

# Native Tree Sheet:

## Jamaican Caper

### *Capparis cynophallophora*

### Caper Family (CAPPARACEAE)



By Brian Daley and Thomas W. Zimmerman, Ph.D.  
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Figure 1. A young Jamaican caper with a canopy full of showy blooms.

#### Common Names

Jamaican caper, black caper (Virgin Islands), buro prieto (Puerto Rico).

#### Description

A small, attractive, evergreen tree reaching 10 to 20 feet in height. Canopy is compact and upright with dark green foliage. Trunk reaches a maximum of 6 inches in diameter with light gray to black bark and an inner bark with a strong, spicy fragrance and horseradish taste. Simple, alternate, almost leathery leaves are 2-4 inches long and shiny green above and bronze beneath. This and several other species of caper native to the territory produce new leaves that are folded in half along the mid vein. Juvenile leaves of this species are distinctly long, linear and purple in color. Small, 4-petaled flowers grow in clusters colored white to purple and have distinct, two-inch long stamens. Jamaican caper is easily confused with the more common white caper (*C. in-*

*dica*) that has similar looking leaves, bark and fruit. However, the white caper is much more common, somewhat larger, faster growing, has less shiny leaves and its flowers remain white.

#### Distribution and Ecology

The tree's native range extends from south Florida to Central America and the Caribbean islands. Populations are concentrated in coastal scrub forests to the edge of sandy beaches. In the Virgin Islands there are scattered individuals on the coasts of St. Croix but they are more common on Buck Island, St. Thomas and St. John. The slow-growing plants are extremely tolerant of drought, salt and wind. The flowers are most fragrant at night and birds are observed to ingest the seeds whole.

#### Flowering and Fruiting

Jamaican caper flowers throughout the year, with young flowers opening white and turning



Figure 2. Blooms open white initially and become purple over time.



Figure 3. Leaf, flower and fruit (Illustration from Little and Wadsworth).

purple over several days. The fruits are fuzzy, brown bean-like pods, 2-7 inches (5-18 cm) long, narrow and swelling slightly around each seed. At maturity the pods split open along one seam, revealing a sticky, bright orange-red flesh with seeds imbedded. Collections on St. Croix and Buck Island reveal fruit can contain from 3 -10 seeds with an average of 5.3 per fruit. There are roughly 215 fruit per pound (475/kg).

#### Seed Collection and Processing

Mature seeds should be collected directly from open seed pods on the tree. Collecting large numbers of seeds can be difficult because the seeds are quickly taken by birds or fall to the ground once the fruit open. Collecting from the ground is difficult and manually splitting unopened pods yields mostly immature seeds. Ripe seeds are ¼ inch (0.6 cm) long, round, black, moist and slightly sticky. They should be planted or treated at once or they begin to dry out and lose viability in a matter of weeks. There are about 5,400 seeds per pound (12,000/kg).



Figure 4. Ripening and open fruit (left). Note the indentations in the orange flesh where seeds once were.

### Seed Treatments and Germination

The round black seeds are relatively thin-walled and should be used quickly after collection and not allowed to dry out. Germination trials at UVI-AES indicate that germination begins in 15 days and concludes by day 30. Without any treatment, up to 80% of seeds can germinate but there is substantial variability between seed lots collected on St. Croix. In general, soaking the seeds in water for 24 hours is effective, but both manual and chemical scarification treatments had a significant negative effect on the delicate seeds.

### Greenhouse Management

Start germination in deep trays (3-5") with well-drained potting soil. These plants develop a relatively long tap root and are susceptible to over-watering and over-potting. The seedling will produce long purple leaves for the first year or two of growth. They can be transplanted to pots after the third or fourth leaf is formed and easily acclimate to full sun. Sunny conditions with good air movement will decrease the likelihood of over-watering and increase growth rates.

### Outplanting and Growth

Seedlings are very hardy, drought-tolerant and establish in the field with a high success rate even before producing adult leaves. Supplemental water is required only during initial establishment and periods of prolonged drought. Establishment trials at UVI-AES indicate saplings are strong but slow growing, averaging under 2 inches (4.5 cm) per month. Our 16-inch (40 cm) tall plants grew to 65 inches (165 cm) in 30 months without any supplemental water and produced flowers and fruit after 36 months.

Prepared by Brian Daley, Agroforestry Research Specialist, and Dr. Thomas W. Zimmerman, Biotechnology Program Leader. Issued by the University of the Virgin Islands Agricultural Experiment Station, Dr. James Rakocy, Director. This work was made possible through support from a USDA McIntire-Stennis grant # UVI-201073. USDA-Cris 0201950.

University of the Virgin Islands  
Agricultural Experiment Station  
RR 2, Box 10,000  
Kingshill, VI 00850  
Telephone: (340) 692-4020  
Fax: (340) 692-4035  
[http://rps.uvi.edu/AES/aes\\_home.html](http://rps.uvi.edu/AES/aes_home.html)



Figure 5. Early development stages of Jamaican caper. The cotyledons and linear juvenile leaves are distinctly purple. Green, adult leaves are not produced until one year after germination.

### Landscape Uses

Jamaican caper is an ideal candidate for home and commercial landscapes in the Virgin Islands. It remains relatively small, produces abundant, showy blooms and requires very little care. No native tree is more tolerant of drought, salt and wind. This tree is increasingly popular in landscapes in Florida and elsewhere. This has created the improbable scenario where the Florida variety is being imported to the territory in favor of locally produced Virgin Islands' natives. The two distinct varieties can breed with each other, making importation a serious risk to the genetic integrity of local populations.

### Traditional Uses

The wood is hard and heavy and has been consumed locally for fencepost and charcoal. The heartwood is yellow-tinged with red. Roots, bark, leaves and fruits have variously been used to make teas and other infusions to treat venereal disease and a variety of other internal and skin ailments.

For further information contact Brian Daley, Research Specialist, University of the Virgin Islands Agricultural Experiment Station, RR 1 Box 10,000, Kingshill, VI 00850. (340) 692-4078, [bdaley@uvi.edu](mailto:bdaley@uvi.edu)

### Additional Reading

Jones, K., 1995. *Native Trees for Community Forests*. St. George Village Botanical Garden of St Croix, Inc. 124 p.

Gibney, E. 2003. *Native Trees and Plants of East End, St. John, U.S. Virgin Islands*. Center for the Environment Inc. 6Y-7 Hansen Bay, East End, St. John 00830. 86 p.

Little, E.L., Wadsworth, F.H. 1964 *Common Trees of Puerto Rico and the Virgin Islands*. Agricultural Handbook No. 249. US Dept. of Ag., Forest Service. Washington DC. 548 p.

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