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Topic to be presented:- **GROUNDNUT**

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CONTENT

1. Classification
2. Origin and distribution
3. Morphology
4. Climate and soil types
5. Harvesting
6. Water management
7. Fertilizer and nutrient management
8. Economic importance



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CLASSIFICATION

Kingdom: Plantae

Family: Fabaceae

Genus: Arachis

Species: Arachis hypogaea

Vernacular name: Peanut



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ORIGIN AND DISTRIBUTION

- Ground nut is native to Brazil .It is widely distributed throughout in the south America.
- India is the largest producer of ground nut followed by China , USA , Sudan , Senegal , Nigeria , South Africa , Indonesia and Brazil. It also grows in Burma , Argentina and Thailand.



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MORPHOLOGY

- It is a low growing herb 0.3m-0.6m tall which contain compound leaves, green in color and having hairs.

FLOWER

- Flowers are born singly or in cluster of 2-4(vexillary or papillary aestivation).
- 5 fused sepals and 5 papilionaceous corolla having staminal column of Monadelphous stamen with 9+1 arrangement at monocarpellary ovary and self pollination occurs.



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- After fertilization, the ovaries are push downward due to positively geotropic stipe or gynophore which is like peg structure which easily penetrate the soil up to a depth of 2-5 cm. After this the peg loses its geotropic character.

FRUIT

- The fruit is known as pod.
- Here the fruit is an elongated oblong, indehiscent pod containing 2-3 seeds.





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CLIMATE AND SOIL TYPES

- The most favorable climatic conditions for groundnut are a well distributed rainfall of at least 50 centimeter during growing season, abundance of sunshine and relatively warm temperatures.
- Lower temperatures are not suitable for its proper development. Soil Groundnut thrives best in well-drained sandy and sandy loam soils.
- Clay or heavy soils are not suitable for this crop. Groundnut gives good yields in the soil with pH between 6.0-6.5.



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HARVESTING

- It is necessary to dig the pods at the right time for obtaining higher yields of pods and oil.
- Nut takes two months to attain full development.
- Harvesting should be done when good percentage of nuts are fully developed and intact.
- In case of bunch type of groundnut, the plants are harvested by pulling.



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WATER MANAGEMENT

- Being a rainy season crop, groundnut does not require irrigation. However, if dry spell occurs, irrigation may become necessary.
- The field should be well drained.
- In the southern part of the country where groundnut is grown in Rabi season, three to four irrigation are necessary.



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FERTILIZER AND NUTRIENT MANAGEMENT

- Like the other legumes, groundnut too meets the major part of its nitrogen requirement through nitrogen fixation.
- However, an application of kg nitrogen per hectare as a starter dose should be given to meet the nitrogen requirement of the crop in the initial stage in poor fertility soils.





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ECONOMIC IMPORTANCE

- Groundnut, also known as peanut, is a large legume crop of oil, food, and feed grown in over 100 countries.
- Groundnuts and groundnut-based products can be marketed as nutritional foods to combat energy, protein, and micronutrient malnutrition among the needy, as they are highly nutritious.
- Groundnut oil is, because of its high smoking point, an outstanding cooking medium. India, China, Myanmar, and Vietnam make heavy use of groundnut oil for cooking purposes.
- Groundnut, as a legume crop, tends to boost soil quality and fertility by leaving nitrogen and organic matter behind in the soil.



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**Thank
You**