrecia de MacVean and Elfriede Pöll (Chapter 8, Table 2). Many leaves are primarily for seasoning, rather than eating per se.

Allspice, pimenta gorda, leaves are used for tea

Bledo, amaranth greens, *Amaranthus cruentus* and/or *Amaranthus. hypochondriacus*

Calabash, *Cucurbita moschata*

Canak, arbol de las manitas, *Chiranthodendron pentadactylon*

Cestrum racemosum (Chízmar 2009:302-303).

Chaya, *Cnidosculus aconitifolius*

Chayote, *Sechium edule* (root, flowers, AND leaves are edible).

Chile pepper, *Capsicum frutescens* (Elevitch 1998:3)

Chipilin, *Crotalaria longirostrata*

Macuy, *Solanum americanum*

Manioc, *Manihot esculenta* (Elevitch 1998:3)

Sinclairia sublobata (Chízmar 2009:113-116).

Sweet potato *Ipomoea batatas* (Elevitch 1998:3)



Canak, arbol de las manitas, *Chiranthodendron pentadactylon*



Pseudobombax ellipticum, shaving brush tree



Edible Seed

Amapola blanca, *Bernoullia flammea*, Uacut, chunte', Cante, Bombacaceae (Parker 2008:100-101).

Cerasee, Sorosi vine, *Momordica charantia*, pods orange or yellow; Izabal.

Guanacaste, *Enterolobium cyclocarpon* (Niembro Rocas 2002)

Jicara, morro (two different plants, but not many people use only one name)

Crescentia alata

Pepitorio, Pumpkin seeds, squash seeds, various species are grown more for their seeds than for the vegetable portion.

Sterculia apetala, castaña, ground seeds to make a drink (Parker 2008:890).

Provision Tree, **Zapaton**, zapote bobo, *Pachira aquatica* The flower of this tree is similar to flowers favored in scenes on Maya pottery (Zidar 2009).

Pseudobombax ellipticum, shaving brush tree (flower is shaped like a shaving brush). I doubt many people eat the seeds, and I would not wish to try (considering that the tree is also known as amapola).

We will be adding more seeds from trees of the Bombacaceae family as we complete our research on this important plant family.



Zapaton, zapote bobo, *Pachira aquatica* flower

Edible Seed pulp

I added this category after learning how many species and relatives there are of *Inga* that are edible. But it is the pulp around the seed that you eat: not the seed itself. Our categories are deliberately informal, because obviously with some fruits you eat everything; with others you eat only the pulp, with others you eat only the seeds.

Bri Bri, *Inga edulis*, (when it is mainly the seed pulp that is eaten, we have separate section on seeds).

Xelex, *Inga thibaudiana*, (Chízmar 2009:191-192)

Inga vera, (Chízmar 2009:193-194)

Paterna, *Inga paterna*, seed pods; common in Guatemala





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Berries

Acai berry, acai palm tree, *Euterpe oleracea* (don't blame me; it's called a berry, but you can also consider it as a nut).

Allspice berry, *Pimenta racemosa*, I list this also under seasoning.

Vaccinium confertum, Tlo'Chaj, a berry from the Tajumulco region.

Vaccinium consanguineum (Chízmar 2009:174-175).

White Maya Tree, *Miconia argentea*

Palm trees with edible parts more than (just nuts)

Capuca, *Calyptrogyne ghiesbreghtiana* (Chízmar 2009:87-88)

Chamaedorea pinnatifrons (Chízmar 2009:89-91)

Chocho palm, chapay, *Astrocaryum mexicanum*, shoots, heart, and flowers edible (Haynes and McLaughlin 2000).

Cohune palm, oil palm, *Astrocaryum cohune*, in addition to the edible nut, the heart is also edible.

Gonolobus taylorianus, some parts toxic (Chízmar 2009:107-109)

Huiscoyol, *Bactris major* (Chízmar 2009:84-86)

Manaco, *Manicaria saccifera* (Chízmar 2009:103-104)

Palmito, ternera, *Euterpe precatoria* (Chízmar 2009:100-102)

Piva, peach palm, *Guilielma utilis*, edible fruits

Mexican Sabal palm,

Cooking oil

Acrocomia aculeate

Corozo (cohune) palm oil

Chamadorea elegans

Gonolobus taylorianus (Chízmar 2009:107-110)

Jatropha curcas, physic nut, oil for soap and other uses. Toxic as food.

Zapatero, Simaruba glauca, Paradise tree, oil, medicine, and fruit.

Several other palm tree parts can be used to produce oil.

Other plants which have edible parts

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Mangrove fern, *Acrostichum aureum* (from pollen at Copan; Fedick 2010)

Fern, *Microgramma lycopodioides* (from pollen at Copan; Fedick 2010)

Cattail, **reed**, *Typha latifolia* www.rook.org/earl/bwca/nature/aquatics/typhalat.html

Sorosi vine, *Momordica charantia*, common in Izabal area.

white milkwood, lechoso, *Tabernaemontana alba*; chewing gum substitute
Spathiphyllum friedrichsthali

Spathiphyllum phryniifolium (Chízmar 2009:60-62)

Yuc, *Spathiphyllum blandum* (Chízmar 2009:58-59)

Root crops

Sweet potato, camote, *Ipomoea batatas*

Jicama, yam bean, *Pachyrhizus erosus*. Flower is distinctive shape and beautiful lavender colors.

Cassava, sweet manioc, yuca, *Manihot esculenta*

Malanga, *Xanthosoma* species (these four featured by Bronson 1966:63-65)
Kaqiox, Marac, Quequescamote, *Xanthosoma sagittifolium*

Chayote, ichintal, root of chayote or güisquil, *Sechium edule* (root, flowers, and leaves are edible).

Iron cross plant, *Oxalis deppei* (Stross, UTexas course outline)

Maranta arundinacea, (Chízmar 2009:233-234)

Mexican Shell flower, *Tigridia pavonia* (Stross ethnobotany course outline)

Smilax spinosa (Chízmar 2009:295-296)

Tubers of *Solanum cardiophyllum* and *S. ehrenbergii* are eaten in Jalisco, Mexico (Cuevas-Arias et al. 2008 :77).



Chayote, ichintal, root of chayote or güisquil





Allspice, *Pimenta gorda*, *Pimenta racemosa*

Flavoring, herbs, and spices

See also all the flavorings (in the separate exhibit section) for cacao drinks.

Allspice, *Pimenta gorda*, *Pimenta racemosa*

bay-leaves *Litsea glaucescens*

boldo, *Peumus boldo*

Chia, *Salvia Hispanica*; seeds used; in juice; sprouts, etc

Chipilin, *Crotalaria longirostrata*. Unique flower; Parts edible, part toxic (Morton 1994)

Chili pepper, *Capsicum species*

Dipteryx panamensis seed is listed in a Tico ethnobotanical dictionary as flavoring tobacco (on-line).

Dorstenia contrajerva, roots flavor tobacco Tico ethnobotanical dictionary as flavoring tobacco (on-line). Also (MacVean 2003:90)

Flor de nardo, *Polianthes tuberosa*. (Schoenhals 1988:206). Also an additive to balche drink of Lacandon.

Myroxylon balsamum, powder added to tobacco (Nations 2006:96)

Guarumo, leaves also used for tobacco

Coriander, *Porophyllum ruderale*

Culantro, cilantro, samat *Eryngium foetidum* (Chízmar 2009:40-41).

Guanacaste, *Enterolobium cyclocarpon*

hierba de conejo, *Tridax coronpifolia*, *Castilleja lanata*

“oregano” or “marjoram” in the cookbooks, but I suspect that local herbs are meant in the first place. At least two different herbs are known as “**Mexican oregano**”: *Poliomintha longiflora* (Lamiaceae) and *Lippia graveolens* (Gernot Katzer, Geographic Spice Index)

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Guarumo, leaves



Sapoton, *Pachira aquatica*

Porophyllum tagetoides

Pumpkin seed (*Cucurbita* spp)

Renalmia aromatica, MacVean gives local words as tzi or chucho (Alta Verapaz), nabay (Peten), and rat plantain for Belize. She says pulp of the fruit is used to flavor tea. (MacVean 2003:136).

Sapoton, *Pachira aquatica* (Gomez 2008:84)



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Sarsaparilla, *Smilax regelii*, is used for root beer after sassafras (root of tree of that name) was found to have bad side effects.

Talauma Mexicana (Gomez 2008:84)

Wormseed, Epazote, *Chenopodium ambrosioides*

Probably another dozen spices could easily be added, though most modern spices come from India, Asia, Africa, or Europe. For example, coriandrum sativum, is not indigenous.

Flowers, edible

Biznaga colorada, Cactus flowers, *Ferocactus pilosus*, (Arias 2010)

Chayote, *Sechium edule* (root, flowers, and leaves are edible).

Dahlia, Tzoloj, *Dahlia imperialis* (Chízmar 2009:111-112)

Isote tree (also spelled izote), spineless yucca, *Yucca elephantipes*

Loroco, *Fernaldia pandurata*

Pacaya, palm, *Chamaedorea pacaya*

Squash blossom, *Cucurbita pepo*

Many parts of the waterlily, *Nymphaea ampla*, are edible.



waterlily, *Nymphaea ampla*



Loroco, *Fernaldia pandurata*

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