ECHO Asia Seed Fact Sheet

Photo: ECHO Asia staff

Scientific name – *Solanum melongena*

English common names – Eggplant, aubergine

Asian common names –

- Burmese: kayan
- Chinese: 茄 qie, 茄子 qie zi, ai gua / ngai gwa (Cantonese name)
- Hindi: बैंगन baigan, baijani, बैंगन baingan
- Japanese: daimaru nasu, daimaru nasu, nasu.
- Khmer: trâb vèèng, trâb put lonhoong
- Lao: khüa ham maaz, khüa hlèèz, khüa poom
- Thai: มะเขือ makhuea, มะเขือยาว makhuea yao
- Vietnamese: cà tim, cà bat, cà tin.

Variety –

- **Yellow:** Very productive in hot, humid weather. Fruit turns yellow when mature. Productive at ECHO Asia even with nematodes, but susceptible to various soil pathogens. Fruits are eaten as vegetables when young (about 2/3 of full size) but remain edible up to full maturity. An annual crop, eggplant does best in well-drained soils with temperatures of 28-35^{0}C (75-100^{0}F). Can be planted all year, but performs best during the cool, dry season. Preferred soil pH: 4.3-8.5.

General description and special characteristics – A semi-perennial shrubby plant that is sometimes grown as an annual. The cooked fruits provide a useful vegetable in the tropics. The size and shape of the fruit varies with the variety, including round, oval, and long. Color also varies between white, yellow, green, and purple.

Crop uses (culinary) – When the fruits are not quite mature, they are used as a vegetable, being mostly cooked. Eggplants may be boiled, fried, stuffed, or included as a dipping vegetable for Asian chili sauces. In Southeast Asia, unripe fruits are commonly used in curries.

Crops uses (medicinal) – In India, eggplant is sometimes used to treat diabetes, asthma, cholera, and bronchitis.

Seasons of production – In northern Thailand, eggplant can be planted all year, but performs best during the cool, dry season.

Length of production and harvest period – Depending on growing conditions, fruits can begin to be harvested 2-3 months after planting. Eggplant is indeterminate, with flowering and fruiting continuing through the lifespan of the plant. Edible fruit should be picked 3 to 4 times per week.

Production methods – Eggplant prefers full sun on well-drained soil. It is preferable to start eggplant seedlings in containers and then transplant out to the field or garden when seedlings are 10-15 cm (4-6 in) tall. For disease prevention, as with all Solanaceae (tomatoes, peppers, eggplant), rotate eggplant production beds to avoid prolonged contact with soil-borne diseases such as Fusarium, Pythium, and Rhizoctonia.

Plant spacing – Plant in rows 70 cm (30 in) apart with 50-60 cm (20 in) between plants.

Pollination information – Partial self-pollination; cross-pollination may still occur between flowering plants located within 200 m (656 ft) of each other.

Environmental conditions for production – Grows well up to about 900 m (3,000 ft) in elevation.

Soil requirements – Eggplant grows best in a sandy loam soil. The plants are heavy feeders and respond well to manure or a balanced fertilizer at four to six weeks of development.

Diseases and pests – Bacterial wilt, *Pseudomonas solanacearum*, is a serious disease of eggplant in the wet tropics. Other soil borne diseases include Fusarium, Pythium and Rhizoctonia. The fungus *Phomopsis vexans* causes damage to leaves, stems and fruits. *Corythraica passiflorae* (lace bugs), *Epitrix parvula,* and *E. cucumeris* (flea beetles) produce a shot-hole effect on leaves. Termites eat the roots and stems, while ants may be associated with aphid and scale infestations. Integrated Pest Management (IPM), using such practices as rotation of beds, soil management, soil health, scouting, preventing soil-leave splash, and spraying is usually necessary for successful eggplant production in the tropics and humid sub-tropics.

Seed saving – Seeds should be collected from fully developed fruit. Remove seeds with a spoon and rinse in water to remove pulp. Seeds should be dried in the shade until the moisture is approximately 12% and then stored in a cool dry place. Seeds stored for more than one year may not maintain a high percentage of germination.

References –

Herklots, G. 1972. Vegetables in Southeast Asia. Hong Kong: South China Morning Post, Ltd.

Purseglove, J. W. 1968. Tropical Crops: Dicotyledons. Essex, U.K.: Longman Group Ltd.