

## State Award – Gujarat

## AA: Improved Drought Tolerant Dual Purpose Sorghum Variety.

Himatbhai Virjibhai Lakkad Bhavnagar, Gujarat Scout: Direct

Himmatbhai Virjibhai Lakkad (57) is a progressive farmer growing local sorghum, groundnut, cotton, onion, and wheat crop varieties and working for varietal improvement.

In 1995, he identified one unique sorghum plant among the local sorghum variety having bigger bold grains, good lustre, good plant vigour, green leaf midrib and free from insect and disease incidence. During 1996 – 1999, the selected plant seeds were cultivated, and plants with evident phenotypical desirable traits were selected for propagation. By 2000, the variety was stabilized for its dual-purpose characteristics, and he named it "AA". He has been distributing the seeds to the other farmers, and the variety is very popular in the region.

AA is a dual-purpose sorghum popular among farmers equally for grain and fodder. It is a high-yielding variety suitable for both Rabi and Kharif seasons. It takes 100-110 days for harvest maturity, is high yielding (grain yield:



25-35 q/ha, green fodder yield: 220-250 q/ha & dry fodder yield: 110-120 q/ha) and suitable for growing throughout the year. The fodder is sweet, and the variety is tolerant to insects, pests, diseases and is suitable for drought conditions also.

During 2018-2019, the validation trials were carried out at S. D. Agricultural University, Sardarkrushinagar, Gujarat. The variety Sorghum AA recorded a 45% higher grain yield and 9.84% high dry fodder yield over the checks. Compared to the checks, the variety was early maturing in Rabi & Kharif seasons at all the locations tested. The protein content in the flour ranged between 10.5 to 12% and was recommended for dual-purpose use with good performance.

In the field trials in Jammu and Maharashtra, the variety received good feedback for dualpurpose use from the farmers. The innovator has disseminated seeds in Gujarat. The application for registration under PPV&FR Act, 2001 has been submitted by NIF.

