

Vegetable Production Throughout the Rainy Season [✎ \(https://www.echocommunity.org/vi/articles/139/edit\)](https://www.echocommunity.org/vi/articles/139/edit)

By: Kimberly Duncan, Niemet Chompoothong, and Rick Burnette

Published: 01-04-2012

From: ECHO Asia Notes (/vi/resources/d0eaf359-b4a4-43a1-801b-ab1320c1ba76) | Asia Note Issue #13 (/vi/resources/2eb7e222-9bee-4738-ab37-dec86f1bfeaf)

an-issue-13.pdf

(<https://www.echocommunity.org/vi/resources/2eb7e222-9bee-4738-ab37-dec86f1bfeaf/download>)

📄 ☆ ☆ ☆ ☆ ☆

The cool, dry season offers the best window for vegetable production in the tropics, assuming an adequate water supply. Pest and disease pressures are relatively low and temperatures are moderate. By contrast, the rainy season brings a combination of high temperatures and humidity that encourages the return of voracious snails and other pests. This means that many desirable vegetables, such as lettuce and tomatoes, are difficult to produce under rainy season conditions without significant inputs such as plastic row covers and pesticides.

In anticipation of the rainy season, ECHO Asia's Seed Bank staff have compiled a list of 32 vegetable crops that are productive throughout the rainiest months. These crops, both annual and perennial vegetables, can withstand pest and disease attack (e.g. snails and fungi) and provide a nutritious base to the daily diet. The practice of cultivating both annuals and perennials simultaneously lends itself to better production and nutrition and ensures a fallback when a particular species or variety fails. In this list we emphasize mainly plants producing edible foliage and leaf shoots.

In Southeast Asia, leaves and shoots are traditionally harvested in small amounts, moving between species and varieties on a regular basis in what can be likened to browsing or foraging. Many crops harvested in this way can continue to provide food for long or extended periods of time. Additionally, various shoots and flowers are customarily prepared as sides or "dipping" vegetables (i.e. used to dip sauces and curries) rather than as main dishes. Therefore, these types are not required in large amounts.

The following list of recommended vegetables for the rainy season is arranged in alphabetical order by common name. It includes plants that can generally be found in the household gardens and on the tables of our seed bank staff at any given time. For seed or cuttings of recommended varieties, please check our ECHO Asia Seed Bank Catalog. However, not all varieties may be available through the ECHO Asia Seed Bank. If we are unable to provide seed, readers may wish to check with the ECHO International Seed Bank where noted. Several references are made to wild or forest species, and to those that can be found easily in your local market. As usual, the ECHO Asia Seed Bank highly recommends investigating all species and varieties that are available to you locally.

Vegetables for the Rainy Season:



(/resources/0d117d4e-d467-48f9-b06f-775530258f32) Bamboo shoots - Dendrocalamus, Gigantochloa and Thyrsostachys species and others

Characteristics: Bamboo species native to much of Southeast Asia; produce multiple stems ("culms") in clumps.

Edible Parts: Bamboo shoots are high in nutritional value. In comparison to many commonly consumed vegetables, bamboo shoots have higher free amino acids, protein, and dietary fiber content. Except for *Brassica* vegetables, they also have a higher amount of vitamin C. Edible new stem shoots are produced particularly during the last half of the rainy season. Shoots are eaten boiled, fried, curried and pickled

Planting Recommendations: Cultivated bamboo is usually propagated vegetatively, for example through clump division and culm (stem)/branch cuttings; techniques depend upon the species. As opportunity presents, wildlings that have germinated from seed can be used. Bamboo plantings must be spaced widely, no less than 3-5 meters (10-16 ft.) apart.

Possible Pests/Disease: Stem borers, mealy bugs, scale and mites; usually not severe.

(/resources/575df3ac-46fe-406e-b261-9de37359a326) Chaya - Cnidoscolus chayamansa

Characteristics: A fairly recent arrival to Asia, chaya is a perennial with thick, succulent, upright shoots bearing large lobed leaves. The ECHO Asia Seed Bank and ECHO International Seed Bank offer cuttings of 'ECHO' variety.

Edible Parts: Young chaya leaves and shoots are a good source of protein, calcium, phosphorus, iron, niacin, riboflavin, thiamine and vitamins A and C. *Important Note: Raw chaya shoots and leaves contain cyanide and are poisonous. Boil or steam in an open/uncovered pot for 10 minutes and remove water before consuming.*

Planting Recommendations: Plant as cuttings, spaced 50 cm (1.6 ft.) apart or slightly closer for an edible fence. Chaya grows in sun or partial shade; early growth is improved with regular watering but the plant does not tolerate standing water.

Possible Pests/Diseases: No major pests.



(/resources/351bfb9e-b719-4861-bdb3-779281a19b03)Chayote - *Sechium edule*

Characteristics: A viny, perennial, herbaceous plant.

Edible parts: Fruit, root, stems, seeds and leaves are edible. Fruit can be eaten raw or cooked. The leaf shoots, available through the rainy season, are harvested and prepared in a manner similar to pumpkin and bottle gourd-the tougher, slightly pubescent outer layer of the shoots is removed to access the tender, edible portion.

Planting recommendations: Plant by placing the whole fruit on its side in a hollow in the soil. Trellising is recommended for chayote; space plants 2-3 meters (approximately 7-10 ft.) apart. In the tropics, chayote grows best at higher elevations (800 m and higher) and requires consistent soil moisture for adequate production.

Possible Pests/Diseases: Aphids, fruit flies and some crickets.

(/resources/8fde8a82-c9d1-4263-8631-d0ea54824c24)Climbing wattle - *Acacia pennata*

Characteristics: With edible bipinnate leaves, climbing wattle is grown as a bushy, perennial vegetable in Myanmar, Thailand, Laos and Cambodia. Edible Parts: Climbing wattle produces edible leaf shoots year round, especially during the rainy season. The shoots have a strong aroma and flavor, and are often deep-fried, added to omelets or blanched for use as a dipping vegetable.

Planting Recommendations: Plants can be established from stem cuttings or from seed. Seedlings should be spaced at least 1 meter (3.3 ft.) apart. Possible Pests: No major pests.



(/resources/ce478e99-1437-4f71-bc56-b74534b885d2) Cowpea - *Vigna unguiculata*

Characteristics: Annual bush or creeping vine. ECHO Asia Seed Bank offers 'Samoeng' variety (a low, creeping cowpea with white flowers) and 'Lahu/Mae Ai' (a bush cowpea variety).

Edible Parts: Young shoots and pods; mature seeds.

Planting Recommendations: Direct seed; space 30 cm (11.8 in) apart; plant in full sun.

Possible Pests/Diseases: Aphids (spray plant with wood vinegar or mild detergent solution)

(/resources/8551574b-39c4-451c-8086-f6cbd6ebb23b) Cucumber - *Cucumis sativus*.

Characteristics: Climbing vine with hairy leaves; an annual. ECHO Asia Seed Bank offers 'Khmer' variety with large fruit.

Edible Parts: Young or mature fruit.

Planting Recommendations: Plant seeds 30 cm (11.8 in.) apart and support with a trellis.

Possible Pests/Diseases: Cucumber moth (control with preventive cultural practices such as sanitation and row covers) and fungal diseases.

(/resources/9e1b9a34-6fb1-4951-be73-6e73d50550fe) Eggplant - *Solanum melongena*

Characteristics: Broad, hairy leaves; oblong or oval fruits; local varieties-often with plum-sized fruit or large-are available. Though this plant often performs best in the cool season, some naturalized *Solanum* species (e.g. *S. torvum*) are also productive during the rainy season. ECHO Asia Seed Bank offers 'Yellow' variety (*S. melongena*), a long-lived annual with large, gourd-like fruits.

Edible Parts: Fruit. ECHO Asia's 'Yellow' variety can be eaten young when the fruit is green and firm, or mature and yellow when the fruit is soft but somewhat bitter.

Planting Recommendations: Plant seeds 30 cm (11.8 in.) apart in well-drained soil in an area with full sun or light shade.

Possible Pests/Diseases: Root/stem fungal diseases (remove infected plants immediately and rotate production areas; soil solarization with clear plastic mulch during



the hottest months is also recommended).

(/resources/c6a7ac6c-47d7-496d-8a12-6a5d7375900d)Vegetable fern - Diplazium esculentum

Characteristics: Herbaceous perennial found wild along forest streams or wetlands. Plants produce edible pinnate shoots (fronds). Vegetable fern is usually collected from the wild and sometimes available in local markets; cultivation is limited.

Edible Parts: New curled fronds and young, tender leaf shoots.

Planting Recommendations: Cultivate by establishing divided plantlets; performs best in shade and moist conditions.

Possible Pests/Diseases: Occasional snails

(/resources/479423b9-b261-45f2-ad62-f044d7c4fbdc)Fishtail Palm - Caryota mitis

Characteristics: Palm that produces multiple stems with edible inner core, which can be harvested when approximately 2-3 meters (7-10 ft.) tall; has distinct "fishtail" shaped leaves. Found in the wild but often cultivated as an ornamental.

Edible Parts: Inner shoot (heart) accessed by removing woody outer layer of stem; has a slightly bitter/sweet flavor.

Planting Recommendations: Fishtail palm is a clustering species that grows in full sun and partial shade. Establish seedlings at least 3 meters (approximately 10 ft.) apart; they will take at least three years to begin producing edible shoots.



Possible Pests/Diseases: No major pests.

(/resources/b7f90a58-1945-47c9-8e94-a09a75079b51)**Jack Bean - *Canavalia ensiformis***

Characteristics: Annual bush or creeping vine with purple flowers and large pods. ECHO Asia Seed Bank offers 'Thai' variety, which is a bush type.

Edible Parts: Very young pods and shoots; flowers. Important Note: Mature jack bean seeds are mildly toxic and should not be consumed in large amounts without special preparation.

Planting Recommendations: Direct seed; space 30 cm (11.8 in.) apart in full sun or partial shade.

Possible Pests/Diseases: Pod borers in maturing pods, especially during late rainy season.

(/resources/2832ef7f-0c08-4883-9a7c-2616f7a29703)**Katuk/Sweet Leaf - *Sauropus androgynus***

Characteristics: Perennial with upright stems that produce green shoots with small oblong leaves. ECHO Asia Seed Bank offers cuttings of 'Thai local' variety as available.

Edible Parts: Tender, young shoots and leaves.

Planting Recommendations: Plant rooted cuttings 30 cm (11.8 in.) apart, or closer for an edible fence; grows in sun but prefers partial shade.



Possible Pests/Diseases: Scale and sucking insects (apply wood vinegar solution or "Cornell" spray made with 5 T (tablespoons) vegetable oil, 1 T baking soda, and 4 T Safer's soap or 2 teaspoons of mild liquid dish soap in one gallon of water).



(/resources/e6fc34f1-e9b5-4768-926d-5bda0757bdcc)Kwangtung Gymnema - *Gymnema inodorum*

Characteristics: A viny, woody perennial that is widely distributed across South Asia, mainland Southeast Asia, southern China, Borneo, Indonesia and the Philippines. Found in gardens and local markets. Vines can reach lengths of several meters or more.

Edible parts: Tender leaves and leaf shoots are produced year round; most flavorful during the dry season (bitter but edible during the rains); consumed in various ways including omelets, stir fries and curries. Medical studies show that compounds in *G. inodorum* have medicinal properties including the regulation of blood sugar and supplying antioxidants.

Planting recommendations: Propagate from stem cuttings. Allow to grow along fences and trellises.

Possible Disease: No major pests.

(/resources/62d61672-321c-437e-bd73-97d1adcc0ce6)Leaf Pepper - *Piper sarmentosum*

Characteristics: Creeping perennial vine with broad ovate leaves. Grows wild or found in gardens and markets.

Edible Parts: Tender, young shoots and leaves; eaten raw in salads, wrapped around various ingredients and in curries; contains the antioxidant naringenin.

Planting Recommendations: Plant rooted stem cuttings as ground cover; prefers shade. Possible Pests/Diseases: No major pests.

(/resources/9c00eea8-e7f7-4dca-983e-490fd7dec1da)Long Bean/Yard-long Bean - *Vigna unguiculata ssp. sesquipedalis*

Characteristics: An extremely viny cowpea (annual) that produces long pods approximately 50 cm (20 in.) in length. Widely grown and available in markets.

Edible Parts: Pods; may become stringy in texture if left on the vine too long.

Planting Recommendations: Direct seed along a trellis; space 50 cm - 1 m (approximately 20 in. - 3 ft.) apart. Grows in full sun or light shade.

Possible Pests/Diseases: Aphids (spray plant with wood vinegar or mild detergent solution).



(/resources/6df8a77c-8f38-41ba-8a35-95631ca76f45)**Malabar Spinach - *Basella alba***

Characteristics: Succulent climbing perennial vine with oblate leaves. ECHO Asia Seed Bank offers 'Bangladesh,' a thick-stemmed variety with large leaves. Other varieties are generally smaller.

Edible Parts: Young leaves (somewhat mucilaginous when cooked) and pink flower buds; often cooked with seafood and in soups and curries.

Planting Recommendations: Propagate by seed or cuttings; space 30-50 cm (approximately 12-20 in.) apart; handles full sun or partial shade. Malabar spinach generally performs better when trellised. **Possible Pests/Diseases:** Root-knot nematodes (to control them, apply large amounts of composted manure, rotate with crops less susceptible to nematodes, and solarize soil with clear plastic mulch during the hottest months).

(/resources/7c0c9e83-5a84-4d73-84e0-7ea066f1c0cf)**Moringa - *Moringa oleifera***

Characteristics: Tree with small rounded, pinnately compound leaves. ECHO Asia Seed Bank currently offers local mixed varieties.

Edible Parts: Leaves are especially high in protein, calcium, and vitamins A, B, and C; can be eaten raw, cooked, or dried and ground. Young pods are included in curries (inner portion is edible). Roots can be used as a spicy condiment similar in taste to horseradish. ECHO Asia offers a 'Regional Mix' selection.

Planting Recommendations: Can be direct seeded into fields and gardens, but

better to establish plants in seedling bags and then transplant. Stem and branch cuttings may also be rooted. Plant as a single specimen or in stands for leaf and seed production (at least a few meters apart). Moringa may also be spaced 50 cm (20 in.) apart or closer for an edible fence. Grows well in poor soils and full sun, but must be established in well-drained sites; yellow leaves and dieback may indicate too much water. Keep coppiced to produce flushes of new leaves and for easy harvest.

Possible Pests/Diseases: No major pests.

(/resources/ca3a7a98-1806-41d7-800d-9b79e8bf21e1)**Morning Glory - Water Spinach/Kang Kong - *Ipomoea aquatica*/*Ipomoea reptans***

Characteristics: Perennial creeping vine with both aquatic/lowland (l. aquatic) and upland species (l. reptans). Upland varieties are grown almost exclusively in plant beds whereas aquatic/lowland types are grown in bodies of water (e.g. ditches and ponds), wetlands and plots prone to flooding. Both types are often found in Southeast Asian markets. **Edible Parts:** Young shoots and leaves are eaten in soups, stir-fried as an individual dish, and steamed as a side or to be eaten as a "dipping" vegetable. **Planting Recommendations:** Plant seed of upland varieties into beds in hills 10-15 cm (approximately 4-6 in.) apart. Establish aquatic types with stem cuttings. Tolerates some shade. Beware of invasive tendency. **Possible Pests/Diseases:** Caterpillars.



(/resources/e4b3b6a8-b0f3-47e3-a492-b32b408088ad)**Mustard greens - Brassica juncea**

Characteristics: Mustard greens are annual, leafy greens with a slightly strong horseradish flavor. Mustards perform better under rainy season conditions (e.g. they are more resistant to various rainy season pests) than many other Brassicas; widely planted in gardens and fields. The ECHO Asia Seed Bank offers 'Khasi.'
Edible parts: Tender leaves. Planting recommendations: Sow into plant beds and thin to 10-15 cm (approximately 4-6 in.) apart. Possible pests: Snails and slugs and other leaf feeders.

(/resources/661c0567-90ec-4ed2-8278-bb799a2eb981)**Okra - Abelmoschus esculentum**

Characteristics: Upright annual plant with plump, hairy pods. ECHO Asia Seed Bank offers the 'Clemson Spineless' variety, which produces pods with fewer spines.

Edible Parts: Mainly tender pods (leaves are reportedly edible too). Pods are mucilaginous (i.e. contain a slimy substance). Fry with chilies or boil and add cumin, salt, and/or lime to cut mucilage. **Planting Recommendations:** Direct seed in rows at least 60 cm (24 in.) apart with hills approximately 30 cm (12 in.) apart in

full sun.

Possible Pests/Diseases: Aphids (spray plant with wood vinegar solution or mild detergent solution).



(/resources/b1a0a94a-f50b-46b3-b895-3d3d922a3c3d)Pumpkin/Squash - *Cucurbita moschata*

Characteristics: Creeping annual vine with hairy leaves and shoots.

Edible Parts: Young leaf shoots, flowers and fruit. Peel off pubescent/veiny outer layer of leaf shoots for more palatable consumption. When planted at the start of the rainy season, fruits will not mature until the cool dry season.

Planting Recommendations: Direct seed no less than 50 cm (1.6 ft.) apart in full sun or partial shade; trellis if desired.

Possible Pests/Diseases: No major pests.

(/resources/300c24cf-31c0-4037-9b33-cfe1cde2255d)Rattan - *Calamus viminalis* and other species

Characteristics: Rattans are multi-stemmed palms. Young stems, which vine over time, grow upright. Many rattans are extremely thorny. Can be harvested in the wild (unfortunately becoming rare in many locations) but also grown for local markets in parts of Southeast Asia. Mature vines (canes) are harvested to produce wicker products.

Edible Parts: Inner core of shoots and stems (i.e. hearts) are consumed. The woody, thorny outer layer of the stem must be carefully removed to access the edible core.

Planting Recommendations: Establish as seedlings spaced at least 1.5 meters (approximately 5 ft.) apart in sun or partial shade. Seedlings must grow approximately three years before the stems are edible. Afterward, harvest stems continually to manage growth and maintain long term shoot production. Seed for *C. viminalis* is available on a seasonal basis (April-June) through the ECHO Asia Seed Bank in partnership with the Upland Holistic Development Project (UHDP), Mae Ai/Fang, Thailand. Rattan seed viability diminishes soon after harvest. Seedlings may also be bought at UHDP. Possible Pests/Diseases: No major pests.



(/resources/b0723aec-ef22-4d70-9079-dde388890c39)Red Shoot Fig - *Ficus virens*

Characteristics: A type of strangler fig that can be planted as a self-supporting tree.

Edible Parts: Edible, young leaf shoots emerge after a brief leaf fall during the mid-late dry season. Trees continue to produce the leaf shoots through the remainder of the dry season and on through the rainy season. The leaf shoots are prepared in a variety of ways including stir-fries and curries. **Planting Recommendations:** Plant seedlings in full sun to partial shade. The tree can grow very large, so best keep it coppiced to 1-2 meters (approximately 3-7 ft.) to control the size and for easier harvest. Propagated from stem cuttings.

Possible Pests/Diseases: No major pests.

(/resources/81b07307-076f-4fd3-8b9c-bf9f891d0468)Roselle - *Hibiscus sabdariffa*

Characteristics: An annual bush with distinctive cranberry-colored shoots, stems and flower calyxes. **Edible Parts:** Tender leaves and leaf shoots (slightly mucilaginous and sour) and flower calyxes (also sour; used to make teas and jams). Planted at the beginning of the rains, tender leaves and shoots are produced throughout much of the rainy season. The calyxes are ready for harvest by the cool dry season.

Planting Recommendations: Direct seed 50 cm (1,6 ft.) apart or wider; prefers full sun. The ECHO Asia Seed Bank offers seeds of the 'Burmese' variety that produces good shoots.

P

Possible Pests/Diseases: Snail damage possible.



(/resources/9d076f15-c1f7-442f-8d8c-f210a410d6a4)Scarlet/Ivy Gourd - *Coccinia grandis*

Characteristics: Climbing vine with ivy-shaped leaves, white flowers and small scarlet fruit.

Edible Parts: Young vine and leaf shoots. The mature fruit is also edible.

Planting Recommendations: Ivy gourd is often found growing wild; shoots are harvested by foragers. However, seeds or wildlings can be used to establish plants in gardens. Best to plant along a trellis or fence; can be grown in full sun or partial shade. Ivy gourd is invasive and prohibited in some locations outside of its native range that extends from Africa to Asia. The ECHO Asia Seed Bank offers seed but recommends planting only within the native range.

Possible Pests/Diseases: Powdery mildew.



(/resources/c2b90a98-fe3a-4335-bc20-cfbf08d04674)Sesbania - *Sesbania grandiflora*

Characteristics: Tree grows to 5 meters tall with pinnately compound leaves and large white, pink, red, or yellow flowers.

Edible Parts: Flowers (most commonly), young leaves and pods (occasionally). Flowers are eaten raw, in curries, or steamed as a side. Young leaves and pods are sometimes included in a white coconut curry.

Planting Recommendations: Best to plant seedlings in moist but well-drained soil. Grows well in full sun and light shade. Establish trees at least a few meters (6-9 ft.) apart.

Possible Pests/Diseases: Leaf webbers and feeders; stem borers; root knot nematodes; some gray leaf spot; some mosaic virus.

(/resources/923d94c3-b498-454c-b086-fce22bb390a4)Siamese Senna/Kassod Tree - *Senna siamea*

Characteristics: A leguminous tree with pinnately compound leaves that grows to between 15 and 20 meters in height. Commonly planted and found in the wild.

ECHO Asia Seed Bank offers seed of a local variety.

Edible Parts: Young leaves and flowers. The taste is bitter, but the plant parts are consumed in soups and curries or with chili pastes. Traditional senna leaf curries were reportedly used as a mild laxative drug; the leaves contain glycosides, much of which can be reduced by cooking. Planting Recommendations: Can be direct seeded or established as seedlings. If you are planning to coppice, trees can be spaced 1-2 meters (approximately 3-7 ft.) apart. Use a planting distance of 3 meters (9.8 ft.) or more for larger trees. Prefers sun or light shade; does not grow well above 1300 meters elevation.

Possible Pests/Diseases: No major pests.

(/resources/bbce9d63-145f-4ac0-9520-24d6b66c69fe)Sunnhemp - *Crotalaria juncea*

Characteristics: Sunnhemp is an annual with stems that grow to a height of a meter or more and produce bright yellow flowers and plump, velvety pods. Sunnhemp performs well any time of year if moisture is adequate, and is mainly used as a green manure/cover crop. ECHO Asia Seed Bank offers 'Chiang Mai' variety.



Edible Parts: Flowers are eaten in soups or omelets.

Planting Recommendations: Broadcast seed. Thin seedlings to 30 cm (11.8 in.) spacing. Prefers full sun and performs well in almost any soil that is not waterlogged.

Possible Pests/Diseases: Sunnhemp moth and stem borers.

(/resources/31e47b64-5694-4111-bebb-145124748fbc) Sweet Potato - Ipomoea batatas

Characteristics: Creeping, herbaceous, perennial vine with large cordate (heart-shaped) leaves and tubers. Various varieties (e.g. white, purple and orange tubers) are available in local markets and widely planted.

Edible Parts: Young shoots and leaves, as well as tubers. Tender leaves and shoots are prepared in various ways, including blanching, stir fries and curries.

Planting Recommendations: Plant tubers or establish cuttings from the main runner of a plant; space at 50 cm (1.6 ft.); fills in quickly.

Possible Pests/Diseases: Snails (especially on young seedlings).

(/resources/ec48e102-cddf-4261-bf65-5764353a72a2) Tropical/Indian Lettuce - Lactuca indica

Characteristics: A fast-growing, self-seeding semi-perennial with long, lanceolate leaves. ECHO Asia Seed Bank offers 'ECHO Tropical' variety.

Edible Parts: Leaves are a fair source of vitamins A and C. Young leaves can be eaten raw; older leaves can be served raw with vinegar, steamed, or boiled.

Planting Recommendations: Plant seeds 50-60 cm (approximately 1.6-2 ft.) apart to accommodate the plant's bushy nature. Performs well in warm, moist conditions.



If planted in well-drained soil, it can tolerate rainfall in excess of 3500 mm/year.

Possible Pests/Diseases: Aphids (spray with wood vinegar solution or mild detergent solution).

(/resources/7aa1842b-41ac-4928-9cb5-83aad65385b0)Vegetable Taro - *Colocasia esculenta*

Characteristics: An herbaceous perennial that produces a thick fleshy stem with large triangular-ovate leaves and oval tubers. Tubers and plantlets of local varieties planted widely throughout the Asia/Pacific region and available in markets.

Edible Parts: Depending on the variety, young leaves, stems and/or tubers are edible. Among vegetable types, varieties with edible stems appear most widely available in much of Southeast Asia. Important note: In general, taro species contain toxic oxalate crystals which necessitate boiling and/or other forms of preparing to make plant parts safe for handling and consumption. Some varieties are more potent than others, thereby affecting edibility. Consult local methods for handling and consuming local varieties.

Planting Recommendations: Plant tubers in sun or partial shade; space about 1 meter (3.3 ft.) apart to accommodate wide-spreading leaves.

Possible Pests/Diseases: No major pests.

(/resources/b22197cb-3e2f-48b1-a0fd-ea3a5b07012b)Wax gourd/Wintermelon - *Benincasa hispida*

Characteristics: Creeping annual vine yielding large, waxy-looking gourds 45 to 60 cm in length. ECHO Asia Seed Bank offers a local variety.

Edible Parts: Leaf shoots are consumed during the rainy season when vines are actively growing. Fruit and seeds are generally available during the dry season.

Planting Recommendations: Plant seeds 50 cm - 1 m (approximately 1.6-3.3 ft.) apart, in full sun or partial shade.

Possible Pests/Diseases: Squash beetle and a yellow leaf-eating beetle.