



United States Department of Agriculture
Natural Resources Conservation Service
Plant Materials Program

'Tropic Coral' Tall Erythrina

Erythrina variegata L.

A Conservation Plant Release by USDA NRCS NAME Plant Materials Center, City, State



Duvauchelle 2003

'Tropic Coral' tall erythrina, is a cooperative release by the United States Department of Agriculture, Soil Conservation Service; the University of Hawaii, Hawaii Institute of Tropical Agriculture and Human Resources, Department of Agronomy and Soil Science; and the Honolulu Botanic Gardens. 'Tropic Coral' tall erythrina was officially released for public use in 1985.

Description

'Tropic Coral' tall erythrina is a leguminous tree that grows approximately 30 ft tall within three years and may eventually reach heights of 40 to 50 ft, depending upon spacing, care, and location. It has an erect or columnar growth form with numerous vertically oriented branches coming out of the single trunk. It has attained the dimensions of 11.5 ft high by 3.5 ft wide the first year from unrooted cuttings planted directly in the soil under favorable growing conditions. Leaves are trifoliate with heart-shaped leaflets, 3 to 5 in wide by 5 to 7 in long. It has small thorns, 0.04 to 0.08 in long, on the trunks and branches. Thorns are longer if the tree is stressed by lack of moisture. The leaves remain on the tree at flowering, unlike some species of *Erythrina*, which drop their leaves.

Flowers, appearing near the top of the tree, are brilliant orange-red. The flowers are 0.75-1.25 inches wide by 2-2.75 inches long. Seed pods are 0.50-0.75 inches wide by

3-5 inches long and contain two or three dark brown seeds. The seeds are 0.25-0.33 inches wide by 0.50-0.67 inches long. Seeds and foliage of 'Tropic Coral' tall erythrina were nontoxic in laboratory tests and on feeding trials conducted with week-old chicks.

Source

'Tropic Coral' tall erythrina is a fastigiate (column-shaped with branches erect) form of the open-branched Cochin China Coral tree, locally known as tall erythrina or tall wiliwili. It originated from cuttings given to the USDA Soil Conservation Service in 1972 from an *Erythrina variegata* growing in the Foster Botanical Garden, Honolulu. Foster Botanical Garden received the plant originally as a single rooted cutting from E.M. Menninger. Menninger's cutting originated from plants grown from seed under the name *Erythrina fusca* that had been obtained from the Botanical Garden in Adelaide, Australia.

The natural range of *Erythrina variegata* extends from the east coast of Africa, throughout Southeast Asia and Malaysia to Oceania, including Fiji, Tahiti, and the Marquesas, and as far north as southern Okinawa.

The columnar form is quite common in cultivation in New Caledonia. In cultivation it has spread to other tropical and warm-temperate areas, including Australia and southern Florida. The fastigiate form of this cultivar is not known to occur anywhere in the wild. The genetics of the column-shaped form are not known; hence, 'Tropic Coral' tall erythrina is propagated from cuttings.

Conservation Uses

'Tropic Coral' tall erythrina was selected for release and for plantings around farmsteads. It has a strong root system that does not seem to compete with adjacent crops. It is an attractive tree for use as an ornamental in landscaping and as a screen for privacy and from light.

Area of Adaptation and Use

'Tropic Coral' tall erythrina is adapted to elevations from sea level to 2000 ft in Hawaii. Best success has been obtained, however, from sea level to 1000 ft. Above 1000 ft, it has performed best on the sunnier, leeward sides of the islands. At these altitudes, its growth is slower than at the lower elevations. It will grow without supplemental irrigation in areas with annual rainfall over 60 in and in drier areas if adequate irrigation is provided. It will grow in a wide range of soils, from coarse to fine and from very acid to moderately alkaline (pH 4.5-7.5).

Establishment and Management for Conservation Plantings

'Tropic Coral' tall erythrina must be vegetatively propagated because it does not grow true to form from seed. Unrooted woody cuttings can be planted directly in the soil or rooted in pots and transplanted. Cuttings can be 12 inches to over 3feet long. Rooting percentage is reduced when cuttings shorter than 9 inches are used. The longer the cuttings, the sooner the tree will reach its functional size. The optimal survival rate has been obtained with cuttings of 0.75-2 inch diameter.

After cuttings have been taken from stock plants, allow the cut ends to air out or cure for at least 24 hours. Sealing the top surfaces of the cuttings with wax or tree-wound dressing is helpful in preventing the tops of the cuttings from rotting or drying out. Bases of the cuttings can be coated with a rooting hormone for improved root development, but is not necessary.

When planting, cuttings should be placed in the ground to a depth of at least 6 inches. For windbreaks, plants should be placed at uniform intervals from 2-6feet apart. Since 'Tropic Coral' tall erythrina has only fair shade tolerance, plants will lose some of the lower leaves if planted closer together than 2 feet. After planting, the soil or potting medium should be kept moist for good establishment.

The 'Tropic Coral' tall erythrina is relatively maintenance-free. The plant requires only occasional pruning of its branches. Fertilizers should be applied according to soil test recommendations; however, 'Tropic Coral' tall erythrina is a legume and is able to obtain nitrogen from the atmosphere. It requires supplemental irrigation if rainfall is below 60 inches. Drip irrigation with an emitter at the base of each tree works best. In very windy conditions, the windward row of trees will require additional water to remain in good condition. Over irrigation may inhibit growth rate, on the other hand, plants can become stressed from lack of water, causing leaves to shed and reduce windbreak efficiency. Planting the cuttings through black plastic has been a good method to control weeds and conserve moisture.

Ecological Considerations

'Tropic Coral' tall erythrina is susceptible to attack by powdery mildew (*Oidium sp.*), Chinese rose beetles (*Adoretus sinicus*), mealybugs (*Phenacoccus sp.*), spider mites (*Tetranychus cinnabarinus*), broad mites (*Polyphagotarsonemus latus*), and black stink bugs (*Coptosoma xanthogramma*). Although no specific record exists for 'Tropic Coral', several species of Erythrina are attacked by the Hibiscus snow scale (*Pinnaspis stracham*) and the carob moth (*Ectomyelois ceratoniae*) and are hosts for the fruit-piercing moth (*Othreis fullonia*). The fruit-piercing moth entered Hawaii after 'Tropic Coral' tall erythrina was officially released. 'Tropic Coral' tall

erythrina may serve as a reservoir for these pests as well as for their predators. This should be considered on an individual basis by those planning to use the tree as a windbreak, particularly for commercial crops. Approved pest control measures may be needed at times.

Seed and Plant Production

Insert text here – Describe general procedures needed for large-scale production, included estimated quantities expected in typical production systems.

Availability

For conservation use: Currently, there are no commercial producers of 'Tropic Coral' Tall Erythrina.

For seed or plant increase: Foundation-quality plant material of 'Tropic Coral' Tall Erythrina will be maintained by the USDA NRCS Hoolehua Plant Materials Center and is available to commercial producers and others for establishing their production fields.

For more information, contact:

Hoolehua PMC

4101 Maunaloa Hwy

P.O. Box 236,

ph. (808)567-6885, fax (808)567-6537

<<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/plants/centers/>>

Citation

Release Brochure for 'Tropic Coral' Tall Erythrina (*Erythrina variegata*). USDA-Natural Resources Conservation Service, Hoolehua PMC. Hoolehua, Hawaii 96829. Published June 2013.

For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <<http://www.nrcs.usda.gov/>>, and visit the PLANTS Web site <<http://plants.usda.gov/>> or the Plant Materials Program Web site <<http://www.plant-materials.nrcs.usda.gov/>>

Helping People Help The Land

USDA IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER