

Superior field performance of high yielding sorghum variety CSV 22

AICRP-Sorghum, Bijapur, Karnataka

The All India Coordinated Sorghum Improvement Project (AICRP-SORGHUM), Bijapur centre demonstrated newly developed high yielding varieties viz., DSV 4, DSV 5, CSV 22R, Phule Yashoda (CSV 216R) and CSV 18R, along with popular varieties like, M 35-1 and Muguti during Krishimela organized in the rabi season every year. One of the farmers, Shri Anand Patil doubted that the improved varieties may not perform equally well in the farmer's field compared to the demonstration plots. To convince him, a frontline demonstration on sorghum was allotted to him. This was the turning point for the farmer to take interest in cultivation of rabi sorghum with improved variety. His village, Narsalagi is about 50 km from the head quarters of RARS, Bijapur and located in the Basavana Bagewadi tehsil of Bijapur district. The soils of that village are medium to deep black. The average annual rainfall ranges between 550 and 600 mm. Rabi crops such as, sorghum and chickpea were grown under receding soil moisture condition. Farmers of this village, grow local varieties of sorghum (Maldandi derivatives) with traditional cultivation practices. However, as the yielding ability of local varieties of this region was less, the income obtained was also low. Shri Patil has a small family of three members and had 8.4 hectares of land. Shri Patil had an experience of a decade in sorghum cultivation. This crop is indispensable for him since he had 12 farm animals. He was given inputs- seeds of variety CSV 22 and the recommended dose of fertilizers to grow the crop in one hectare area. He was advised to grow a local variety along with CSV 22, in the remaining portion of the land (2.0 ha), for comparison.



The improved variety CSV 22 recorded higher grain yield of 1.4 t/ha and fodder yield of 3.0 t/ha when compared to local variety (1.1 t/ha and 2.2 t/ha, respectively). By adopting an improved variety with recommended dose of fertilizers, there was 27 per cent increase in yield. Net income of Rs. 11144 per hectare was realized from CSV 22, whereas from the local variety it was only Rs. 7964 per ha. Thus, there was substantial increase in net income (Rs.3000 per hectare) by using the new variety with benefit cost ratio of 2.63:1. The farmer opined that maintenance of their animals throughout the year also become easy due to high fodder yield. Many farmers in and around the village visited the field (demonstration plot) of Shri Patil. They saw the vigorous crop growth, big panicle size and other characters of new variety. The majority of farmers thereby liked the new variety and were convinced to adopt it.