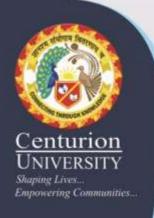


COCONUT (Cocos nucifera)

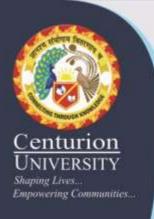
Facilitator: Dr. Kalpita Bhatta
Dept. of Botany,
School of Applied Sciences
Centurion University
Technology and Management
Bhubaneswar





CONTENTS

- SCIENTIFIC CLASSIFICATION
- INTRODUCTION
- ORIGIN
- MORPHOLOGY
- CLIMATIC CONDITION
- ECONOMIC IMPORTANCE

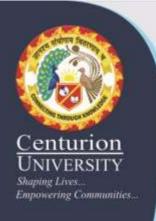


SCIENTIFIC CLASSIFICATION

Scientific name: Cocos nucifera

Family: Arecaceae

Vernacular name: Nariyal



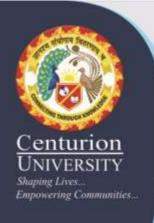
INTRODUCTION

• The coconut palm is one of the nature's greatest gifts to mankind. Practically all parts of the plant are useful. Coconut is often regarded as the 'tree of Heaven', because it provides all the basic necessities of life.

ORIGIN:

It is found Indo-Pacific region.

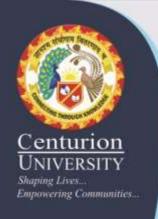
• In India, coconut cultivation is mainly confined to the coastal areas of Kerala, Tamil Nadu, Karnataka and Andhra Pradesh- the first alone contributing nearly 50% of total production.



MORPHOLOGY

- It is a tall tree attaining a height of 15-30m.
- Basically the trunk is inclined in the direction of the wind and they are marked by leaf scars.
- The main stem is unbranched and has a thick swollen base which have adventitious roots.
- The main branch forms a crown of leaves at the apical region.



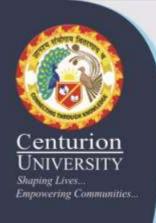


Leaf: The leaves are paripinnate, needle like about 1.8-6m long.

Inflorescence: The inflorescence is spadix produced in the axil of the leaf enclosed by spathe.

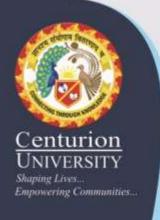
Flower: The male flowers are numerous, while the female flowers are few in number.

- Male flowers are present at the apical region and the female flowers are present at the basal region.
- Each male flowers consist of six small, unequal tepals and six stamens.
- Female flowers consists of three-celled ovaries(tricarpillary).



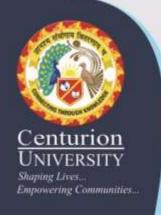
Fruit:

- It is a fibrous drupe, and differentiated into three zones:-
- 1. Exocarp: It is the outer covering, hard, green in colour in younger stage and become yellowish or reddish brown later on. At maturity, the exocarp is shredded off.
- 2. Mesocarp: It is known as coir of commerce. It is mostly used for trade and commerce.
- 3. Endocarp: It is hard, distinguished with three eyes or depression. One of the eye is larger and softer, which a small embryo is located and the other two represent the aborted carpels.



- The endocarp encloses a hollow seed with a browntesta adhering firmly to the solid endosperm, which is known as copra of commerce.
- The cavity of the nut is filled with coconut milk which is liquid in nature.





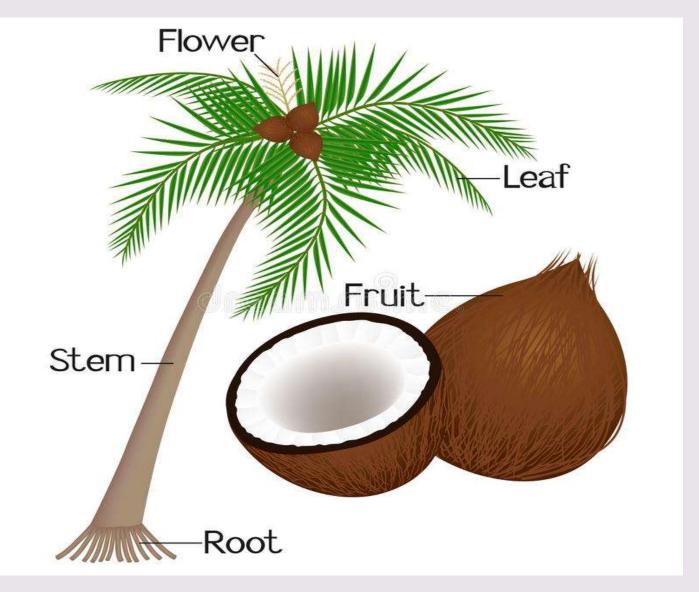
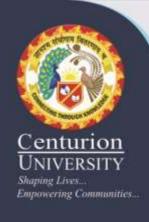


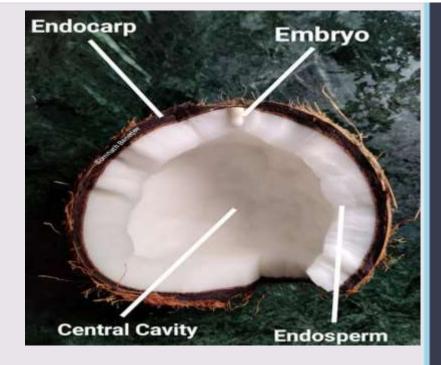
Fig.on:-Cocos nucifera(Coconut Tree)



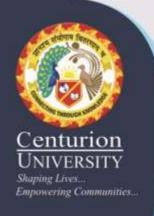






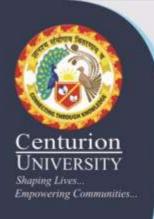






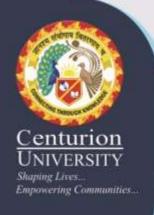
CLIMATIC CONDITION

- The palm requires plenty of sunlight.
- An average temperature between 27-32°C.
- It can be grown on a wide variety of soils, including coastal sands, alluvial, volcanic, and clay soil, with good drainage and adequate soil aeration.
- Thus, a porous soil behind beaches is best for the growth of coconut.

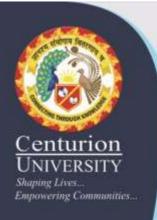


ECONOMIC IMPORTANCE

- The fresh kernels are used in the preparation of sweets, curries, puddings and chutneys.
- Coconut water is very refreshing and have diuretic properties.
- 'Toddy', is prepared by unopened spadices of coconut.
- It may be boiled out to produce 'Jaggery' and palm sugar.
- The coconut oil constitute;



- 1. Lauric acid(44-51%)
- 2. Myristic acids (13.1-18.5%)
- 3. Oleic acid (5.0-8.2%)
- 4. Linoleic acid (1.0-2.6%)
- Due to its unique feature of economic importance of every part of it, it is called as 'Kalpavriksha'.



TOP 10 WAYS TO USE A COCONUT TREE

healthrangerstore



The Flesh: Food, Milk, and Flour



The Water: A Healthy, Refreshing Drink



The Oil: For Cooking, Skin, and Hair



The Shells: To Steam Food and Craft With



The Husks: A Natural Scrubber and Craft Material



The Husks: Ropes



Tree Leaves: Thatching



The Sticks: Brooms



The Wood: Fires in Traditional Kitchens



The Flowers: Medicine, traditional remedies



Shaping Lives... Empowering Communities...

