

Crop 14
Blackgram
Vigna mungo

- *V. mungo*,
 - syn: *Phaseolus mungo*, *Azuki mungo*,
- Urd bean
- Another short duration pulse crop
 - Grown in many parts of India
 - It is a mixed crop, catch crop, also sole crop
 - Sole crop after rice,
 - Sole crop before other seasonal crop
 - Like greengram rich in protein (25-26%)
- It is a crop of Indian origin
 - Later spread to other countries
 - Cultivated and consumed mostly where it is produced
- Grown in India, Pak, Sri-Lanka, Myanmar
 - Also in some other countries of East Asia, Africa & America

Area production, productivity in India

Zone	State	Million ha	Million t	t / ha
North	UP	0.28	0.12	0.44
West	Maharashtra	0.51	0.23	0.46
	MP	0.51	0.18	0.34
	Rajasthan	0.15	0.06	0.42
	Gujarat	0.01	0.06	0.51
South	AP	0.53	0.28	0.54
	TN	0.34	0.14	0.40
	Karnataka	0.13	0.10	0.77
East	Orissa	0.50	0.32	0.64
All India		3.30	1.60	0.49

- Climatic requirement
 - Tropical crop
 - Tolerates high temp
 - Also cultivated in summer season
 - Short day plant to day neutral cultivars available
 - Optimum temp between 25 & 35°C
 - It can tolerate 42°C
- Plant
 - Like greengram, short, erect
 - Flowers are borne in clusters of 5-6 on a short hairy peduncle in auxiliary racemes

- Pods are short, brown black in color, hairy with stout hooked beak
 - 6-10 seeds
 - Weight 40-50mg (40g/1000grain)
- Varieties for TN
 - T9 - 65-70d
 - CO 4 - 70d
 - CO 5 - 70-75d
 - KM 2 - 60-65d
 - VBN 1 – 60-65
 - ADT 3 – 70-75d
 - ADT 5 – 65 d
- Soil, seed bed preparation
 - As that of greengram
- Season
 - Warm weather with irrigation
 - Sowing during winter faces low temp
- Seed rate
 - 20 to 25 kg /ha
- Seed treatment
- Spacing &
- Method of sowing
- Manuring and
- Weeding as that of greengram
- Irrigation
 - As GG but
 - IW / CPE ratio of 0.6 to 0.9 in summer was found good
- Cropping systems
 - Intercropped with PP, Sorghum, maize, pearl millet, oilseeds
 - Sequential cropping
 - Rice-rice-blackgram
 - Rice – wheat – blackgram
 - Blackgram – barley
 - Blackgram – wheat
 - Blackgram – rice - groundnut
- Harvest
 - As Greengram
 - But staggered harvesting not a prerequisite since, not a shattering type
 - Second flesh is possible in this crop
 - Varieties should be short statured
 - For this add additional fertilizer at flowering and give two more irrigation
 - Growth is extended by 15 days
 - Grain yield enhanced
 - When pods turn black and hard entire plant may be uprooted and kept upside down for few days

- After drying & volume reduced transport to threshing floor dry and thresh
- Dry to 8-10% moisture and store