

ISABGOL



Plant Profile

Family	: Plantaginaceae
English name	: Blond psyllium , Spogel seeds
Indian name	: Snigdhajah, Snigdhajirakah (Sanskrit) Isabgol, Isabgul (Hindi) Iskol,Isphogol (Tamil)
Species	: <i>Plantago ovata</i> <i>P. psyllium</i>
Distribution	: India, West Asia, Pakistan, Persia, Mexico, Mediterranean Regions

- India is the largest producer and exporter of this crop in the world.
- It is grown as a cash crop in Gujarat, Punjab and Uttar Pradesh. Experimental cultivation of Bangalore has shown that this crop comes up well and gives yield comparable to the traditional areas of Gujarat.

MEDICINAL PROPERTIES AND USES

- The seed husk is used to cure inflammation of the mucus membrane of gastrointestinal and genito-urinary tracts, chronic constipation, dysentery, duodenal ulcers, gonorrhoea and piles.
- It is also used in calico printing, setting lotions and food industry.

PRODUCTION TECHNOLOGY

SOIL

- Comes up well even on marginal lands.
- Sandy loam to loamy soils which are well drained and with pH between 7-8 are ideal to raise this crop.

CLIMATE

- It requires a cool climate with dry sunny weather during maturity.
- Even a mild dew, cloudy weather or light showers cause seed shedding.
- Sowing should be done to eliminate the monsoon period from coinciding with maturity of the seed.

VARIETIES

- Gujarat –1
- Gujarat-2
- TS-1-10
- EC-124345
- Niharika,
- Haryana Isabgol –5
- Jawahar Isabgol-4

INPUTS

Sl.No.	Materials		Per acre	Per hectare
1.	Seeds (kg)		3	8
2.	Farm Yard Manure (t)		6	15
3.	Fertilizers (kg)			
		N	20	50
		P ₂ O ₅	10	25
		K ₂ O	12	30

Note

Apply 50% N at sowing and the remaining 50% after one month.

CULTIVATION

Land preparation and sowing:

- The land is brought to fine tilth and laid out into beds of convenient sizes of irrigation.
- It is preferable to add 15 tonnes of FYM/ha during the preparation of land and mix it well.
- The seeds are sown in rows at 15 cm apart or broadcasted during the month of October. About 3 kg seeds required for one acre.
- After sowing they are covered thinly by raking the soil.

IRRIGATION AND INTERCULTURE

- Immediately after sowing a light irrigation is given.
- Germination starts after 6 to 10 days.
- Second irrigation is given after 3 weeks and third one at the time of formation of spikes.
- Crop needs about 7 –10 irrigation.
- It is given 2-3 hand weddings during the entire growing period to control the weeds.

PLANT PROTECTION

Major insect	:White grub.
Major diseases	:Powdery mildew; downy mildew and rhizoctonia wilt.

Schedule

1. Application of 5% Aldrin or Lindane at 25 kg per hectare at the time of last ploughing during the preparation of land is effective in protecting the crop against white grubs.
2. To control powdery mildew, spray the crop with 0.2 per cent wettable sulphur at 15 days interval two or three times.
3. Spray Bavistin at 0.1 per cent to control downy mildew immediately after the appearance of the disease and repeat the spray 15 days later.
4. Seed treatment with Captan 5 g/kg of seed followed by drenching the soil and spraying the plants with 0.2 per cent Captan solution and repeating the same a week after first application controls the spread of rhizoctonia wilt.

HARVESTING AND YIELD

- It is a **4 to 5 months duration crop**.
- The yellowing of the lower leaves and change in the colour of spikes to brown indicate the maturity, which is confirmed by pressing the spike between the two fingers when mature seeds come out.

- The crop is **harvested close to the ground in the early morning hours** to avoid seed shattering.
- It is stacked for 1 to 2 days and then trampled by bullocks, winnowed and the seed is separated and collected.
- Seeds are processed through a series of grinding mills to separate the husk. About 30 per cent husk by weight is thus recovered.
- A good crop may yield about **800-1000 kg of seeds per hectare**.



Isabgol Seeds



Isabgol Seed Husk powder