

Improved sorghum cultivation makes a difference

AICRP-Sorghum, Rahuri, Maharashtra

Shri Suresh Sarjerao Tambe, Bherdapur village, Taluka Shrirampur, District Ahmednagar of Maharashtra. He is a graduate of Art faculty. He was growing sorghum since last decade. The annual rainfall of this area is 550-570 mm. The climate is hot and dry. The soil types in this village are shallow to deep black. The productivity of sorghum was low due to lack of awareness of improved varieties and technology. He is a member of Farmers-Scientist club of Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri. After joining the Farmers-Scientist club, the information on sorghum cultivation and the technologies developed by the MPKV were given to the sorghum farmers. The farmer developed interest to adopt improved sorghum varieties and technology through Farmers-Scientist Club. Initially, he was growing sorghum with traditional farming practices.

The MPKV had demonstrated the high yielding sorghum varieties and production technologies through All India Coordinated Sorghum Improvement Project, Rahuri. The varieties were: Phule Anuradha (for shallow soils), Phule Chitra and Phule Mauli (for medium soils), Phule Vasudha, Phule Yashoda (for deep soils) and Phule Revati (for deep soils under irrigated situation). Shri Suresh Tambe sown sorghum varieties on the basis of his soil type and followed technologies of sorghum cultivation. During 2008-09, he cultivated chickpea and pulse crops. During the year 2009-10, he had sown sorghum in the same soil during *rabi* season. During the kharif season, He prepared bunds around the plot and beds of 10 x 20 m size to conserve *kharif* rain water. He had sown the crop during 15 September -15 October with seed rate of 10-12 kg /ha at 45 cm row to row and 15 cm plant to plant distance. Seeds treatment was done with Sulphur, Thiamethoxam, Azotobactor and Trichoderma. Thinning was done at 20-25 days after sowing by maintaining 1.35 to 1.45 lakh plant population per ha. Fertilizers were applied @10 tonns of farm yard manure /ha before sowing and 60 kg N: 30 kg P at the time of sowing. First hoeing was done at three weeks after sowing, second at 5 weeks after sowing and third at 8 weeks after sowing. Two weeding were also done. Since 2006, he started growing sorghum crop with improved varieties and technology. He observed significant increase in yield and quality of grains and also fodder (Table below). He used to get yield of sorghum grains up to 0.4-0.5 t /ha from the local varieties and traditional practices. He was happy with improved varieties due to 1.6-4.0 t /ha grain and 4.2-8.9 t /ha fodder yield. This was the significant benefits realized by using latest sorghum technologies.

Variety-wise yield performance of the farmer's sorghum trial

Sl. No.	Variety	Soil type	Duration (Days)	Grain (t /ha)	Fodder (t /ha)
1	Phule Vasudha	Deep	120-130	3.20	7.20
2	Phule Anuradha	Shallow	105-110	1.60	4.20
3	PKV Kranti	Deep	120-130	2.80	6.80
4	CSV 18R	Deep	120-130	2.70	6.50
5	Phule Revati	Deep	120-130	4.00	8.90
6	CSV 22R	Deep	120-130	3.00	7.00
7	Local	Deep	120-135	0.56	1.20



A view of the field demonstration

timely guidance from the scientists of the MPKV, Rahuri, Marathwada Agricultural University, Parbhani and Krishi Vidnyan Kendra, Babhaleshwar, Maharashtra. The Department of Agriculture, Maharashtra also provided incentives to the farmer. The farmers were exposed to improved cultivation of sorghum through *Kisan Melas* and farm visits. The farmers purchased fertilizers and pesticides from private agencies viz., Agro-Service Centres and Co-operative Societies, etc.