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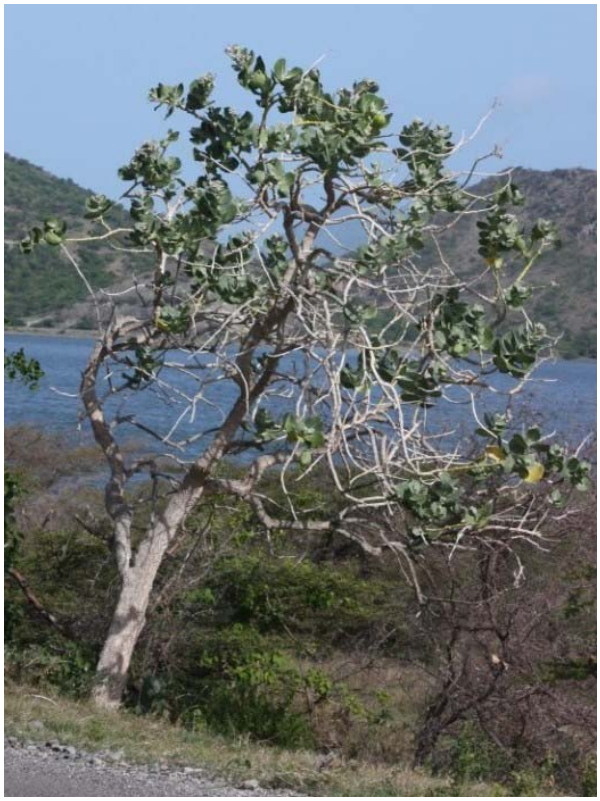
Calotropis procera **Family: Apocynaceae**

Giant milkweed, algodón de seda, calatropis, ashkhar, French cotton



St. Kitts, western Caribbean

The inflorescence is an umbel-like cyme

Giant Milkweed

Synonyms (Discarded Names): *Asclepias procera*
Origin: Old world
U.S.D.A. Zone: 10A-11 (Leaf damage 30°F)
Growth Rate: Fast
Form: Upright herbaceous
Flowering Months: Year round
Leaf Persistence: Evergreen, semi-deciduous
Salt Spray Tolerance: High
Drought Tolerance: High
Soil: Wide but well-drained
Nutritional Requirements: Low
Potential Pests: Aphids, caterpillars of the monarch butterfly
Typical Heights: 6-8 feet Florida, 12-16 feet tropics
Messiness: Low
Propagation: Seeds, rooted cuttings, air layers
Human Hazards: Sap can cause severe irritation to eyes. Toxic sap.
Uses: Seaside or dry gardens; large planters; accent plant in foundation plantings for large buildings; good for creating a tropical effect; free standing specimen.

Natural Geographic Distribution

The giant milkweed, *Calotropis procera*, is native to the Old World from the Arabian Peninsula to West, North and East Africa, also from Southern Asia to Malaysia. It has been widely naturalized elsewhere including Australia, Hawaii, California, the Caribbean and from Mexico to Brazil. Plants are usually found scattered in dry coastal areas, on beaches, along roadsides, and in disturbed urban lots. However, although reported to be unpalatable, it is occasionally eaten by cattle often without ill effect. Giant milkweed grows in a wide variety of soils, often where few other species will venture. It is not inclined to grow much above an elevation of one thousand feet.

Growth and Form

The giant milkweed is a relative of the hoya and the scarlet milkweed. The plant is a soft-wooded, evergreen or semi-deciduous shrub or small tree. Leaves are concentrated near the growing tips. Shrubs are often dense with leaves. As the plant becomes more treelike it produces an airy crown of a few twisted branches. There is often a significant number of dead stems in the canopy of small trees. The trunks are often at an angle as if pushed by the wind. The bark is whitish, thick, corky, and furrowed. The wood is whitish in color. When broken, all parts of the plant produce copious amount of white sap. There are few branched roots often growing as much as 9 feet below the surface.

An unattended tree leans toward the bay. Note the airy canopy, twisted branches and the accumulation of dead stems. Grenada, western Caribbean

The bark is whitish, thick and furrowed

Trunks of the giant milkweed appear as if pushed in one direction by the wind. Southern coast of St. Kitts, western Caribbean

Leaves

The leaves are opposite, entire, and on extremely short petioles. The blades are broadly elliptic or oblong to nearly orbicular. They have a short-pointed to blunt apex and a nearly clasping heart-shaped base. They are 3-8 inches long and 2-5 inches wide with a broad light yellow mid-vein and conspicuous main veins. The blades are slightly leathery, light to dark green above and whitish green beneath being coated by fine soft hairs that are easy to rub off.

Leaves are opposite and entire

Leaves are whitish green beneath and nearly stalkless or sessile with a broad light yellow mid-vein

Flowers

The inflorescence is an umbel-like cyme at or near the ends of twigs. Many flowers are borne on the inflorescence on pedicels that are about 1 inch long. Flowers are about 3/4 inch across. They consist of five sepals, approximately 1/4 inch long. The corolla is slightly succulent and is made up of five showy erect petals. The petals are about 3/4 inches long and are whitish and tinged with purple at the apex.

Inflorescences with many flowers

The corolla has five showy petals that are whitish and tinged with purple at the apex

Fruit

Flowers are replaced by a kidney-shaped, recurved, inflated follicles. Immature fruit are green and become brown when mature. They are 3-4.5 inches long and 2-2.5 inches wide. Slightly fleshy, they split open on one side to reveal a rough fibrous interior with many flat brown seeds with tufts of long white silky hair (pappus) at one end. Most plants flower and fruit simultaneously throughout the year.

The fruit is a kidney shaped follicle, 3-4.5 inches long

A section of the interior of an immature follicle

Inside this follicle are developing seeds

Planting and Maintenance Guidelines

The giant milkweed grows best in full sun. Shade from trees can reduce or eliminate their presence. Competition from weeds, especially grass, weakens the plant. Beach front salt spray is not detrimental to its growth. However, giant milkweed does not do well in wet soils as that can cause root rot. The plant is a frequent bloomer unaffected by drought.

Plant it from mid-spring through summer for faster establishment. Once established it requires only minimal care. The growth might be quite straggly if not pruned. Shrubs can be pinched back to encourage a thicker canopy. If a small tree is desired, lightly prune the tree after it has attained 3 to 4 feet of clear trunk. Frequent pruning may be required afterwards to develop a full, bushy crown. In summer the plant might become semi-deciduous.

IFAS Assessments of non-native plants in Florida's natural areas include three cautionary categories; prohibited, invasive and caution. *C. procera* does not appear on any of these categories. The IFAS assessments pertain only to Florida's conditions.

Pests

Aphis nerii, oleander aphids, can be a problem. These aphids attack many plants in the milkweed family. Their feeding can cause defoliation, aborted fruit and stem dieback.

Oleander aphids on scarlet milkweed (*Asclepias curassavica*)

Oleander aphids on giant milkweed

Oleander aphids mummies

Uses

As a member of the milkweed family, the giant milkweed is sometimes planted to attract monarch butterflies. Monarch caterpillars feed on its leaves and the adult butterflies use it as a nectar source.

The plant yields a durable fiber commercially known as bowstrings. The stem is useful for making ropes, carpets, fishing nets and sewing thread. Fiber from the inner bark was once used in the manufacture of cloth for the nobility. The wood is used in making charcoal. Floss, obtained from the fruit, was used for stuffing purposes. The giant milkweed was a common ingredient in traditional medicine. However, the milky sap is poisonous if swallowed.

Distinctions Between *C. procera* and *C. gigantea*

C. procera and *C. gigantea* are closely related species. Both are commonly known as giant milkweeds. Comparison of their flowers can be used for species identification. *C. procera* is distinguished by its erect corollas and white petals with dark purple tips. *C. gigantea* has reflexed (bent backwards or downwards) corollas that become twisted with age. The petals are white to pale lilac-blue. Flowers of *C. procera* are fragrant unlike those of *C. gigantea*.

C. procera with upright corolla

C. gigantea with reflexed corolla

Seedlings along highway in St. Kitts, western Caribbean.

This tree is approximately 25 feet tall. Grenada, western Caribbean

References

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Little, Elbert, Jr., Roy Woodbury and Frank Wadsworth. 1974. Trees of Puerto Rico and the Virgin Islands. U.S. Department of Agriculture, Washington, D.C.

Watkins, John, V., Sheehan, J. Thomas and T. Black. 2005. Florida Landscape Plants: Native and Exotic. University Press of Florida, Gainesville, Florida

Calotropis procera. Australia Tropical Rainforest Plants.

Flowering Trees Fact Sheets

Calabash (*Crescentia alata*)

Candlebush (Senna alata)

Desert Rose (*Adenium obesum*)

Dwarf Poinciana (*Caesalpinia pulcherrima*)

Frangipani (*Plumeria rubra*)

Hong Kong Orchid (*Bauhinia blakeana)*

Jacaranda (*Jacaranda mimosifolia*)

Kapok (*Ceiba pentandra*)

Lignum vitae (*Guaiacum officinale*)

Pink Trumpet Tree (*Tabebuia heterophylla*)

Red Silk-Cotton (*Bombax ceiba*)

Royal Poinciana (*Delonix regia*)

Starburst (*Clerodendrum quadriloculare*)

Native Trees Fact Sheets

Buttonwood (*Conocarpus erectus*)

Gumbo Limbo (*Bursera simaruba*)

Jamaica Caper (*Capparis cynophallophora*)

Mahogany (*Swietenia mahagoni*)

Pigeon Plum (*Coccoloba diversifolia*)

Pond Apple (*Annona glabra*)

Sea Grape (*Coccoloba uvifera*)

Wild Tamarind (*Lysiloma latisiliquum*)

Palm Fact Sheets

Bismarck (*Bismarckia nobilis*)

Cabbage (*Sabal palmetto*)

Florida Thatch Palm (*Thrinax radiata*)

All pictures taken by Stephen Brown except where indicated

This fact sheet was reviewed by Peggy Cruz, Horticulture Specialist, Lee County Extension, Pat Rooney, Lee County Master Gardener

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