

Research recommendations/Achievements

- 1) The farmers of the South Gujarat Agro- climatic Zone (AES-V) are advised to grow *Rabi* sorghum GJ-36 by fertilizing the crop with 80 kg N ha⁻¹ through application of P₂O₅ @ 20 kg ha⁻¹ had increased the yield; it was not found economical. (Year-1996)
- 2) The farmers of the South Gujarat Agro- climatic Zone (AES-V) are advised to grow *Rabi* sorghum GJ-36 by keeping 60 cm distance between rows and 10-12 cm between the plants. (Year-1996)
- 3) The farmers of the South Gujarat Agro-Climatic Zone (AES-V) should sow the sorghum seeds in the moist zone for raising *rabi* crops. (Year 1996)
- 4) The farmers of AES-V of South Gujarat Agro- Climatic Zone II growing *kharif* cotton on black soil are advised to open 22.5 cm deep furrow after either four or two rows of cotton sown at a row spacing of 120 cm. this results in 83% more income than flat bed sowing. (Year-2005)
- 5) The farmers of *bara* tract of Narmada command growing cotton G.Cot Hy-8 are advised to apply either FYM @ 10 t ha⁻¹ or Gypsum @ 6 t ha⁻¹ or Pressmud @ 6 t ha⁻¹ for achieving higher yield and net profit along with improvement in soil properties. (Year-2006)
- 6) The farmers of *bara* tract Narmada command with limited water availability growing castor during late *kharif* are advice to irrigate in alternate furrow and mulch their crop with black plastic (50 µ) for realizing 51 and 21 % more yield and net profit, respectively than control. (Year- 2009)
- 7) Under limited supply of moisture in the *bara* tract of Narmada command area, farmers growing Gram (GG-2) are advice to apply one irrigation at branching stage get 60 % more seed yield. (Year- 2009)
- 8) Farmers of South Gujarat Rainfall Zone-II (AES-V), growing *grain* sorghum var. BP-53 under conserved moisture during *rabi* season, are advised to adopt Paired row sole sorghum (75-45 cm x 20 cm) + inter-crop of Green gram var. Co-4 for achieving higher grain equivalent yield and economic returns. (Year-2015)
- 9) Farmers of South Gujarat Zone-II (AES-V) growing *rabi* Black moong var. GBM-1 under conserved moisture are advised to apply 1 tonne vermicompost/ha + 50% of recommended dose of fertilizer (10:20:0 kg N:P₂O₅:K₂O/ha) for achieving higher seed yield and economic returns. (Year 2017)
- 10) Farmers of Bara track of south Gujarat rainfall zone-II, growing pigeon pea cv. GT 102 during *Rabi* season under conserved soil moisture condition are advised to sow the crop at 60 cm x 30 cm spacing and to apply recommended dose of fertilizers i.e. 20:40:00 N:P₂O₅:K₂O kg/ha alongwith 1 t/ha vermicompost + seed treatment by *Rhizobium* and PSB for getting higher yield and net return. (Year 2018)

Variety released

GBM-1 variety of black moong was released for *bara* tract of south Gujarat Zone II in the year 2008 in collaboration with Associate Research Scientist (pulses), Navsari Agricultural University, Navsari.

Seed production during 2017-18

Sr. no.	Crop	Variety	Production (kg)
1	Black moong	GBM-1	445
2	Greengram	Co-4	650
3	Chick pea	GG-2	560
4	Chick pea	GJG-5	550
5	Chick pea	PKV-2	110
6	Pigeon pea	Vaishali	1200
7	Sorghum	BP-53	156
8	Wheat	GW-496	1180
9	Papdi	NPS-1	150
10	Val	Guj.Val-2	271