



SOUTHERN UNIVERSITY AGRICULTURAL RESEARCH AND EXTENSION CENTER



ETHNIC VEGETABLE

PLANTING GUIDE

A Guide for Planting and Harvesting Ethnic Vegetables for the U.S. Deep South



LEADERSHIP

Orlando F. McMeans, Ph.D.

Chancellor-Dean

*Southern University Agricultural
Research and Extension Center*

*The College of Agricultural,
Human and Environmental Sciences*

De'Shoin A. York, Ph.D.

Vice Chancellor for Extension
and Outreach

*Southern University Agricultural
Research and Extension Center*



AUTHORS

Stephanie M. Elwood, M.S.

LDAF Licensed Horticulturalist
Assistant Specialist, Horticulture

*Southern University Agricultural Research
and Extension Center*

**Adjunct Professor, FHS,
Plant and Soil Sciences**

*The College of Agricultural,
Human and Environmental Sciences*

Mila Berhane

Senior Research Associate

*Southern University Agricultural Research
and Extension Center*

**Adjunct Professor, FHS,
Plant and Soil Sciences**

*The College of Agricultural,
Human and Environmental Sciences*

CONTRIBUTERS

Mitchell Provensal

Associate Director of
Agroforestry

Baton Roots

Terra Polite

Extension Associate,
Horticulture

*Southern University Agricultural
Research and Extension Center*



This publication is dedicated to Mrs. Mila Berhane and Mr. Andeab Berhane. For dedicating their lives to plant preservation, being model horticulturalists, preserving so many cultural, ethnic and rare plants and mentoring so many without reservation resulting in the infinite knowledge of plants being passed on from generation to generation. The Southern University Agricultural Research and Extension Center and the state of Louisiana would not be the same without your vast contributions.

Photos by Collin Richie Photography





The Southern University Agricultural Research and Extension Center (SUAREC) Ethnic Vegetable Planting Guide is intended to honor the cultural traditions of such vegetables and to teach the reader how to incorporate ethnic vegetables into their garden repertoire. With Louisiana being in a sub-tropical planting zone, when planted at the right times, many tropical fruits and vegetables can grow successfully here. For decades, SUAREC has led the way in propagating, growing and spreading knowledge to the state of Louisiana on ethnic vegetables of the world. Some examples include: Hibiscus roselle (*Hibiscus sabdariffa*), Molokhia (*Corchorus olitorius*), Sweet Potato greens (*Ipomoea batatas*), amaranth (*Amaranthus*), and many other vegetables, fruit and herbs that are grown and consumed worldwide. Compiling this knowledge into a digital and written resource will assist with the dispersal of knowledge across the state of Louisiana and will provide information for home vegetable gardeners, urban farmers, and small farmers to grow, sell, and consume them successfully.



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AMARANTH

[*Amaranthus spp*]

Common Name(s): Callaloo

Scientific name: *Amaranthus spp*

Country of origin: Central and South America

USDA Hardiness Zones: Zones 2-10 (not cold hardy)

Soil Requirements: Rich, well drained soil

Climate Requirements: Full sun

Uses: Greens and grain

Widely Used In (Countries): Asia, Caribbean, and Africa

Added Facts: Known as callaloo in Jamaica and has other names in different regions. In Central America it is known as “bledo,” in Mexico it’s known as “quelites,” and in Haiti called “spinach.”

Planting Dates for Louisiana: After the last danger of frost.

- South Louisiana: February 15 – danger of frost
- North Louisiana: March 15 – danger of frost

Planting Specifications: Plant 12 inches apart. The plant can reseed itself. Can plant direct seed or transplant.

Pest and Diseases: Cucumber beetle

Harvesting Specifications: Continual harvest. Harvest entire plant when plants are young and tender. Harvest the tender tips on large mature plants. If leaves are left on the plant too long they will become bitter.

How to Eat/Recipe: Amaranth greens go well in salads, soups, and stir-fries. Eat raw or boil/steam/sauté until tender (stalks take longer to cook). Seeds are used as grain and popped.

Amaranth greens are high in protein, iron & calcium. Often substituted for spinach, they have a similar earthy flavor.



BITTER MELON

[*Momordica charantia*]

Common Name(s): Bitter gourd, Goya melon, Karela, and Karalla

Scientific Name: *Momordica charantia*

Country of Origin: Africa

USDA Hardiness Zones: Zones 9-11

Soil Requirements: Sandy or loamy well drained soil

Climate Requirements: Full sun, not cold hardy

Uses: Medicinal, stir-fry

Widely Used In (Countries): India and China

Planting Dates for Louisiana: After the last danger of frost.

- South Louisiana: February 15 – danger of frost
- North Louisiana: March 15 – danger of frost

Planting Specifications: Plant 12 inches apart. Provide something for the vines to climb on, like a trellis or chain-link fence.

Pest and Diseases: No significant pest or diseases.

Harvesting specifications: Seventy-five days to harvest from seed. Harvest when skin is glossy and fruit is 4-6 inches long. Harvest when fruit is tender and young, older fruit can become unpalatable. To grow for seed, allow fruit to turn yellow and pop open on vine, viable seed will be bright red.

How to Eat/Recipe: Chop bittermelon (keep seeds) stir fry with other vegetables. To remove bitterness chop bittermelon and set in a brine (however, this will remove medicinal properties).

Leaves can be dried out and utilized as tea for fever.



BROCCOLI RAAB

[*Sessantina Grossa*]

Common Name(s): Broccolini, rapini, raab, rapa, rapine, rappi, rappone, fall and spring raab, turnip broccoli, taitcat, Italian or Chinese broccoli, broccoli rape, broccoli de rabe, Italian turnip, and turnip broccoli.

Scientific Name: *Sessantina Grossa*

Country of Origin: Italy

USDA Hardiness Zones: Zones 3A-10A

Soil Requirements: Clay, loamy, or sandy

Climate Requirements: Full sun to part sun

Uses: Easy to cook sauteed, braised, and roasted

Widely Used in (Countries): Italian, Chinese, and Portuguese cuisine

Planting dates for Louisiana:

- South Louisiana: August 1
- North Louisiana: August 15

Planting specifications: It takes 40-100 days to harvest from seed, continual harvest.

Pest and Diseases: None

Harvesting Specifications: When plants are 6-15 inches tall when flower buds are still unopened. Cut the tender tops (6-8 inches from top). Harvest 40-60 days after planting.

How to Eat/Recipe: Harvest the whole plant—leaves and stems—and stir fry by itself or with other vegetables.



CACTUS

[*Opuntia ficus-Indica*]

Common Name(s): Leaf-Nopales/Fruit-Prickly Pear

Scientific Name: *Opuntia ficus-Indica*

Country of Origin: Africa

USDA Hardiness Zones: Perennial zones 9-11

Soil Requirements: Thrive in well-draining soil that is slightly acidic to neutral in pH, sandy or gravelly. The soil should be porous and free-draining so that it doesn't retain moisture, which can cause the plant to rot.

Climate Requirements: Full sun, low moisture conditions

Uses: Fruits are eaten as fresh fruit, jelly, juice, or candy. Alcoholic drinks in Mexico, Eritrea, and Malta. The young leaves are edible and are used in Mexican food (tuna).

Widely Used in (Countries): Mexico, the Caribbean, southwestern United States, Israel, Colombia, South Africa, and Spain

Planting Specifications: Propagate by cutting

Pest and Diseases: Soft skin scale

Harvesting Specifications: Fruit – prickly pear – it takes 3-6 months for fruit to ripen, fruit is ripe when deep red/maroon (there are other varieties with other colors – ripe color ranging from green, orange, yellow, and red) color and a slight loss of fruit firmness to the touch. Remove fruit from the pads by twisting or cutting rather than pulling.

Leaf – harvest younger leaves on top. Wear thick gloves and long sleeves or have appropriate long knife cutting tools. Grasp the pad with tongs, and cut it where the section joins to another pad. Use tongs to place into cloth or burlap bag (the spines will rip plastic). Leave 2/3 of leaves on plant to enable proper growth and photosynthesis to grow more leaves. Before consumption, wash and remove spines with a knife. There are also spineless varieties.

How to Eat/Recipe: Fruit – eat raw, make into jellies, or wine. Leaf – eat raw in salads, sauteed, boiled, pickled, or roasted. Put into tacos.



CHINESE CABBAGE

[Brassica rapa subsp. Pekinensis]

Common Name(s): Chinese Cabbage, Napa Cabbage, Celery Cabbage

Scientific Name: *Brassica rapa subsp. Pekinensis*

Country of Origin: China

USDA Hardiness Zones: Zones 4-11

Soil Requirements: Fertile, well-drained soil that retains moisture and has a pH of 6.0 to 7.5. Rich soil with organic matter.

Climate Requirements: Can tolerate below-freezing temperatures late in plant development, but it's not as cold-hardy as round-head cabbage. If overnight lows are expected to fall below 30°F, you can protect the heads with a row cover

Uses: Salads, stews, soups, stir-fries, and kimchi or sauerkraut

Widely Used In (Countries): China, Korea, Taiwan, Japan, Europe, the Americas, and Australia

Planting Dates for Louisiana:

- South Louisiana: August 15
- North Louisiana: August 1

Planting Specifications: Space Chinese cabbage seed or plant 12 inches apart.

Pest and Diseases: Cabbage worm, Japanese beetle

Harvesting Specifications: Can harvest semi mature or mature. Sixty days from planting seed. Harvest the whole head with a sharp knife.

How to Eat/Recipe: Eat entire plant, chop and stir fry with desired seasoning.



CUCUZZA

[*Lagenaria siceraria*]

Common Name(s): Cucuzza Squash, Italian squash, bottle gourd, zucca, suzza melon, tasmania bean, and New Guinea bean (tenerumi leaves and tender shoots)

Scientific Name: *Lagenaria siceraria*

Country of Origin: Africa, Mediterranean

USDA Hardiness Zones: Zones 2A-11B

Soil Requirements: Loamy

Climate Requirements: Full sun

Uses: Fruit and leaves

Widely Used In (Countries): Italy

Planting Dates for Louisiana: After the last danger of frost plant by seed or transplant.

- South Louisiana: February 15 – danger of frost
- North Louisiana: March 15 – danger of frost

Planting Specifications: Vines can grow 20-30 feet. long, space plantings 4-5 feet apart. Provide something for the vines to climb on, like a trellis or chain-link fence.

Pest and Diseases: None

Harvesting Specifications: Sixty days seed to harvest for tender fruit, 90-130 days from seed to harvest for mature squash.

How to Eat/Recipe: It can be pickled, curried, stuffed, baked, stir-fried, stewed, or used as a substitute in recipes calling for any squash. The leaves and tender shoots (tenerumi) can be cleaned (remove thick fibers) and eaten like any greens or stir-fried.



ELDERBERRY

[*Sambucus* c

Common Name(s): Elderberry, American Elder, Common elderberry

Scientific Name: *Sambucus canadensis* (American) & *Sambucus nigra* spp. *Caerulea* (European)

Country of Origin: America (*Sambucus canadensis*) and Europe (*Sambucus nigra* spp. *Caerulea*)

USDA Hardiness Zones: Zones 3-9

Soil Requirements: Can grow in a variety of soil conditions in Louisiana, including wet to dry soils, but it prefers rich, moist, slightly acidic soil with a pH between 5.5 and 6.5.

Climate Requirements: Partial shade to full sun

Uses: Berry and Flower

Widely Used In (Countries): North America and Europe

Planting Dates for Louisiana: American Elderberry plant is a native to Louisiana, it will begin to grow in the wild after the danger of frost has passed, flower in June – July and have berries August- September. Flowers and berries can be foraged from native plants or can be propagated by cutting. Plant the transplant after the last danger of frost- elderberry is a perennial and will come back every spring.



Y, AMERICAN

[*canadensis*]

Planting Specifications: Propagates well by vegetative cutting. The mature plants are a large shrub with multiple stems and a sprawling shape that can grow to be 5–12 ft tall and wide

Pest and Diseases: Aphids, mealy bugs, spider mites, Canker, leaf spot, and powdery mildew

Harvesting Specifications: Flower clusters can be harvested between June and July. Berries – harvest when they are dark purple, nearly black, in mid-August to September. The easiest way to harvest the fruit is to clip the entire berry cluster from the shrub, and then gently remove the berries from the cluster. Berries should be cooked first before consumption.

How to Eat/Recipe: Elderberry flowers can be harvested and used fresh or dried to make cordials, teas, fritters, jellies, flavored water, homemade skincare products, and anti-inflammatory creams.

Berries should be cooked first to safely remove the lectin and cyanide (toxins). Raw berries are also mildly poisonous and can cause nausea, vomiting, and diarrhea.

To make elderberry syrup, harvest fresh elderberries, wash off, and remove from the stem. Place the berries in a saucepan on the stove, add sugar and allow the berries to cook down into a syrup consistency. This syrup can be used to boost the immune system and tastes great.



HOJA SANTA

[*Piper auritum*]

Common Name(s): Acuyo, Yerba Santa (holy herb), Mexican Pepperleaf, Veracruz Pepper, Sacred Pepper, and Root Beer Plant

Scientific Name: *Piper auritum* in black pepper family

Country of Origin: Central America, South America, and the tropical region of Africa

USDA Hardiness Zones: Zones 8B-11

Soil Requirements: Wide variety of soil

Climate Requirements: Full sun, part shade

Uses: Fresh, dried, soups, eggs, drinks, tamales wraps, and essential ingredient in mole verde.

Widely Used In (Countries): Central America, Mexico

Planting Dates for Louisiana: Plant transplant in the spring.

- South Louisiana: February 15
- North Louisiana: March 15

Planting Specifications: Perennial plant will spread. It will die back in the winter and return every spring.

Pest and Diseases: None

Harvesting Specifications: Continual harvest once the plant is established. Harvest leaves as you need them.

How to Eat/Recipe: Fresh, dried, soups, eggs, drinks, tamales wraps, and essential ingredient in mole verde.

How to eat/recipe: <https://www.kcrw.com/culture/shows/good-food/vegetarian-recipe-fresh-hoja-santa-table-salsa>



HIBISCUS PANAMA RED

[Hibiscus acetosella]

Common Name(s): Panama Red Hibiscus, cranberry hibiscus

Scientific Name: *Hibiscus acetosella*

Country of Origin: Tropical regions of Africa

USDA Hardiness Zones: Zones 9A-11B

Soil Requirements: Wide range of soil

Climate Requirements: Drought tolerant medium watering, not cold hardy, can be protected to live through the winter.

Uses: Leaves are used as vegetable, raw, or cooked.

Widely Used In (Countries): Brazil, Southeast Asia, and Carribean

Planting Dates for Louisiana: After the last danger of frost.

- South Louisiana: February 15 – danger of frost
- North Louisiana: March 15 – danger of frost

Planting Specifications: Start seed indoors in February. Plant seed or transplant outdoor 4 feet. apart after danger of frost, seed are easy to save, dry out, and use for the next spring.

Pest and Diseases: None

Harvesting Specifications: Continual harvest once plant is established.

How to Eat/Recipe: Soups, salads, stir fry, and tea. Very tart, slightly mucilaginous, and some should be eaten in small amounts.

Source: <https://herbsfromdistantlands.blogspot.com/2016/05/hibiscus-acetosella-cranberry-hibiscus.html>



LUFFA, BABY

[*Luffa spp*]

Common Name(s): Luffa, Loofah, loofa Torai, Chinese Okra, Silk Melon, Estropajo (Mexico), sponge gourd, and pashte (Central America)

Scientific Name: *Luffa spp* (ridged, culinary)

Country of Origin: Asia

USDA Hardiness Zones: Zones 7-13

Soil Requirements: Well drained nutrient rich soil

Climate Requirements: Full sun, warm hot

Uses: Fresh, immature luffa fruits may be used for culinary purposes. They can be eaten raw, pickled, and cooked with vegetables. The shoots, flowers, and sometimes leaves are used.

Widely Used In (Countries): Nepal, Gujarat, Bangladesh, Assam, Tamil Nadu, Malenadu, Telangana, Andhra Pradesh, Kerala, Maharashtra, Mainpur, Vietnam, China, Taiwan, Philippines, and Japan

Planting Dates for Louisiana: Start seeds inside during late winter with a warming pad as they have a long growing season.

Planting Specifications: Plant seed or transplants 3 feet apart, vine can grow up to 50 feet, fruit grows about 2 feet long when mature. Provide something for the vines to climb on, like a trellis or chain-link fence.

Pest and Diseases: Powdery mildew

Harvesting Specifications: Harvest 90-120 days from seed. Harvest immature green fruit at 4 inches long for eating to use in culinary dishes. For fibers, allow fruits to mature on the vine until the skin turns brown/yellow.

How to Eat/Recipe: Harvest baby luffa fruit 4 inches long or smaller for eating. Cook like any squash.



LOTUS ROOT

[Nelumbo nucifera]

Common Name(s): Water lily, sacred lotus, or Indian lotus

Scientific Name: *Nelumbo nucifera*

Country of Origin: Asia

USDA Hardiness Zones: Zones 6-11

Soil Requirements: Nutrient rich and loamy soil

Climate Requirements: Aquatic species, warm-temperate to tropical, full/part sun.

Uses: Rhizomes are used as a vegetable.

Widely Used In (Countries): China, Japan, Korean, Australia, and India

Planting dates for Louisiana: After the last danger of frost.

- South Louisiana: February 15 – danger of frost
- North Louisiana: March 15 – danger of frost

Planting Specifications: Rootstock is planted horizontally just below the soil surface.

Pest and Diseases: None

Harvesting Specifications: Harvest 5-6 months after planting. Must be harvested before flowering. Large leaves float on the water surface, marking the readiness of the roots for harvest.

How to Eat/Recipe: Mature lotus root rhizomes are brown-beige in color with darker brown speckles, and have a dense and crunchy texture. They have a nutty and sweet flavor, similar to water chestnuts or taro root. Rhizomes mature in 6-9 months.

Stir-fry – salad with sesame oil and coriander leaves.



MIRLITON

[*Sechium edule*]



Common Name(s): Mirliton, Chayote, choko, vegetable pear, and alligator pear

Scientific Name: *Sechium edule*

Country of Origin: Africa

USDA Hardiness Zones: Zones 8B-11

Soil Requirements: Well drained soil, slightly acidic.

Climate Requirements: Full sun

Uses: Fruit is used cooked or in some cases raw and root, stem, seed, and leaves are edible as well.

Widely Used In (Countries): Latin America, India, Caribbean Islands, Asia, and US (Louisiana)

Planting Dates for Louisiana: Plant seed (mature fruit) in spring after the danger of frost has passed.

Planting Specifications: Plant the fruit at a 60 degree angle with the pointed end up and the broad end buried, covering half or more of the fruit with soil. You can plant the entire fruit, whether it's sprouted or not, or a potted, sprouted, and growing mirliton. Space plants 10 to 12 feet apart. Provide something for the vines to climb on, like a trellis or chain-link fence.

Pest and Diseases: None

Harvesting Specifications: Ready to harvest in Louisiana 25–30 days after pollination, which usually occurs in late September and October. Harvest when fruit is 4-6 inches in diameter. The way you can test ripeness of the mirliton is by pressing your thumbnail into the flesh and if it dents the flesh easily, the fruit is immature and still contains too much moisture and not enough structure.

How to Eat/Recipe: Stir fries, salads, dressings, summer squash uses. Guatemalan Chilaquiles (Caldos): Cheese placed between two slices of chayote, then dipped in egg batter and fried. Stuffed mirliton with seafood.

MOLOUKHIA

[*Corchorus olitorius*]

Common Name(s): Jute Mallow, nalita jute, bush okra, West African sorrel, Molokhia, mulukhia, mulukhiyah, ewedu

Scientific Name: *Corchorus olitorius*

Country of Origin: Africa

USDA Hardiness Zones: Zones 5-11

Soil Requirements: Humus-rich, well-drained alluvial soil, but grows well in suboptimal soil conditions.

Climate Requirements: Tropical/ subtropical/full sun

Uses: Leaves are used for food, or whole plant can be harvested for jute production.

Widely Used In (Countries): Syria, Lebanon, Egypt, Benin, Nigeria, Ghana, Cameroon, Sudan, Uganda, Kenya, Zambia, Zimbabwe, Caribbean islands, Middle East, India, and Asian countries.

Planting Dates for Louisiana: After the last danger of frost.

- South Louisiana: February 15 – danger of frost
- North Louisiana: March 15 – danger of frost

Planting Specifications: Space plants 8-18 inches apart.

Pest and Diseases: Virus black spot

Harvesting specifications: Continual harvest, ratooning harvest cutting off the top tender leaves and stems about 8 inches down. Can be immediately put into a bundle for storage or selling.

How to Eat/Recipe: Cook down greens into a soup or stew. Egyptians use Moloukhia to make a soup prepared with lamb, beef, or duck. This leaf is also a common food in many African countries. Moloukhia is considered to be extremely nutritious. The leaves are rich in beta-carotene, iron, calcium, and more than 32 vitamins and minerals. The folic acid content is substantially higher than that of other folacin-rich vegetables.



MORINGA

[*Moringa oleifera*]

Common Name(s): African moringa, Arango, Badumbo, Bintree, Caragua, Drumstick tree, Horseradish tree, and Radish tree

Scientific Name: *Moringa oleifera*

Country of Origin: Northwestern India

USDA Hardiness Zones: Zones 9-10 (tender perennial – needs to be covered or put indoor/greenhouse)

Soil Requirements: Sandy loam soil that's well-drained and not heavy with clay or waterlogged, neutral pH, and slightly acidic.

Climate Requirements: Full sun, hot, warm, dry

Uses: Leaves, flowers, young roots, oil pressed from mature seeds, and immature green stems fruits or seeds

Widely Used In (Countries): India, Sri Lanka, Bangladesh, South and Southeast Asia, Philippines, Indonesia, Taiwan, Central America, Caribbean islands, northern countries in South America, tropical/subtropical Africa, and Hawaii

Planting Dates for Louisiana:

- South Louisiana: February 1 – danger of frost
- North Louisiana: February 15 – danger of frost

Planting Specifications: Planted as an annual, the moringa can grow to 16 feet in the first year.

Pest and Diseases: Possible fungal disease, root rot, and canker

Harvesting Specifications: Yields best under warm, dry conditions. Harvest may be done year-round of all parts depending on use. Stem, leaves, and root are edible/medicinal.

How to Eat/Recipe: Drumstick curry



MALABAR SPINACH

[Basella alba or rubra]

Common Name(s): Malabar Spinach, vine spinach, Ceylon spinach, and Indian spinach

Scientific Name: *Basella alba or rubra*

Country of Origin: Tropical Asia Indian subcontinent, Southeast Asia, and New Guinea

USDA Hardiness Zones: Zones 9 & 10 (not cold hardy)

Soil Requirements: Moist well-drained, loamy soils. Neutral - slightly acidic.

Climate Requirements: Tropical, full/part sun, hot, and humid. Sensitive to frost.

Uses: Summer greens – greens for warm weather, use fresh and tender leaves, some varieties used to make red dye.

Widely Used In (Countries): China, tropical Africa, Brazil, Belize, Colombia, West Indies, Fiji, and French Polynesia

Planting Dates for Louisiana:

- South Louisiana: February 1 – danger of frost
- North Louisiana: February 15 – danger of frost

Planting Specifications: Can re-seed itself, scarification of seed inside before frost; cutting, or air layer after danger of frost.

Pest and Diseases: Slugs and leaf miners

Harvesting Specifications: Continual harvest of young tender leaves.

How to Eat/Recipe: In place of raw or braising greens, or as a substitute for spinach.



PORTULACA-VERDOLAGA

[*Portulaca oleracea*]

Common Name(s): Portulaca, Verdolaga, common purslane, hogweed, parsley, and verdolagas

Scientific Name: *Portulaca oleracea*

Country of Origin: Unknown; suggested that it may have adapted to desert climates of Middle East and India.

USDA Hardiness Zones: Zones 9-11 (perennial)

Soil Requirements: Can tolerate poor soil and drought. High tolerance for saline soils* (used in desalination remediation).

Climate Requirements: Warm temperatures, prefers full sun and lots of air circulation, but can also grow in light shade.

Uses: Raw leafy vegetable, stir fries, cooked as a spinach substitute. The seeds, stems, valued for its high levels of omega-3 fatty acids. It is considered to have higher levels of this essential fatty acid than any other vegetable.

Widely Used In (Countries): North Africa, Southern Europe, Middle East, Indian subcontinent to Malesia, Australasia, and Americas

Planting Dates for Louisiana:

- South Louisiana: February 1 – danger of frost
- North Louisiana: February 15 – danger of frost

Planting Specifications: Plant by seed or cutting, perennial in preferred zones 9-11.

Pest and Diseases: None

Harvesting Specifications: Continual harvest

How to Eat/Recipe: Raw or cooked



PIGEON PEAS

[Cajanus cajan]

Common Name(s): Gandule (Puerto Rico), Pinunu (Hawaii), Gungo peas (Jamaica), Congo pea (Africa), and Red Gram (India)

Scientific Name: *Cajanus cajan*

Country of Origin: Unknown, possibly tropical Africa, Egypt, or India

USDA Hardiness Zones: Zones 9-15 (not cold hardy)

Soil Requirements: Well-drained soils with a pH between 5.0 and 8.0. They can tolerate low nutrient levels and poor soils, and even grow in dense clay.

Climate Requirements: Full sun, drought tolerant

Uses: Summer greens – greens for warm weather, use fresh and tender leaves, some varieties used to make red dye.

Widely Used In (Countries): South Asia, Southeast Asia, Africa, Latin America, and Caribbean islands

Planting Dates for Louisiana: After danger of frost:

- South Louisiana: February 15 – August
- North Louisiana: March 15 – August

Planting Specifications: Plant by seed after the last frost. Save seed from the previous years crop to use the next spring.

Pest and Diseases: Young plants susceptible to wilt and Fusarium udum.

Harvesting Specifications: Harvest when pea pods are dry, before they become moldy from the rain and moisture.

How to Eat/Recipe: Cook same as any other dried pea, bean, or lentil. Pigeon peas and rice. Soak first then simmered, sautéed, or cooked with rice.



ROSELLE

[*Hibiscus sabdariffa*]

Common Name(s): Rosa de Jamaica, Red sorrel, Cranberry of the South, Bissap (West Africa), N'gai n'gai (DR Congo), Zobo (Nigeria), and Oseille de Guinea

Scientific Name: *Hibiscus sabdariffa*

Country of Origin: West Africa, Sudan, North Africa, India, or Malaysia

USDA Hardiness Zones: Zones 3-11 (3-8 as an annual, 9-11 as a perennial)

Soil Requirements: Well-drained, fertile, loamy soil that's rich in organic matter and has a pH between 5.5 and 7.0.

Climate Requirements: Warm humid or dry climates with even rainfall and full sun.

Uses: Red calyx for tea, leaves for salad or sauce, medicinal, and culinary.

Widely Used In (Countries): Commercial crops grown in: China, Thailand, Mexico, and Africa—principally Sudan, Senegal and Mali. It has been widely distributed in the Tropics and Subtropics of both hemispheres, and in many areas of the West Indies and Central America.



HIBISCUS

sabdariffa)

Planting Dates for Louisiana: Plant indoor mid-February near the Mardi Gras holiday (failure to start plants at this time can result in no fruit production before frost). Plant outdoors after the danger of frost has passed Mid-March for the Southern region and April for Northern.

Planting Specifications: Space plants 3 feet apart in rows 5 feet apart. Roselle appreciates a soil with high organic matter levels but too much nitrogen will delay flowering until too late in the season.

Pest and Diseases: Aphids, white flies, and root rot

Harvesting Specifications: Calyx: harvest when red calyx (seemingly flowers) have grown deep red. Cut the calyx off, remove the inner seed pod, and save them for next years crop. Seed is only viable when dark brown/black – green seed is not viable.

Leaves: continual harvest, leaving enough leaves on the shrub for calyx production.

How to Eat/Recipe: Hibiscus tea, jelly and chutney, use leaves as sauce (harvest leaf, pour boiling water over it, and allow to become soft, add to tops of rice or other dishes for flavor), and steam leaves with okra.



SWEET POTATO

(*Ipomoea batatas*)

Common Name(s): Yam Leaves, Sprouts, talbos ng kamote, and camote tops

Scientific name: *Ipomoea batatas*

Country of origin: Central or South America, possibly in present-day Ecuador (The earliest cultivation records date back to 750 BCE in Peru, and by the time Christopher Columbus arrived in the late 15th century, they were well established as food plants in the region.)

USDA Hardiness Zones: Zones 7-11

Soil Requirements: Well-drained, loose, sandy loam, or silt loam soil with a slightly acidic pH of 5 to 7.5. Sweet potato vines prefer moderately rich, well-draining soil with different pH levels. You can also plant in containers with high-quality potting soil and drainage holes.

Climate Requirements: Sweet potatoes can tolerate relatively dry weather, but they are sensitive to drought for the first 50–60 days after planting. Sweet potatoes need soil temperatures between 60–85°F and air temperatures between 65–95°F. They are sensitive to frost and need full sun, which is at least 6–8 hours of direct sunlight a day, but preferably 8–10 hours.

Uses: Sweet potato leaves, are edible and can be used in many dishes like other leafy greens add as a substitute for spinach. They are a leafy vegetable that are high in vitamins B6 and C.

Widely Used In (Countries): Asia, Africa (West Africa, Liberia), and the Pacific



POTATO GREENS

(*batatas*)

Planting Dates for Louisiana: After the last danger of frost.

- South Louisiana: April – danger of frost
- North Louisiana: May 1/June – danger of frost

Planting Specifications: Plant in late spring or early summer after the last frost and when the soil temperature is at least 60°F. In hot weather, you can transplant in the evening.

Pest and Diseases: Sweetpotato weevil: Adults eat vines, and larvae tunnel into roots, causing damage in the field and during storage, white flies, and beetles. Growing sweet potatoes greens, there is less pest pressure, than when growing for tubers.

Harvesting Specifications: They can be harvested several times during the growing season.

How to Eat/Recipe: Sweet potato greens have a slightly sweet and earthy flavor, similar to spinach or kale, and are often used in soups and stir fries to add color and texture. They have a mild flavor and pair well with aromatics like garlic, ginger, or chili. Here are some ways to use sweet potato leaves: sautéed, in soups, and broths.



SHISO

[*Perilla frutescens*]

Common Name(s): Perilla mint, Chinese Basil, wild basil, beefsteak plant, Japanese basil, and Ooba

Scientific Name: *Perilla frutescens*

Country of Origin: China and India

USDA Hardiness Zones: Zones 10-11, grown as an annual elsewhere

Soil Requirements: Moist, loose, well-drained soil that's rich in organic matter and has a pH between 5.5 and 6.5.

Climate Requirements: Can grow in a variety of climates, but it prefers warm to hot, humid conditions.

Uses: Many uses in cooking and medicine, seasoning, garnishing, pickling, and juicing

Widely Used In (Countries): Japanese, Korean, and Southeast Asian cuisine.

Planting Dates for Louisiana:

- South Louisiana: February 15 - August
- North Louisiana: March 15 - August

Planting Specifications: Soil temperatures above 65 degrees. Sow 1-2 seeds, 18 inches apart, and press them lightly into the soil. Seeds are small, barely cover the seeds, as they need light to germinate.

Pest and Diseases: Fungus gnat and fruit flies

Harvesting Specifications: Shiso leaves can be harvested when the plant is about 8 - 12 inches tall and fills out. Use sharp, clean scissors to cut the stem above a node or pair of leaves, taking no more than one-third of the plant at a time.

How to Eat/Recipe: Perilla Leaf Kimchi, shiso pesto, raw leaves are delicious tossed into salads or used wherever you might add savory green herbs. It can be cooked like tender spinach - steamed, sautéed, or tempura-fried. Red varieties can be steeped in hot water and juiced, yielding a ruby herbal concoction with a lemony bite.



TARO

[*Colocasia esculenta*]

Common Name(s): Taro, Yam, Ubi Keladi, Keladi, elephant ear, and Taro root.

Scientific Name: *Colocasia esculenta*

Country of Origin: Northeast India to Southeast Asia

USDA Hardiness Zones: Zones 8-11

Soil Requirements: Moist, rich, fertile, and well-drained soil that's high in organic matter and slightly acidic.

Climate Requirements: Warm, humid climates with rich soil and lots of water. Daytime temperatures of 70–85°F and nighttime temperatures above 60°F.

Uses (Food and Medicine): Taro has been used since ancient times to treat various ailments, including asthma, arthritis, diarrhea, internal hemorrhage, neurological disorders, and skin disorders.

Widely Used In (Countries): Japan, islands in the Caribbean, Hawaii, throughout Africa, the Philippines, and South-East Asia. In Hawaii, Taro is associated with Hawaiian gods and ancestors.

Planting Specifications: If you are planting bulbs, bury them about 4 inches deep and 2 feet apart for smaller varieties and 8 inches deep and 3-4 feet apart for larger varieties.

Pest and Diseases: Taro leaf blight (small, dark brown flecks or light brown spots on the upper leaf surface), Armyworm, White spotted flea beetle, Aphids, Whitefly, Lace bug, Thrips, and Hawk moth.

Harvesting Specifications: The crop matures in 9-12 months, when the leaves begin to yellow and die down and there is a slight lifting of the tubers. Lift the tubers as you would sweet potatoes. Taro does not store for longer than a month, so leave tubers in the soil until needed.

How to Eat/Recipe: A perennial plant that produces large corms underground. The corms, leaves and stems can be eaten if cooked. Taro Pudding (Che Khoai Mon), a classic Vietnamese dessert of taro root and glutinous rice topped with creamy coconut sauce.



TOMATO

[*Physalis philadelphica*]

Common Name(s): Tomatillo, Mexican green tomato, Miltomates, Strawberry tomato, Mexican groundcherry, Large-flowered tomatillo, Purple cape gooseberry, and mexican husk cherry

Scientific name: *Physalis philadelphica*

Country of origin: Mexico and Central America

USDA Hardiness Zones: Zones 6-9

Soil Requirements: Well-drained, moist, rich, organic-matter-rich loam soil with a pH between 6.5 and 7. Tomatillos don't do well with excessive soil moisture, so the soil should drain well. You can add organic matter like compost or coco coir, or perlite or vermiculite to help with drainage. If your soil is clay-heavy, you can try planting in a raised bed.

Climate Requirements: Warmer, full-sun conditions, with optimum growth at 25-32° C (77-89° F).

Uses: Food (can be stored if picked before they are fully ripe and left inside their calyx, tomatillos can be stored for up to a year) and traditional medicine

Widely Used In (Countries): Mexico and Guatemala

Planting Dates for Louisiana:

- South Louisiana: February 15 – August
- North Louisiana: March 15 – August



TATILLO

philadelphica]

Planting Specifications: Tomatillos have relatively no-fuss germination requirements.

Sunlight: Plant in full sun, or at least six hours of direct sunlight per day.

Spacing: Plant 2–6 feet apart, depending on the variety. Lighter feeders than tomatoes.

- Prune tomatillos aggressively to control their spread and encourage fruit production. Early in the season, leave the plants alone, but then cut suckers, which are secondary stems that grow out of the stem-leaf junctions where flowers appear.
- Pollination: *Physalis philadelphica* doesn't self-pollinate well, so planting more than one plant can help improve fruit set.

Pest and Diseases: Verticillium Wilt is a common fungal disease of tomato and squash family crops. It prefers warm (not hot) and wet conditions.

Harvesting Specifications: Tomatillos will be ready to harvest 75 to 100 days after transplanting. The fruit is ready to harvest when it completely fills the husk and easily falls off the plant when picked. Additionally, the husk will dry out and turn from a green color to a tan color and will begin to split open.

How to Eat/Recipe: Tomatillo salsa verde



TURMERIC

[*Curcuma*

Common Name(s): Turmeric

Scientific name: *Curcuma longa*

Country of origin: India

USDA Hardiness Zones: Zones 8-11

Soil Requirements: Moist, well-drained, fertile, and slightly acidic to neutral (pH 5.5–7.0) soil that's rich in organic matter.

Climate Requirements: Hot, humid conditions with full sun in the morning and afternoon shade. *Curcuma longa* is winter hardy in USDA Zones 8–11, but in areas where it's not cold-hardy, it can be grown as an annual.

Uses (Medicine): Turmeric has been used for thousands of years to treat a variety of conditions, including infections, cancers, inflammation, digestive issues, liver problems, skincare, food, and more. Turmeric is a common spice and antioxidant that can also be used as a natural flavoring agent to affect the color, taste, and nature of food.

Widely Used In (Countries): Extensively cultivated in the tropical and subtropical regions of South and Southeast Asia including China, Indonesia, and India, and some areas of Africa with a warm and wet tropical climate.

Planting Dates for Louisiana:

- South Louisiana: February 15 – August
- North Louisiana: March 15 – August



AMERIC

na longa]

Planting Specifications: The plant size can range from 2 to over 7 feet tall depending on the variety.

There are 100 different species of *Curcuma*. Some of the plants may be used as food and dyes, while others are only ornamental. They are all members of the Zingiberaceae or ginger family. The species include *Curcuma amada* (Mango Ginger), *Curcuma angustifolia* (Wild Arrowroot), *Curcuma aromatica* (Wild Turmeric), *Curcuma longa* (Common Turmeric), and *Curcuma zedoaria* (Zedoary).

<https://plants.ces.ncsu.edu/plants/curcuma/>

Pest and Diseases: *Curcuma longa*, has many properties that may help with pest and disease management, including insecticidal, fungicidal, and nematicidal properties.

Rhizome rot can be a problem. Leaf blotch and leaf spot can be problematic as well. Generally no pest problems.

Harvesting Specifications: Can be harvested 7–10 months after planting, when the lower leaves turn yellow. The rhizomes can be dug up by hand or with a spade, and any excess soil should be shaken off. The leafy tops and roots can then be removed, and the rhizomes washed and cleaned of mud.

How to Eat/Recipe: Fresh sliced turmeric pairs well with egg dishes: Try grating some into egg salads, scrambled eggs, or omelettes. Use grated turmeric in a marinade for chicken, fish, or vegetables. Make turmeric tea with grated turmeric, honey, and freshly grated black pepper. Turmeric dried powder can be added as a spice to any dish to add color, increase medicinal value, and to add flavor.



Common Name(s): Major Species include:

- *Dioscorea cayenensis* common names: Yellow yam, jamaican yellow yam, and Guinea Yam;
- *Dioscorea cayenensis* subsp. *Rotundata* common names: white yam and West African yam
- *Dioscorea Alata* common names: Purple yam or Ube
- *Dioscorea Trifida* common name : Indian yam, Inhame, Ñame, and Ñampi, cush-cush, and yampee.

Scientific name: *Dioscorea spp* (See above for major species.)

Country of origin: This genus consists of more than 600 species distributed from Africa, Asia, the Caribbean South America, and the South Pacific islands.

USDA Hardiness Zones: Zones 8-11

Soil Requirements: Light (sandy), medium (loamy) and heavy (clay) soils, and prefers well-drained soil. Suitable pH: mildly acid, neutral, and basic (mildly alkaline) soils. It prefers moist soil.

Climate Requirements: Open woodlands or at the edge of the forest, where there is partial sun exposure, and where there are small trees and brush for the vines to climb.

Uses: Food, medicine, and ingredients in cosmetics and pharmaceuticals.

Widely Used In (Countries):

- *Dioscorea cayenensis*: Guinea, Africa, including Senegal, Ethiopia, Uganda, Gabon, Congo, Cote d'Ivoire, Nigeria, Ghana, Benin, Togo, and Cameroon. Central and East

Africa, the Caribbean, Central America, South America, and Oceania. Nigeria is the country that produces the most **D. cayenensis**.



AM

rea spp]

- *Dioscorea cayenensis* subsp. is grown in countries like the Ivory Coast, Ghana, and Nigeria.
- *Dioscorea Alata* is the most widely distributed yam in the world, and is grown in the tropics including West Africa, Southeast Asia, Papua New Guinea, the Caribbean, South America, and India. *Dioscorea alata* is grown in many countries because it is easy to prepare, tastes good, and has nutritional benefits.
- *Dioscorea Trifida* is a species of yam that is native to South America, the Caribbean, and Central America. Indigenous people who lived on the border of Brazil, Guyana, Suriname, and French Guiana may have domesticated **D. trifida*

Planting Dates for Louisiana:

- South Louisiana: February 15 – August
- North Louisiana: March 15 – August

Planting Specifications: *Dioscorea*, also known as yams, are a vegetable group of plants that can be grown from seeds, tubers, bulbils, or cuttings.

Pest and Diseases: Pest pressure from Mealybugs and yam beetle. Viruses and disease (seed-tuber rot, root rot, stem basal canker, vascular wilt, anthracnose, and leaf spots.)

Harvesting Specifications: Be careful to avoid cutting, scraping, bruising, or sunburning the tubers. Store tubers in a shady area with good ventilation and protection from pests, especially rodents. Regularly inspect the tubers and throw away any that are rotting. You can also prune any sprouts. Dig around the tuber to loosen it from the soil, then lift it, and cut it from the vine. After digging move the tubers out of the sun, clean them, sort them, and store them immediately. Some varieties are harvested 7-10 months after planting.





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