

## Sponsored Government Agencies Sugarcane Research Program

- **Title: Weed management in sugarcane ratoon crop**  
**Conclusions:** Spraying of Metribuzin @1.0 kg a.i./ha as PE + 2,4-D @1.0 kg a.i./ha at 45 DARI is being adopted at VSI farms and at sugar factories.
- **Title: Agronomic evaluation of promising sugarcane genotypes (CoTL1153, Co2000-6 and Co2000-12)**  
**Conclusions:** Genotype Co 2000-12 was found superior over CoTL 1153, Co 2000-6 and two standard checks Co 86032 and CoC671 in respect of cane yield, B:C ratio, CCS tonnes per hectare, millible height and sucrose content when fertilized with 125 % recommended dose of fertilizers.
- **Title: Agronomic performance of elite sugarcane genotypes**  
**Conclusion:** Crop genotype/variety is a key factor in yield increment. Early genotype CoM11084 & Co11001 & in midlate genotype CoM 11085 and Co 11012 resulted higher yield and quality
- **Title: Water and Nutrient Management for Sugarcane Ratoon under water stress condition**  
**Conclusion:** Sugarcane trash mulching practiced by the cane growers in ratoon sugarcane crop, as it is beneficial for increasing organic carbon and crop stability during drought. Application of RD NPK 50% at the time of ratooning by crow bar + 50% at the time of onset of monsoon by crow bar + 25% extra K + Calcium Silicate @ 400 kg/ha at the time of ratooning by crow bar to ratoon sugarcane produced significantly higher cane yield
- **Title: Evaluation of different sett treatment techniques**  
**Conclusion:** The higher tiller count (1.14 lakh/ha) at 120 DAP, maximum cane and seed cane yield (171.17 t/ha and 8.66 Lakh two bud setts/ha.) was registered in seed treated with Moist Hot Air at 54<sup>0</sup>C for 150 min. sett treated with Ethrel (50 ppm) manually and by vacuum pressure technique was found superior for germination.
- **Agronomic performance of elite sugarcane genotypes**  
**Conclusion:** Maximum cane yield (118.48 t/ha) and CCS yield (15.96 t/ha) secured by fertilizing the crop with 125% RDF. In the case of genotypic performance CoSnK 14102 recorded maximum germination (69.25%), whereas, CoSnK 14103 performed better in tillering (1.34 lakh/ha), as well as NMC count (0.97 lakh/ha), While cane yield (155.00 t/ha), CCS yield (18.75 t/ha) was higher in CoN 14073. Whereas, CoT 14367 showed superior juice quality.

## **Sponsored Non-Government Agencies Sugarcane Research Program**

- **Title: Bio efficacy of Algrip 20WP (Metasulfuron Methyl 20% WP) against broad leaved weeds of sugarcane**  
**Conclusions:** Algrip application @ 6 gm a.i./ha. with 0.2% surfactant at 2-4 leaf stage of weeds was found very effective against major broad leaved weeds of sugarcane. Two applications of the same dose can be helpful to increase the yield of sugarcane significantly.
- **Title: The efficacy of Velpar K4 60WP in controlling the weeds and its phytotoxicity in sugarcane**  
**Conclusions:** Velpar K4 60WP @ 1200 gm a.i./ha applied either as pre emergence (5DAP) or at post Emergent (25-30 DAP) was found very effective in controlling the broad leaved weeds and the grasses in sugarcane and increased the yield significantly over untreated.
- **Title: The efficacy of Hexazinone 75 DF/WG against weed flora of sugarcane and its phytotoxicity on Sugarcane**  
**Conclusions:** Hexazinone 75 WG @350 gm a.i./ha. application at 3 DAP and Atrazine 50 WP @ 2000 gm a.i./ha at 3 DAP was found effective against major broad-leaved weeds and the grassy weeds in sugarcane.
- **Title: Effect of '5 Element and Wealth, an organic product from SLAVS on sugarcane productivity**  
**Conclusion:** Application of SLAVS Combi package along with 100 % RDF recorded maximum germination (80.33%), tiller Count (1.55 lakh/ha) at 120 DAP, higher NMC Count (0.95 lakh/ha) at harvest, cane yield (145.90 t/ha) and CCS yield (19.36 t/ha).
- **Evaluation of digital module MyAgriGuru (Mahindra & Mahindra)**  
**Conclusion:** The findings showed that, treatment complete MAG Advisory along with drip irrigation showed higher germination (81.72%), tiller Count (1.30 lakh/ha) at 120 DAP, tiller height (218.55 cm) at 150 DAP, improved growth attributes, higher NMC Count (0.96 lakh/ha) at 360 DAP, cane yield (160.69 t/ha), CCS yield (24.47 t/ha), this trend followed by treatment complete MAG Advisory along with conventional irrigation.