

Dryland production technology increase Rabi jowar yield under drought situation in Osmanabad district.

Krishi Vigyan Kendra, Tuljapur

In Osmanabad district kallamb tashil is well known for area and production of rabi sorghum under dryland condition but the productivity is still very low upto 7-8 qtls/ha. The major problems are due to sowing of local varieties, no seed treatment of insecticides, fungicides and biofertilizers. After discussion with the farmers major problem are attack of shootfly, stem borer, whip smut and grain smut, high density planting and low rainfall decreases the yield of the rabi sorghum. Due to these problems krishi vigyan Kendra, Tuljapur has selected village Gour Tq. Kallamb Dist.Osmanabad under Rashtriya Krishi Vikas Yojna project entitled "Transfer of Technology developed by VNMKV, Parbhani" for demonstrations on dryland production technology in Rabi jowar in year 2015-16 where average rainfall 350 mm was received. Under these situation 50 farmers were selected for dryland rabi jowar production technology demonstration. The benefaciries were provided with seed of Var. Parbhani Moti 4 kg, seed treatment material like Imidachlopropid, 300 mesh Sulphur, biofertilizer like Azotobacter and PSB and training was given related to package of practice in dryland rabi production technology. In which farmers were advised to used improved variety, seed treatment before sowing, application of RDF @ 40:20:20 NPK Kg/ ha, advised to maintain plant population by keeping row to row spacing at 45 cms. and further two hoeings at interval of 15 days after sowing which is equal to one irrigation and advised specially for one foliar spraying of 19:19:19 NPK liquid fertilizer @ of 50 gms in 10 lit. of water after one month of sowing.

After training farmers started sowing at first fortnight of October, 2015 as per advised in training and carried out whole package of practice up to harvest. Farmers in field day programme realized the effect of seed treatment of insecticide of Imidachlopropid where incidence of shoot fly and stem borer was reduced as compare with non-seed treatment plot and seed treatment of fungicide like 300 mesh Sulphur also reduced the problem of whip smut, grain smut and effect of biofertilizers also showed good germination and growth of demonstration plot. Due to hoeing in jowar and one foliar spraying of 19:19:19 NPK liquid fertilizer @ of 50 gms in 10 lit. of water after one month of sowing has shown sudden increase in height of plot and cob size was also good under dryland situation where there was increased in yield up 22.22 %. Where under dryland condition average yield was increase from 9 qtls. to 11 qtls/ ha. and some farmers also harvested yield up to 12-14 qtls./ ha. by adopating dryland technologies developed by VNMKV, Parbhani due use of



Seed and critical distribution to farmers at village Tq. Kallamb



Demonstration plot at growth stage.



Training on pest and disease management on Rabi Sorghum.



Demonstration plot at grain formation stage.



Field day dryland production technology in Rabi sorghum



Visit to demonstration plot at grain formation stage.