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SCIENTIFIC CULTIVATION OF **BLACK GRAM**



Krishi Vigyan Kendra
Lohit District
Arunachal Pradesh

Black Gram

Blackgram is one of the most important pulse crop of India. The grains (Whole or split) is used as Dal or made into flour. Various preparations are made from its flour eg. Papad, barian, dosa, vada etc.

Varieties:

Varieties	Duration	Grain yield (q/ha)
T 9	80-90	10-12
T 27	80-90	10-12
Pant U 19	80-95	10-12
122	80-90	10-12
Saonia mah	70-80	10-12
KU 301	80-90	13-15

Sowing Time

Mid August to Mid September

Soil Type

Black gram can be grown on a wide range of soils, but sandy loam soil is most preferable.

Land Preparation

The land is to be ploughed 2-3 times followed by levelling. The stubbles are to be removed. Surface drains should be provided to facilitate quick removal of excess water from the field.

Manures and Fertilizers

Compost or FYM @ 1t/ha or 1.3q/bigha should be applied.

NUTRIENT	Requirement (kg/ha)	Form	Kg/ha	Kg/bigha
N	15	Urea	31	4
P ₂ O ₅	35	SSP	220	30
K ₂ O	0	MOP	-	-

Seed Inoculation

For inoculating seeds with rhizobium, cultures of either Shillongani, Ahatguri, Kamalabari or any other suitable strains may be used. Seeds should be inoculated with 150 g of culture/3-4 kg of seeds.

Seed Rate

25.0 kg/ha for broadcasting, 20.0 kg/ha for line sowing.

Spacing

30 X 10 cm

Intercultural operation

One weeding at 20-25 days after sowing is to be done.

Harvesting

Harvesting can be started when 75% of the pods mature indicated by the full darkish pods which are brittle and breaks on slight pressure.

Protection against Storage Pests

Properly dried black gram seeds should be mixed thoroughly with black pepper seed powder @ 3g/kg of seed, against bruchid infestation during storage. Treated seeds should be kept in polybags with outer covering of gunny bags.

Integrated pest management in black gram

The important insect pests of black gram are jassids, whitefly, stemfly, hairy caterpillar and thrips. Important disease are yellow mosaic virus, Cercospora leaf spot, powdery mildew and Macrophomina blight.

Cultural practices

Deep ploughing, early sowing and timely irrigation are helpful for good crop health. The resistant varieties to yellow mosaic virus are Pant U 30, UG 218, PDU 1 and WBU 108 in blackgram. The resistant varieties to powdery is LBG 17 in blackgram.

Mechanical practices

Hairy caterpillars have defined egg-laying pattern in masses. The first stage larvae remain restricted to leaves of plants where eggs are laid. Collect and destroy them.

Chemical practices

For control of thrips, stem-fly, assids and whitefly apply Phorate or Carbofuran granules in soil before sowing @ 1 kg a. i./ha. It will also help to reduce yellow vein mosaic.

Prepared by	Mr. Debasish Borah <i>Subject Matter Specialist (Agronomy)</i> Miss Madhumita Sonowal <i>Subject Matter Specialist (Plant Protection)</i>
Published by	Programme Coordinator KVK-Lohit District Under NRC on YaK (ICAR) Dirang, West Kameng District, Arunachal Pradesh Phone no: 03806 200100 & 222381.
Design and layout	Mr. Shyam Narayan Prasad Md. Ziaur Rahman