

→ Linseed, Soyabean, Safflower, etc.

# ① Groundnut (oil yielding general description)

Groundnut is non-drying oil containing less than 100-iodine number. It does not react with ~~oxy~~ atmospheric oxygen at normal temperature. They are largely glycerides of saturated fatty acids. It is useful for manufacturing soaps, as lubricants & cooking purposes.

## Vernacular names —

Hindi — Mung-phali

Beng — Chini Badam

Eng — groundnut.

## Systematic position —

Kingdom — Plantae

Division — Angiosperms

Class — Dicotyledons

Order — Leguminales

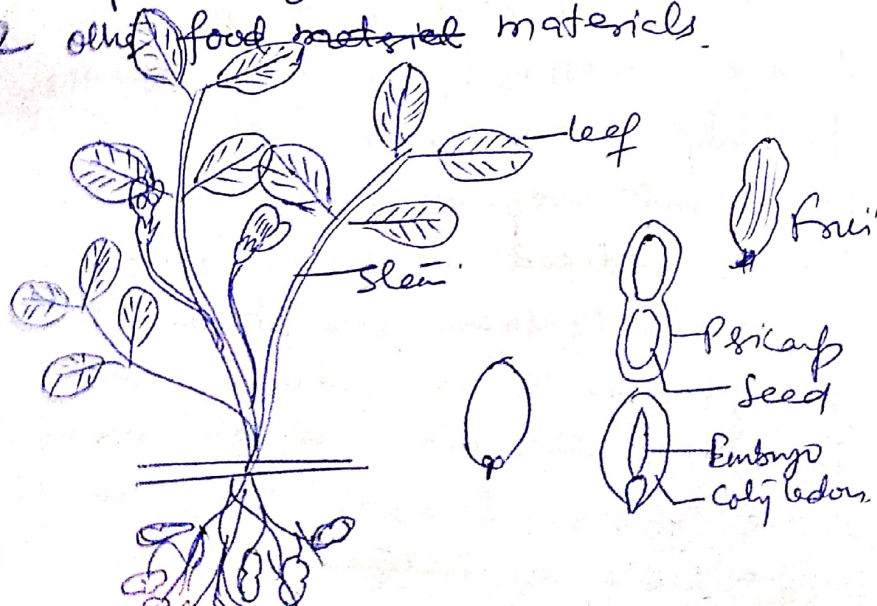
Family — Papilionaceae (Fabaceae)

Botanical name — Arachis hypogaea L.

(2) Groundnut (14)  
Description - It is an annual herb upto 30 to 60 cm high. It is a legume crop grows mainly for its edible seeds. It is widely grown in the tropical & subtropical region. The plant with angular hairy stem with a developed spreading & erect branches. The tap root with nodules. Leaves all node, Pinnate with two pairs of oval leaflets, arranged opposite to each other in pairs.

The most important product of groundnut is the formation of flowers & seeds. The flowers are borne in the axils of the leaves either above & below the ground. The flowers have yellow petals typical papilionaceous type. Generally, flowers are self pollinated. Gynophore present below ovary (ovary present on stalk) the ovary bends into soil. The ovary is monospermy. The fruit is legume. Which is

Simple, dry and indehiscent. The fruit containing one to five seeds. The outer shell of pod is called Pericarp. The seed is covers the seed (nut). The nut is composed of two cotyledons which contain oil & other food materials.





peanut, *Arachis hypogaea* L., having symbiotic nitrogen fixing bacteria in root nodules. It improves soil fertility, making them valuable in crop rotations.

### Origin

*A. hypogaea* arose from a hybrid between two wild species of peanut through — *A. duranensis* & *A. ipaensis* — It originated from in Brazil & South America. In 1838, Bentham published Flora Brasiliensis & describing five species of *Arachis*. The plant was introduced by the Portuguese.

Major groundnut producing countries are India, China, United States & West Africa. In India, cultivation of groundnut is confined to the Southern India like Gujarat, AP, Karnataka, Tamil Nadu, & Maharashtra... The other important states where it is cultivated are Madhya Pradesh, Rajasthan, Uttar Pradesh & Punjab.

### Cultivation

Peanuts grow best in light, sandy loam soil with a pH of 5.9-7. Peanut has capacity to fix atmospheric nitrogen. ~~It~~ they improve soil fertility. They are valuable in crop rotations. The yield of Peanut crop itself is increased in rotation through reduced disease, pests & weeds. The Peanut contains phosphorus, potassium, Calcium, magnesium & micronutrients, etc. To develop well, Peanuts & need warm weather throughout the growing season. They can be grown with a little as ~~250mm~~ 350mm, of water.

# Cultivation of Peanut

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## Nutritional Value

Energy	—	2,385 KJ (570 Kcal)
Carbohydrate	—	21 g
Sugar	—	0.09
Fat	—	48 g
Saturated	—	7 g
mono unsaturated	—	24 g
poly unsaturated	—	16 g
Protein	—	25 g

## Vitamins

Thiamine (B1)
Riboflavin (B2)
Niacin (B3)
Vitamin — B6
Vitamin — C
Vitamin — E

## Minerals

Calcium	— 62 mg
Iron	— 2 mg
$Mg^{++}$	— 184 g
$Mg^{++}$	— 184 mg/52
$Mn^{++}$	— 2.0 mg/9
$K^+$	— 332 mg
Zinc	— 3.3 mg

## Phytochemicals

Peanut contain polyphenols, poly unsaturated fats, phytoestrogens & dietary fibre in it.  
Peanut oil often used in cooking.

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## Uses of Pea nut

- i/ Peanut oil is used to lower cholesterol & prevent heart disease
- ii/ It is also used to decrease appetite & weight loss.
- iii/ Some people use it to help prevent cancer.
- iv/ It plays a vital nutritional role & contains amazing health benefits -
- v/ Promotes fertility because it contains good amount of folic acid
- vi/ Helps Fight Depression. (Tryptophan) an essential amino acid which is important production of serotonin.
- vii/ Ground nut increase your Stamina.
- viii/ Boosts memory power (Vitamin B3).
- ix/ Boosting memory power.
- x/ one fourth cup of Peanuts plays a role in fat & carbohydrate metabolism, Calcium absorption, and blood sugar regulation.
- xi/ Cancer Protection A form of phytoestrogen called beta-sitosterol (~~SIT~~) (SIT) is found in high concentrations.
- xii/ Helps lower cholesterol levels.