Scientific name – The ECHO Asia Seed Bank offers two species of luffa gourd:

- *Luffa aegyptiaca* Mill.; also known as *Luffa cylindrica* (L.): Luffa gourd, sponge gourd, smooth luffa
- *Luffa acutangula* (L.) Roxb.: Angled loofah, Chinese okra, Ribbed loofah, Ridged luffa

English common names – Luffa gourd, sponge gourd

Asian common names – for *Luffa aegyptiaca*

- Thai: บวบหอม, buap hohm
- Hindi: mozhuku peerkankai, jhinga, dhundal, turai, meethi
  - torai
- Vietnamese: **Muộp hương**
- Lao: bwâp khôm
- Khmer: ronôong muul
- Japanese: **ヘチマ** hechima
- Malay: ketola manis, petola buntal, petola manis
- Chinese: 綿瓜 si gua
- Nepalese: pate, ghiu toriya
- Tagalog: patola

Regional common names for *Luffa acutangula*

- Bengali: jhingey
- Chinese: **广东丝瓜** guang dong si gua
- Hindi: peerkankai, jhinga torooee, jhingli torai, kali, torai (torooee), turai, hireballi
- Japanese: 食用ヘチマ shokuyou hechima
- Khmer: ronôong chrung
- Lao: looy
- Malay: ketola, ketola sagi, petola sagi, petola sanding, hoyong (Indonesia), oyong (Indonesia), gambas (Java)
- Nepalese: pate ghirola, pate toriya
- Tagalog: patola, patolang
- Thai: บวบเหลี่ยม buap liam (Boap liam), manoi liam
- Vietnamese: **Muộp khia** (murop kai), **Muộp láu**

Varieties of smooth luffa –

- **Thai Oval**: Large, oval, edible fruit; leaf shoots also edible. Reportedly a short day variety.
- **Thai Long**: Smooth, long, edible fruit (~30 cm/1 ft. long); leaf shoots also edible. Reportedly a day neutral variety.
- **ECHO**: Smooth, long fruit (edible when young). Leaf shoots also edible. Reportedly a day neutral variety.

Varieties of angled luffa –

- **Burmese**: Edible fruit (less than 30 cm/1 ft long) and leaf shoots

General description and special characteristics – Luffa is a climbing annual that when mature, produces oblong fruit about 1 feet long that are full of fiber and oval, black seeds. The mature rind is hard but thin and can be softened and removed by soaking in water, leaving the fiber and seeds. The fiber of mature fruit has been used for bathing or cleaning dishes.

Crop uses (culinary) – Luffa are widely eaten throughout South, East, and Southeast Asian countries. In India and Thailand, the young fruits are eaten fresh like cucumbers, cooked as a vegetable or used in soups. The kernels of the seeds
can be pressed for colorless, odorless, and tasteless oil that can be used in cooking (however, there are reports of possible seed toxicity).

**Seasons of production** – Sow seeds before or at the start of rainy season. Insufficient water can be a problem, so waiting for the rainy season is advisable unless irrigation is possible. Day length sensitivity (e.g. short day, long day, neutral) varies with varieties.

**Length of production and harvest period** – Young fruits are available within two months after seeding. A full-grown plant can produce 6 or 7 fruit to maturity, although if regularly harvested, the plant will continue to produce throughout the season. Harvest fruit when less than 30 cm (1 ft) long for consumption, because fruit can develop a bitter flavor as they mature. If growing for sponge production, wait to harvest until the skin is hard.

**Production methods** – Seeds should be sown 2.5-5.1 cm (1-2 in) deep and 0.6-1.8 m (2-6 ft) apart. The best fruit are obtained by training the vines over trellises. If producing sponges, the mature fruit can be processed by immersing in water until the rind disintegrates. Pieces of rind can be washed away to remove seeds and pulp. The sponges should then be then bleached and dried in the sun. Production slows in cooler temperatures, and a minimum temperature of 26 – 30°C (79-86°F) is necessary for germination although lower temperatures are acceptable once seedlings have germinated.

**Pollination** – Luffa cross-pollinates easily. Flowers are monoecious and are only open for one day, during which insects, usually bees, are required for pollination.

**Environmental conditions for production** – Too much rainfall during flowering and fruiting can be harmful. Luffa generally grows well wherever cucumbers thrive.

**Soil requirements** – Luffa prefers well-drained, fertile soil. The crop responds well to compost applied around the base of the plants or trellis. Luffa does not require soil as fertile as other cucurbits, but once flowers appear, then additional fertilizer will help improve fruit production.

**Pests and diseases** – Downy and powdery mildews are common diseases. Insect pests common to gourd family plants reported for luffas include: squash bugs, cucumber beetles, the red pumpkin beetle, and *Dacus* fruit flies. Snails and slugs can be a problem as well.

**Seed saving** – Mature seeds are flat, black and smooth. Seeds may be removed by immersing fruit in water until the rind and fibrous flesh soften enough to be washed away.

**References** –


