



TREE SPECIES (SCIENTIFIC NAME)

# Syzygium aromaticum

ENGLISH COMMON NAME

Clove

INDONESIAN COMMON NAME

Cengkeh

TREE FAMILY

**MYRTACEAE**

AVERAGE LEAF SIZE (CM)

**9.5cm** × **4.5cm**  
Length Width

ELEVATIONAL RANGE (M)

**0-1000m**

TREE HEIGHT

**SMALL (10-20M)**



DISTRIBUTION



**NATIVE TO INDONESIA**

NATIVE TO

**Region:** Asia

**Indonesia:** Maluku Islands, New Guinea

EXOTIC IN

**Indonesia:** Borneo, Java, Lesser Sunda Islands, Sulawesi, Sumatra

## COFFEE AGROFORESTRY INFORMATION

COFFEE SYSTEM

**ROBUSTA** **ARABICA**

COFFEE IMPACT

Unknown

REGENERATION

**REQUIRES PROPAGATION**

CULTIVATION

**PLANTED**

PREVALENCE

**COMMON IN COFFEE AGROFORESTRY**

TREE MANAGEMENT

Propagates by seed from selected mother trees extracted from the fresh fruit. Seeds germinate in 2-6 weeks and seedlings are raised in shaded nursery beds. Seedlings respond positively to controlled watering, excellent drainage, adequate spacing for sturdy growth, and timely hardening-off by reduced shading and watering. Saplings should be planted under temporary shade once they reach a height of >50 cm (within one year). In the dry season, young trees may need extra water. Standard spacing is 8 m x 8 m but spacing from 6 m x 8 m to 8 m x 11 m optimal and rectangular pattern facilitates intercropping in the early years. Prefers deep, fertile, and moist but well-drained soil (fails to flower in very moist conditions) in either full sun or partial shade. Use periodic summer irrigation. Fertilization with manure in with shallow trenches ~50-150 cm away from the tree. 15 kg of organic manure, 18 g phosphorous, and 50 g potash should be applied per plant for young trees and 40-50 kg of organic manure, 250 g phosphorous, 300 g nitrogen, and 750 g potash for mature trees (≥15 years). Organic manure applied at the beginning of monsoons and fertilizers applied twice from May-June and September-October. Mulching with fallen leaves and application of river-silt are also beneficial and weeding should be done at regular intervals. Thinning recommended to reduce branch overcrowding in trees. Dead and diseased shoots should be removed 1-2x/year. Above 1000 masl they generally do not produce until 6-15 years of age and attain full production at 20-30 years with a bumper clove harvest only occurring every 3-4 years interspersed with years of poor harvest. Can live more than 100 years and is commonly intercropped.

## TREE BENEFITS AND USES

FARMER USES



**Food, Fuelwood, Medicinal, Product**

The fruit is consumed and flower buds used as a spice, it is intensively used in Indonesia for manufacturing kretek cigarettes, and distillation of cloves produces an oil used in the flavoring and perfume industry. Due to its flavor and antiseptic properties, this oil (eugenol) is used in soaps, detergents, toothpaste, and pharmaceutical products. The oil is also a potent bactericide and nematocidal and is used to suppress toothache, bad breath, and as a stimulant and carminative (helps expel excess gas).

FARM SERVICES

Unknown

BIODIVERSITY BENEFITS

Unknown

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