

Cocos nucifera Coconut Palm¹

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INTRODUCTION

The Coconut Palm is one of man's most useful plants (Fig. 1). The heavy crown of long flowing fronds and gently curved trunks lend a tropical effect to any landscape setting in which they can grow. A beautiful street tree, Coconut Palm is also ideal as a background tree, framing tree, or as a striking freestanding specimen. Coconut Palms located along streets, walkways or near patios require pruning to remove the flowers or developing fruit so it doesn't fall and cause injury or property damage.

GENERAL INFORMATION

Scientific name: *Cocos nucifera*

Pronunciation: KOE-koase noo-SIFF-er-uh

Common name(s): Coconut Palm

Family: *Areaceae*

USDA hardiness zones: 10B through 11 (Fig. 2)

Origin: not native to North America

Uses: fruit tree; wide tree lawns (>6 feet wide); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; reclamation plant; narrow tree lawns (3-4 feet wide); specimen; sidewalk cutout (tree pit); residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

Availability: generally available in many areas within its hardiness range

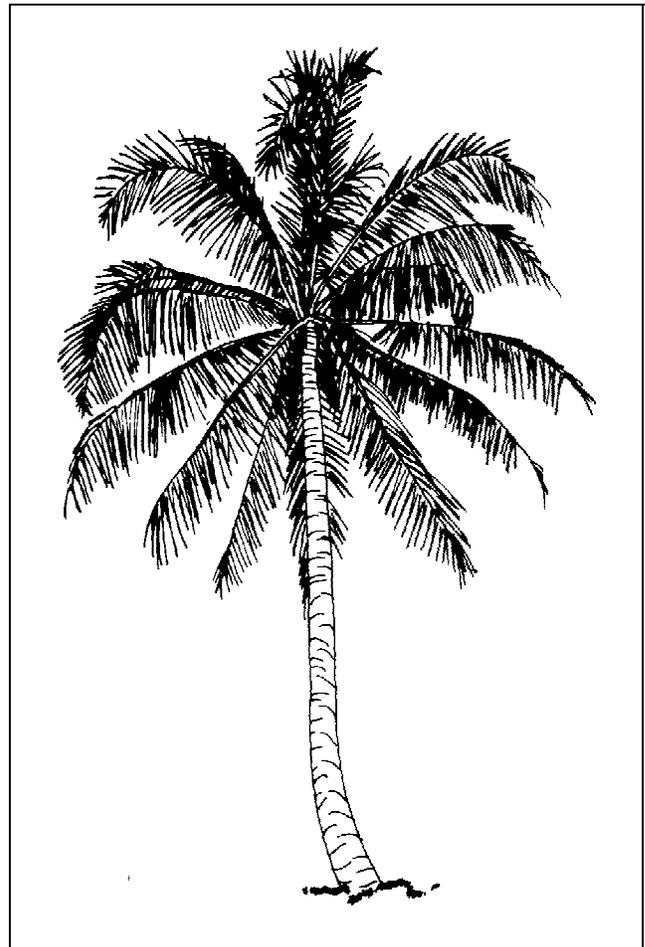


Figure 1. Middle-aged Coconut Palm.

DESCRIPTION

Height: 50 to 60 feet

Spread: 15 to 25 feet

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Figure 2. Shaded area represents potential planting range.

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms

Crown shape: palm; upright

Crown density: open

Growth rate: medium

Texture: coarse

Foliage

Leaf arrangement: spiral

Leaf type: odd pinnately compound

Leaflet margin: entire

Leaflet shape: linear

Leaflet venation: parallel

Leaf type and persistence: evergreen

Leaflet blade length: 18 to 36 inches

Leaf color: green; yellow

Fall color: no fall color change

Fall characteristic: not showy

Flower

Flower color: white

Flower characteristics: inconspicuous and not showy; spring flowering

Fruit

Fruit shape: oval; round (Fig. 3)

Fruit length: 6 to 12 inches

Fruit covering: dry or hard

Fruit color: brown; green; yellow

Fruit characteristics: does not attract wildlife; suited for human consumption; fruit, twigs, or foliage cause significant litter; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: grow mostly upright and will not droop; not particularly showy; should be grown with a single leader; no thorns

Pruning requirement: needs little pruning to develop a strong structure

Breakage: resistant

Crown shaft: no

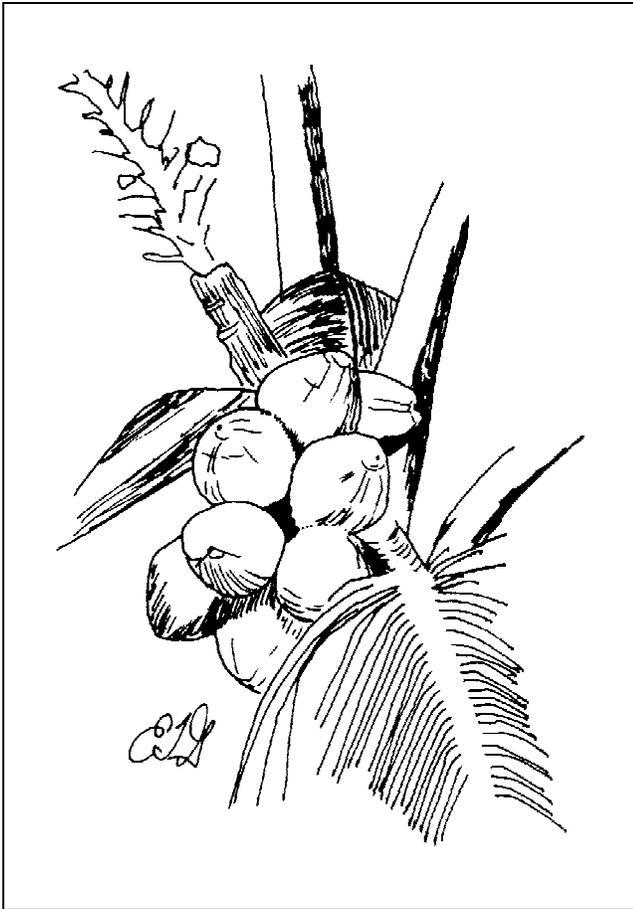


Figure 3. Fruit of Coconut Palm.

Culture

Light requirement: tree grows in full sun

Soil tolerances: clay; loam; sand; acidic; alkaline; well-drained

Drought tolerance: high

Aerosol salt tolerance: high

Soil salt tolerance: good

Other

Roots: surface roots are usually not a problem

Winter interest: no special winter interest

Outstanding tree: not particularly outstanding

Invasive potential: little, if any, potential at this time

Verticillium wilt susceptibility: not known to be susceptible

Pest resistance: very sensitive to one or more pests or diseases which can affect tree health or aesthetics

USE AND MANAGEMENT

Due to the widespread devastation of lethal yellowing disease, use the resistant Malayan strains, often called dwarf or pygmy coconuts, and labelled yellow, golden, red, and green, according to the color of their fruits, such as 'Golden Malayan Dwarf'. It is best to purchase trees from a nursery that can assure you that the palms were grown from certified Malayan seed. The Malayan palms are very similar to the Jamaican Tall except for having straight trunks. The red strain is the most rugged of the three but has the least attractive foliage. The variety 'Maypan', a hybrid of Malayan x Panama Tall, has the most robust and rapid growth yet retains its resistance to lethal yellowing disease. All Coconut Palms are highly salt-tolerant and make nice street trees if planted when they are tall enough. Be aware that falling fruit can damage vehicles or hit pedestrians and the flower stalks (in spring) or developing fruit (summer) may need to be removed.

Coconut Palms grow in full sun on any well-drained soils. Plants respond well to being fertilized.

Propagation is by seed. The large coconuts, with outer husk, should be half-buried on their side in soil. Germination can take many months.

Pests

Nematodes may infest this palm.

Diseases

Lethal yellowing disease, virus diseases, and fungi all affect Coconut Palms. Be sure to only plant selections which are resistant to lethal yellowing disease. Ganoderma butt rot can infect the lower trunk and roots, and can kill the palm. Avoid injury to the palm in this area. There is no control for butt rot, only prevention.