

## Old World cucurbitaceae

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### Cucurbitaceae (taxonomy after Jeffrey via Walters 1989)

#### Tribe Melothrieae

*Cucumis melo* L. subsp. *agrestis* wild melon (Near East through Central India, also China??)

Multiple domestications

*C. melo* ssp. *melo* domesticated melons

*C. sativus* L. *Sativus* domesticated cucumber

*C. sativus* ssp. *hardwickii* wild progenitor western Himalayan foothills

#### Tribe Joliffieae

*Momordica charantia* L., bitter melon or bitter melon, cultivated throughout the tropics; two domestications:

Himalayas (India/Nepal), and Yunnan, China (Marr et al. 2005, *Economic Botany*)

Wild = subsp. *abbreviata* Ser.

Cultivar groups, divided on the basis of fruit size, into *minima* and *maxima*.

*M. balsamina* L., a pantropical of dry areas which can also be eaten (Reyes et al 1993). Indian origin

*M. cochinchinensis* (Loureiro) Sprengel, sweet melon or spiny bitter melon, a root-tuberous perennial, is grown widely in mainland and island Southeast Asia, as well as China and Japan, and occurs in the wild throughout much of this range, but appears absent from Java (Reyes et al. 1993). Chakravarty 1959: Burma, Assam, Bengal: Chittagong, Garjania, Khulna and Jessore, Madras, one collection by Wright no. 1130 Kew from Madras.

*M. subangulata* Blume, Indonesia and Malaysia known as kamas; in Southern Thailand as phakmae is used from wild populations, distributed in mainland Southeast Asia and Java, and a little in India (Chakravarty 1959)

*M. dioica* Roxb. ex Willd. A root-tuberous perennial. Extends from Burma through India, partially cultivated in some parts of India for fruits (Chakravarty 1959)

#### Tribe Trichosantheae

*Trichosanthes cucumerina* L. var. *anguina* (L.) Haines snake melon (domesticated), cultivated India, China, SE Asia

*Trichosanthes cucumerina* L. var. *cucumerina* wild snake melon, India, Yunnan, Burma, mainland Southeast Asia

*Trichosanthes globosa* Blume; another species also called "snake melon", wild but eaten in South Asia

(syn. *Trichosanthes cucumeroides* (Ser.) Maxim.)

*Trichosanthes dioica* Roxb., pointed melon, palwal, South Asia

*Trichosanthes tricuspidata* Lour. Reported to be eaten; wild from India through Guizhou, mainland & island Southeast Asia

Other wild species include: *T. quinquangulata* A. Gray [mainland Southeast Asia, Yunnan]; *T. globosa* Blume [Indonesia]; *T. rosthornii* Harms (south China); *T. villosa* Blume [southwest China, mainland and island Southeast Asia]

#### Tribe Benincaseae

##### Subtribe Luffinae

*Luffa acutangula* (L.) Roxb., ridge loofah, domesticated India

*Luffa aegyptiaca* Mill. (syn. *L. cylindrica* M. Roem.) sponge loofah; also cultivated as vegetable; domesticated twice, South Asia (Himalayan foothills, Yunnan South China).

##### Subtribe Benincasinae [see Walters and Decker-Walters in Econ Bot 1989: 274-8]

*Benincasa hispida* (Thunb.) Cogn., the wax melon, winter melon; important in China and Japan. Native to Southern China/ Yunnan/ maybe eastern India

Four cultivar groups: Unridged winter melon, ridged winter melon, fuzzy melon, wax melon, Moderately dry lowland tropics, up 1000m, optimal growth 23-28 C temp. Mature fruits 100-160 days after sowing

*Citrullus lanatus* (Thunb.) Matsum. & Nakai water melon. Origins Africa, Sahara(?); advanced large, sweet juicy forms may have been developed in India and dispersed in Arab period.

Cultivar = subsp. *Lanatus*

Progenitor: *Citrullus lanatus* (Thunb.) Matsum. & Nakai var. *citroides* (L. H. Bailey) Mansf.

Currently wild in Southern part of Africa; formerly in Sahara(?)

*Citrullus colocynthis* (L.) Schrad. Colocynthis dist includes wild in Western and Central India though Sahara and Sahel. May have been cultivated or collected for the seeds.

*Citrullus ecirrhosus* Cogn. Tsama melon, collected wild by Namib hunter-gatherers

*Lagenaria siceraria* L. - The bottle melon, originally wild only in Africa(?); 4 other wild species in Africa in genus. Widely translocated and cultivated(?) since Palaeolithic times.

