

Diploma in Pharmacy 1st Year

Pharmacognosy Practical

To perform the morphological study of Nutmeg

Aim:

To perform the morphological study of Nutmeg.

Reference :

Dr. Gupta G.D , Dr. Sharma Shailesh , Kaur Navjit , “Practical Manual of Pharmacognosy” Published by Nirali Prakashan , Pg.No 22 - 25

Synonyms

Semen myristicae, Myristica, Nux moschata, Myristica aromata.

Biological Source :

Nutmeg is the kernel of the dried ripe seed of *Myristica fragrans* Houtten, belonging to family Myristicaceae.

Morphological Characters

This form of evaluation involves a series of tests using the sense organs. It refers to evaluation of:

- 1) **Colour:** It has greenish brown or brown colour.
- 2) **Shape:** It is ellipsoidal.
- 3) **Size:** It is 20 to 30 mm in length and 20 mm.
- 4) **Taste:** It has pungent and aromatic taste.
- 5) **Odour:** It has aromatic smell.

Nutmeg is made up of outer and inner perisperm, endosperm, and embryo and comes in an ovoid or widely elongated shape with a length of 2 to 3 cm and a width of 1.5 to 2 cm. The kernels are a greyish brown colour with a lot of reddish brown specks. The position of micropyle is indicated by a little depression on one end of the nutmeg, while the position of hilum is indicated by a small depression on the opposite end. The raphe line runs from the opposite end of the kernel to the chalaza depression. Inside the endosperm, the embryo is housed in a small cavity

Mace is the arillus of nutmeg seeds that appears in the hilum region before the flowers open and fertilisation takes place. The mace is an orange-coloured nutmeg seed mutation. It contains maltodextrin, which when combined with tiodine produces a red colour. Mace is used as a condiment and flavouring agent, particularly in the making of biscuits, pickle, pork, and fish.

Result :

The morphological study of Nutmeg was performed.