



### National Award – Third

#### Sonali-45: Improved Variety of Cauliflower.

Rajmani Singh and Mukesh Kumar Singh

Vaishali, Bihar

Scout: Direct



Rajmani Singh (45) and Mukesh Kumar (39) are well-recognized progressive farmers in their district, renowned for their efforts to conserve and propagate traditional cultivars of cauliflower and brinjal.

The Chakwara area in Vaishali is the hotspot for traditional varieties of cauliflower, and farmers have been cultivating traditional varieties for decades. The Singh brothers have been growing cauliflower since their childhood. They developed Sonali-45 from a traditional variety of cauliflower Kuvari through selection and seed propagation methods. In 1995, they selected plants with good quality curd with dwarf height, early maturity and higher curd weight and harvested them for seeds. During 1996 – 1999, they repeated the selection process and selectively harvested and multiplied the seeds. By 2000, the variety was stabilized for the desired traits-early maturity, high yield and good curd quality. After that, they multiplied around 30 kg seeds of Sonali-45 and distributed them to fellow farmers.

The variety Sonali-45 is an early variety requiring 70-75 days after transplantation for maturity. It produces attractive white-coloured compact curds weighing around 450-500g, and is high yielding (18-20t/ha). The variety is suitable for early sowing also, tolerant to insect pests and diseases and has a good market price.

The validation trials were conducted at Dr Rajendra Prasad Central Agricultural University, Bihar, in 2018. The variety recorded maximum curd yield (18.5 t/ha) and average curd weight (470.4g). Sonali-45 exhibited higher yield and was superior in average curd weight, curd polar diameter, earliness, gross plant weight, and leaf length compared to all checks.

On-farm trials of the variety were conducted in four states - Gujarat, Uttar Pradesh, Bihar and Maharashtra. The variety was found to be most suitable for cultivation in Uttar Pradesh and Bihar for early sowing and maturity. The highest yield of 30.0 t/ha was reported from East Champaran, Bihar. Singh brothers have turned into Agripreneurs, registered a seed company- “Ramayan Seeds”, and sold four-quintal seeds of the variety in Bihar, West Bengal, Jharkhand and Odisha, generating around Rs. 19 lakhs in revenue.

