YIELD PER HECTARE

Average yield of Kapok is 450 kg of dried floss per hectare.

CLASSIFICATION AND GRADING

- **SPK** (Superior Phil. Kapok) The fiber is free from admixture of seeds, husk, broken placenta, knotty matters, lumps and other impurities. Color ranges from ivory white to a shade of light ochre.
- **GPK** (Good Phil. Kapok) The fiber is almost free from the admixture of seeds, particle of husk, broken placenta, knotty matters, lumps and other impurities. The amount of seeds and other impurities mixed in the fiber should not be more than 2%. The color ranges from very light ochre to light brown.
- FPK (Fair Phil. Kapok) The fiber contains considerable amount of small particles of floss with slight admixture of broken placenta and other foreign matters. The seeds mixed with the fiber must not exceed 3%. The fiber is not as fluffy as the grade GPK due to its short staple. Color ranges from dark ivory to dark gray.

PRINCIPAL USES

- Filling materials for pillows, cushions and mattresses.
- •Used in the manufacture of life buoys, life belts, waist coats and other life saving devices at sea.
- Used in surgery as a substitute for cotton
- Used as upholstery material
- Mixed with other fibers for the manufacture of textiles.



KAPOK TECHNOGUIDE



Ceiba pentandra (L) Gaertn

CONTENTS:

Botanical Description
Varieties
Cultural Management
Pests and Disease Control
Maturity and Harvesting
Methods of Extraction
Yield per hectare
Classification and Grading
Principal Uses

2021 EDITION

Republic of the Philippines
Department of Agriculture

PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY

3/F DA-PCAF Building Department of Agriculture, Elliptical Road, Diliman, Quezon City

BOTANICAL DESCRIPTION

KAPOK (Ceiba pentranda (L) Gaertn) wooded, a soft, pod-bearing dicot. The Kapok tree, which is slender and deciduous, can attain a maximum height of 5 meters. Its trunk has pyramidal, stout and scattered pines. The branches grow horizontally in distant whorls, giving the tree a unique appearance.



The leaves consist of five to eight leaflets and leafstalks. The Kapok tree flowers before or during the appearance of new leaves. It bears an oblong shaped fruit.

VARIETIES

- Togo Variety No.15
- Native Kapok
- Thailand
- Javanese
- Surinam
- Randoe
- Koening Clone No.6

CULTURAL MANAGEMENT

Soil Requirement

Preferably deep permeable soil and sandy loam. Laterlite and heavy clay is not recommended. Clay loam and alluvial soil are also suitable for kapok production.

Climatic Requirement

Kapok grows well in a wide range of weather conditions. It needs abundant rain in its growing season especially before or during the flowers appear.

Methods of Propagation

- Stem
- Branch Cuttings
- Seeds

Planting Season

The best time to plant Kapok is at the start of rainy season.

Distance of Planting

Kapok may be planted at a distance of 6-8m x 6-8m.

Rate of Fertilization

A fertilizer mixture containing 6% nitrogen, 12% phosphoric acid and 12% potassium is recommended for application.

PESTS AND DISEASE CONTROL

Some Major Insect Pests and their Control

Kapok Bark Borer (Botocera nermitos Newman) causes considerable damage by boring holes in the bark of the main branches of the plant. Use insecticides to control this kind of pest.

Coffee Stem Borer (Zauzera coffeae Nietn) causes the leaves to wither or break off. Control this pest with insecticides.

Beetles (Manohammus fistular, Fermar) feed on leaves of Kapok trees. These can also be controlled through application of insecticides.

Bugs or Cotton Stainers (*Dysderous* megapugus Breddin) suck the sap of the plant from the shoots as well as from the seeds of the open ripe pods. Spray with insecticides.

Helminthosporium Leaf Spot is manifested by circular yellow spots on any part of the lamina of the leaves. The borders are dull green-yellow which turn to amber yellow as the lesions become older. In the advance stage of the disease, the spots become dark grayish brown and the adjacent lesion may unite causing premature defoliation of the plant. To control, burn all the infected plants and remains.

Helminthosporium Ciobal Orillo is the fungus that is partially destructive to seedlings planted closely to nursery beds. To control this pest, seeds for planting purposes from unknown source should be treated with 1:1,000 mercuric chloride solution for five minutes.

MATURITY AND HARVESTING

Kapok trees begin to bear pods after three to four years. Harvesting of Kapok is usually done during dry months. Full bearing period is attained in 3 to 7 years.

METHODS OF EXTRACTION

Manual - the Kapok floss is spread on the platform for beating to remove its seeds. After beating for a few minutes, the floss is removed and transferred to another platform and given a second light beating to remove any remaining seeds.

Machine - consists of a horizontal chamber with perforated bottom. The floss is beaten up by a series of blades attached to a shaft. The revolving blades move the floss from one end of the chamber where the floss is fed into the other end and is driven out. Some machines are provided with fans which blow the clean floss through the outlet into a large rectangular removable receptacle in which the fiber is deposited like flakes of snow.

Philippine Fiber Industry Development Authority For Inquiries:

Email us at tad@philfida.da.gov.ph (Technical Assistance Division)
Website: www.philfida.da.gov.ph

