

Sophora tomentosa

Family: Fabaceae

Necklace pod, silver-bush, yellow necklace pod



S.H. Brown

Constricted seed pods gives this plant its common name. Photo taken in late February.

Necklace-pod

Synonyms (Discarded Names): *Sophora occidentalis*

Origins: Var. *truncata*, Florida; Caribbean; S. America

Var. *occidentalis*, Texas

U.S.D.A. Zone: 9b through 11 (25°F Minimum)

Growth Rate: Moderate

Flowering Months: Periodically throughout the year but most abundant in fall

Leaf Persistence: Evergreen

Salt Tolerance: High

Drought Tolerance: High

Nutritional Requirements: Low

Potential Major Pests: Caterpillars; mealybugs

Typical Dimensions: Height, 6-10 feet; spread 8-12 feet

Propagation: Seed; cuttings

Human hazards: Seeds are dangerous to eat: they contain an alkaloid, cytisine, which is emetic and purgative.

Uses: Accent; specimen plant; mass planting; background; border plant; butterfly attractor; parking lot

Availability: Variety *occidentalis* is readily found. Variety *truncata* is becoming more available.



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Leaves from the same plant of the Florida native *Sophora tomentosa* var. *truncata*.



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The unfurling inflorescence in early October.

Natural Geographic Distribution and Ecological Function

Sophora tomentosa var *truncata* is native to Florida and can be found growing on the edges of coastal forests and on the inland side of dunes along the beach. The necklace pod native to Texas, *S. tomentosa* var. *occidentalis* is commonly confused with the Florida native. It is found worldwide on tropical beaches. Necklace pod provides food and shelter for wildlife and the flowers attract bees, butterflies, hummingbirds, and warblers.



The mangrove skipper (*Phocides pigmalion okeechobee*) is a common visitor of the necklace pod. This visitor came in early October.



Cassius Blue (*Leptotes cassius*) butterflies is another visitor to the necklace pod.

Growth Habit, Morphology and Reproduction

Necklace pod is a moderately fast grower to about 6 to 10 feet tall and 8 to 12 feet. It is commonly a thicket-forming shrub. Grown alone it forms a naturally symmetrical evergreen shrub. It has many arching irregular branches which are densely foliated. Older plants often become leafless nearest to the ground eventually exposing shrubby stems. The bark is yellowish brown, roughened by many raised whitish, corky lenticles. The leaves are alternate and odd-pinnate. They are up to 12 inches long and 3 inches wide. The leaves consist of as many as 23 irregularly opposite leaflets. The leaflets are typically 1 2/16 to 1 8/16 inches long. They are broadly ovate (egg-shaped) to obovate (inversely ovate). Variety *truncata* is the Florida native. It has dark green leaves that are shiny above and slightly hairy underneath when young, then becoming glabrous (smooth). The other variety, *occidentalis*, is covered with a dense silky tomentose (matted hairs) that gives the plant its silvery cast. In other respects, both varieties are identical. Most necklace pod sold in the landscape trade is the non-native, *S. tomentosa* var. *occidentalis*. Both varieties are extremely showy in full bloom. The bright yellow flowers are held on 4 to 16 inches long terminal racemes. The corolla is papilionaceous or pea-like. The raceme begins flowering from the base upward. Both flowers and immature pods appear simultaneously on the lengthening raceme. The pods start as slender, silvery, dangling threads, which quickly lengthen and become strongly constricted between seeds. Constricted pods appear as beads on a necklace. The indehiscent (not splitting open) pods are 2 to 8 inches long. Necklace pod can be propagated by seeds or cuttings. No stratification is necessary for seeds to germinate. Large numbers of seedlings can be found in the vicinity of the parent plant. Flowers are borne on plants barely older than seedlings.



Left: Necklace pods eventually produce numerous exposed shrubby stems.

Right: The bark is roughened by many raised whitish, corky lenticles. Lenticles are aerating organs in the bark of twigs of trees.



Leaves - Above: Emerging and fully emerged leaves of the native *S. tomentosa* var. *truncata*. **Right:** Leaves of *S. tomentosa* var. *occidentalis*. The leaves of both varieties are alternate and odd-pinnate. The leaflets are opposite or alternate.



Flowers: Emerging inflorescence on a native necklace pod in early October.

Flowers: Bright yellow flowers emerging on the inflorescence of a native necklace pod in early October.



Flowers - Above: Mature raceme of necklace pod in early October. **Right:** The papilionaceous pea-like flowers in hand.



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Fruits: Both flowers and immature pods appear simultaneously on the lengthening raceme. The pods starts as a slender, silvery, dangling threads, which quickly lengthen and become strongly constricted between seeds.

Planting and Maintenance

Necklace pod can grow in nutrient poor soil but some organic content will help it to thrive. It prefers full sun or light shade. It will not tolerate long-term flooding by salt or brackish water but has a high salt wind tolerance. Necklace pod is best used where it will have good air circulation to avoid fungal infection. The plant's rangy growth habit and terminal flower cluster makes it unsuitable as a formal, clipping hedge. The shrubby basal stems often becomes exposed over time. If desired, plants like fakahatchee grass, gopher apple, and muhly grass can be used to conceal these beautiful stems. Seed pods hang on the plant for many months. In formal gardens they detract from the plant's tidy appearance. Once established, little care is required other than occasional pruning. In extremely dry times be sure to irrigate the plant.



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A hedge of the non-native *S. tomentosa* var. *occidentalis* in late September.



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Several necklace pods (*S. tomentosa* var. *occidentalis*) engulf and adorn mail boxes.

Major Pests

Mealybugs and caterpillars are rare problems. The Florida Department of Agriculture and Consumer Services, Bulletin No. 14, reports the following fungal diseases; Alternaria leaf spot; Cercospora leaf spot; Fusarium basal stem rot; Gloeosporium stem rot; Phythium root rot and Rhizoctonia stem and leaf necrosis. Incidences of fungal diseases increase with over-watering of the shrubs. Insecticides and fungicides are available to treat persistent pests.



Jenny Evans

Genista caterpillars (*Uresiphita reversalis*) collected from the Florida native *Sophora tomentosa* var. *truncata* in late August.



Lyle Buss

The caterpillars will metamorphosis into an adult Genista moth.



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Pseudococcidae sp. mealy bugs on non-native *S. tomentosa* var. *occidentalis* in mid-December.



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The black sooty mold fungus is a consequence of the sap feeding *Pseudococcidae* sp. mealybug in mid-December.

This fact sheet was reviewed by Peggy Cruz, Lee County Extension and Jenny Evans, Sanibel-Captiva Conservation Foundation.