Government of Telangana

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RKVY SUCCESS STORY

RKVY Project Title: FARM MECHANIZATION AND POST HARVEST MANAGEMENT.

Year of Initiation: 2014-15

Place: AGRICULTURAL RESEARCH STATION, BASANTHAPUR

1. **Success Story title**: Bud chip/Single node technology in Sugarcane
2. **Description of the Technology**:
   - Sugarcane is commercially planted using setts at the rate of 6-8 tonnes/ha amounting to around 10% of total produce.
   - Bud chip technology is new planting technology, In this, nursery raised preferably in small plastic cups/trays and transplanting them in the field proved economically viable than traditional method of planting using two to three bud setts.
3. **Domain Area** : Agriculture – Crop Improvement
4. **Results/Performance along with photographs:**

   - A small volume of tissue and a single root primordium adhering to the bud are enough to ensure germination in sugarcane. It is also stated that where growing conditions are favorable, planting with only one bud did well as seed material.

   - In this technique, single bud nursery is raised and settlings transplanted in the field at wider spacing within the row to facilitate availability of abundant solar radiation and soil aeration that enhances high levels of tillering.

   - Extensive work has been done at ARS Basanthpur using different types of seed cane materials such as bud chip raised seedlings, 1-3 bud setts for crop establishment to determine the effect of the planting material on growth and yield of sugarcane. It was observed that, due to saving in seed material, germination time and high yields, the maximum net returns were obtained with bud chip raised seedlings.



Bud chip nursery Bud chip crop Profusedtillering of bud chip crop

5. Impact:

Treatment of bud chips helps in improving bud sprouting, rooting activity, plant vigor, tillering of bud chip raised seedlings under field conditions. It is a time saving, labour saving, input saving and high yielding technology.