

**Harvesting:** Blackgram/greengram should be harvested when most of the pods turn black. Over maturity may result in shattering of grains. Harvested crop should be sufficiently dried and then threshed. Threshing can be done either manually or under the feet of bullocks.

**Crop rotation :**

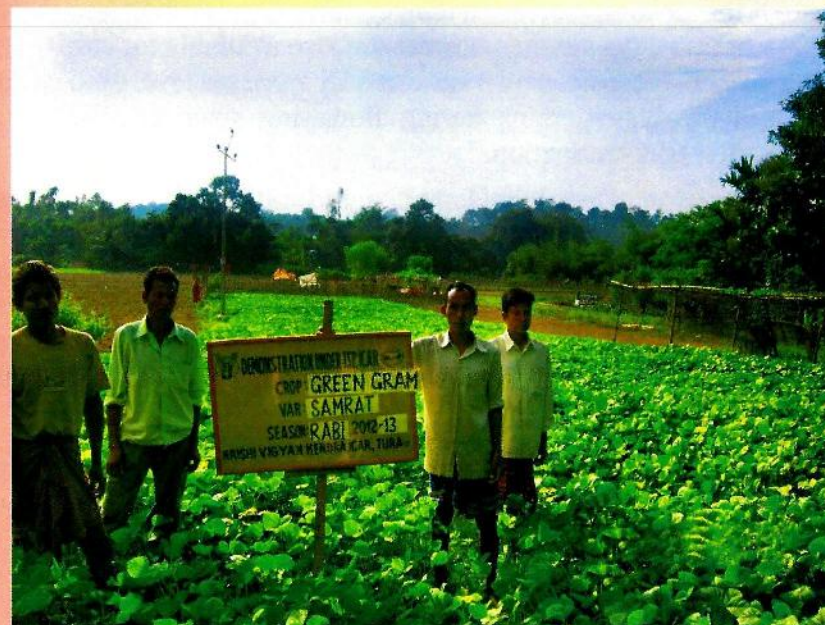
1. Maize (cobs)-Pea-Black/Green gram
2. Rice-Rice- Black/ Green gram
3. Rice- Vegetable- Black/ Green gram
4. Rice-Mustard-Black gram



*Published by:*

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# CULTIVATION OF BLACK GRAM AND GREEN GRAM



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Year of Publication:2013



Black gram or urd bean and Green gram or mung bean are grown as sole crop, mixed crop, catch crop or sequential crop under rainfed or semi irrigated condition in kharif and spring/summer season. It is mainly consumed as dal, whole or splitted, husked or unhusked. Black gram is also an integral ingredient of famous South Indian preparations like Dosa, Idli, Vada etc. Black gram is highly nutritive and contains high proportion of digestible protein with many essential amino acids, minerals and vitamins. Black gram/green gram are tropical crop and it requires hot and humid climate. It is able to tolerate high temperature. As such these are short day plant, but now-a-days neutral varieties are also available for cultivation in summer season. It can be grown successfully from sea level upto elevation of 1800 metre. Heavy rains during flowering stage are harmful and adversely affect the production.

**Field preparation :** Deep loam light textured soil with pH 6.5- 7.5 is ideal. Drainage should be good. One deep ploughing followed by 2-3 harrowing and one planking optimally prepares the land. For spring/ summer crop, soil moisture at the time of sowing is very critical. In the absence of rain, sowing should only be done after irrigation. For kharif crop, land needs to be leveled properly and care should be taken to provide adequate drainage.

#### Variety :

#### Black gram :

Variety	Duration (days)	Yield (q/ha)
Pant -U -19	75 -80	12 -13
T-9	75 -80	8 -10
Azad -urd -1	75 -80	10 -12
PDU -1	70 -80	12 -13
KU -300	65 -70	11 -12
Kalindi	55 -60	12 -15

#### Green gram :

Variety	Duration(days)	Yield (q/ha)
K -851	70 -80	10 -15
PDM -11	65 -75	10 -15
Pant M -4	75 -80	10 -12
Samrat	55 -60	12 -15
Pusa Vishal	60 -65	10 -12

#### Seed Rate :

Spring/summer: 20 -25 kg/ha Kharif/post kharif: 12-15 kg/ha.

#### Spacing :

Spring : 20-25cm x 5-8cm

Kharif: 30-35cm x 10 cm

#### Sowing time :

Sowing should not be delayed beyond 25<sup>th</sup> March during spring and sowing may be completed by 15<sup>th</sup> July during kharif. However, sowing in the early part of kharif should be avoided due to water stagnation at early seedling stage which may reduce the plant population drastically. Moreover, when crop is sown in early kharif there may be rain during harvesting time and the same will be caused of heavy grain loss because of pod shattering in the field. Sowing in 15th August to 15th Sept has been found ideal in this region.

**Fertilizer management :** Being a leguminous crop, Black gram/green gram requires a starter dose of 20 kg nitrogen/ha (Urea 5-6 kg/bigha). In addition to nitrogen, 40 kg phosphorous(SSP-33 kg/bigha), 20kg Potash (MOP 4-5 kg/bigha) and 20 kg Sulphur/ha (2.5 kg/bigha) should be applied to realize the full potential of high yielding varieties.

**Water management :** In North Eastern Region, irrigation is not required during kharif and post kharif cultivation. However, soil moisture availability at sowing, 25 days after sowing and pod filling stage is critical and should be maintained at optimal level. During spring, 4-5 irrigation at 15 days interval may be essential.

**Weed control :** The crop faces severe competition from weed during first 4-5 week after seeding. Weeds can be effectively controlled with good seed bed preparation, 1-2 intercultural operations by wheel hoe or hand weeding during 3-5 weeks after sowing. Application of Pendimethalin 30 EC or Alachlor 50 EC @ 3 litre/800 litre water/ha within 2 days after sowing may control broadleaved weeds. A combination of application of herbicide followed by one hand weeding and hoeing is most effective.