

GROUNDNUT

Production Technology:

- Land** Sandy Soil
- Land Preparation** Cultivate the land 3-4 times and planking before sowing.
- Time of sowing:** Best time for sowing in Barani areas is from 15th March to end of May.
- Sowing Method:** Sowing should be done using Drill keeping row to row distance 45cm and Plant to Plant 15cm.
- Seed Rate:** 70 kg pods (40 Kg/acre grains) is recommended.
- Recommended Varieties:** BARI-2011 and BARI-2016
- Seed Treatment:** Seed treatment is necessary for prevention of seed borne diseases. Proper fungicide at the rate of 3g per kg is applied.
- Fertilizers:** 1/2 bag urea+3.5 bag SSP+1/2 bag potassium sulphate for per acre + 4 Bags Gypsum in July.
- Weed Eradication:** Weeds compete with the main crop for nutrition, space and water. It may cause losses from 15 to 45 %. For eradication of weeds chemical and non-chemical methods (Hoeing, Bar-harrow, Daab Method) are applied in Barani areas.

Groundnut Diseases and their Control

Major Diseases of Groundnut Crop			
S.NO.	DISEASE	DESCRIPTION	CONTROL
1.	Leaf Spot	It is caused by <i>Cercospora Persenta</i> . Round spots are formed on the leaves. This spread through infected seed and from infected plant residues.	Use of healthy seed. Use of fundgicid i.e. Nativo 0.5 g/liter and sprayed after first rainfall of monsoon.
2.	Crown Rot	It is caused by <i>Aspergillers Niger</i> . The lower part of stem became rot and some time underground pods also get infected. The use of infected seed is the main cause of this disease.	Use of healthy seed. Use of fundgicid i.e. Topsin M 2g/kg of seed.
3.	Wilting	It is Caused by <i>Fusarium Sp or Verticillium Alboatrum</i> . Plant start wilting due to its attack. This spread through infected seed and by sowing the crop in infacted crop field.	Use of healthy seed. Use of fundgicid i.e. Topsin M/ Benlate 2g/kg of seed. Crop rotation.
4.	Blight	It is caused by <i>Collecticum demtimum</i> . Light brown spots are formed on the leaves and plant face difficulty to produce its food. This spread through infectd seed	Use of healthy seed. Use of fundgicid i.e. Topsin M/ Benlate 2g/kg of seed.

		and infected plant residues..	
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Major Insect/Pest of Groundnut Crop			
S.NO.	Insect/Pest	DESCRIPTION	CONTROL
1.	Termites	It is found under the soil and forms colonies. It looks like ants. It damages the underground stem and roots mostly in dry season.	Use of Chloropyriphas 40EC 2-1.5 liter/acre Bifenthrin 10 EC 1 liter/acre
2.	Chronogonus	It chews plant parts and reduce plant biomass.	Permethrin 0.5 3kg/acre mixed with 10kg of ash and broadcast in the morning.
3.	Cut worm	Black spots on neck when come out from egg. Mature worm color is dark brown. They cut worm bites the leaves and cut the stems at night.	Carbarayal 5kg/acre mixed with ash and broadcast.

BARI-2011

S. No.	VARIETY ATTRIBUTES	DESCRIPTION/ SALIENT FEATURES
1.1	Days to Maturity	170
1.2	Maturity Duration	155-170
1.3	Sowing Date	Ist. April to 30 th May
1.4	Suitable for	Rainfed area
SEEDLING CHARACTERISTICS		
2.1	Seedling Length	7.5 – 8.7 cm
PLANT CHARACTERISTICS		
3.1	Height (Main Stem)	30 cm (28-32)

3.2	Growth habit	Bunch type
3.3	Canopy spread	Medium
3.4	Branching	Moderate branching
3.5	Branching pattern	Sequential
3.6	Main stem thickness	4.22-4.4mm
LEAF CHARACTERISTICS		
4.1	Color (at flowering)	Light Green
4.2	Size	Medium
4.3	Length	5 - 6 cm
4.4	Width	1.9- 2.1cm
FLOWER CHARACTERISTICS		
5.1	Days to flowering	30 days
5.2	Color	Yellow
5.3	Flowering period	30 -90 days
POD CHARACTERISTICS		
6.1	Color	Light brown
6.2	Size (20 pod length)	69.2 (65.4 – 75.1) cm
6.3	No. of seeds/pod	2.2 seeds/pod
6.4	Pods/plant	50 (25-88) 30-40% 3seeded pods
6.5	Potential pod yield	6300 Kg/ha
SEED (KERNEL)		

7.1	Size	Medium
7.2	Length	1.60 cm
7.3	Thickness	0.70 cm
7.4	100-Seed weight	55 – 60 (g)
7.5	Shelling percentage	69.0 %
7.6	Oil contents	50%
7.7	Protein contents	27.3%

BARI-2016

S. No.	VARIETY ATTRIBUTES	DESCRIPTION/ SALIENT FEATURES
1.1	Days to Maturity	165
1.2	Maturity Duration	155-170
1.3	Sowing Date	Ist. April to 15 th May
1.4	Suitable for	Rainfed area
SEEDLING CHARACTERISTICS		
2.1	Seedling Length	7.0 - 7.8 cm
PLANT CHARACTERISTICS		
3.1	Height (Main Stem)	54 cm (40-65)
3.2	Growth habit	Semi spreading type
3.3	Canopy spread	Medium
3.4	Branching	Moderate branching

3.5	Branching pattern	Sequential
3.6	Main stem thickness	4.25 (4-5.0) mm
LEAF CHARACTERISTICS		
4.1	Color (at flowering)	Dark Green
4.2	Size	Medium
4.3	Length	4 - 6 cm
4.4	Width	2.4 - 3.3 cm
FLOWER CHARACTERISTICS		
5.1	Days to flowering	32 days
5.2	Color	Yellow
5.3	Flowering period	30 - 125 days
POD CHARACTERISTICS		
6.1	Color	Light brown
6.2	Size (20 pod length)	56.7 (55 - 62) cm
6.3	Shape	Long (2-3 seeded pods)
6.4	No. of seeds/pod	2.2 seeds/pod
6.5	Pods/plant	51 (25-88) 30-40% 3seeded pods
6.6	Potential pod yield	4023Kg/ha
SEED (KERNEL)		
7.1	Size	Medium
7.2	Length	1.65 (1.50-1.90) cm

7.3	Thickness	0.80 (0.80-1.00) cm
7.4	100-Seed weight	56 – 62 (g)
7.5	Shelling percentage	65.8 % (63.4 - 70.0%)
7.6	Oil contents	52%
7.7	Protein contents	28%

10 Year Area/Production/Yield Statistics of Punjab

Year	Area (000 ha)	Production (000 tonnes)	Yield kg/ha
2005-06	81.5	49.9	610
2006-07	83.2	57.6	692
2007-08	85.2	67.4	791
2008-09	82.8	69.0	833
2009-10	78.1	38.6	494
2010-11	72.8	51.6	709
2011-12	87.8	77.4	882
2012-13	74.4	71.7	964
2013-14	86.1	90.0	1045
2014-15	89.2	76.8	861
2015-16	84.0	80.5	768