



Dr. Bakshi Ram
Director

19-1/2020 /Tech/51- R&D (TN)

September 05, 2020

GENERAL CIRCULAR - I

Dear Sir/Ma'am,

The **51st Sugarcane Research & Development Workshop of Tamil Nadu & Puducherry** would be held during the second fortnight of October **2020 (Tentative)** to discuss the following topics. The mode of conduct, venue, and exact dates will be informed in due course of time.

- i. Review of action taken on the recommendations of the previous workshop
- ii. Ratoon management in sugarcane
- iii. Enhancing the agronomic performance of Co 11015 variety
- iv. Current varietal position and Performance of new sugarcane varieties
- v. All India Co-ordinated Research Project on Sugarcane, Co-ordinated agronomic experiments/Adaptive Research Trial and SBI-SISMA/SBI-TNCSF Varietal trials
- vi. Sugarcane seed nursery programme

Ponni Sugars (Erode) Ltd., would be hosting the Workshop. You may please prepare the manuscripts of the papers covering these topics as per the guidelines enclosed and send the same to the undersigned by **September 30, 2020**. The guidelines can also be downloaded from <http://sugarcane.icar.gov.in> or <http://caneinfo.icar.gov.in>

As we are planning to bring out the papers presented at the workshop in printed form (*Compendium of Research Articles & Status Papers; ISSN: 0973-8185*), your papers may be prepared and sent to the undersigned **in time**. The papers (**prepared using MS Word 2003**) can be sent by email to sbiextension@yahoo.com.

With best regards,

Yours sincerely,

(BAKSHI RAM)

GUIDELINES FOR PREPARING PAPERS

Topic i: Review of action taken on the recommendations of the previous workshop

Sugar factories/Department of Sugar/Department of Agriculture and research institutions in the region are requested to furnish the details of action taken on the recommendations made in the previous workshop as per the details given hereunder:

S. No	Recommendation/Action point	Action taken
1.	Factories should select suitable intercrops based on local conditions. The crops chosen should be fast-growing, non-competitive with sugarcane and of short duration (less than 90 days).	
2.	Factories should advocate use of green manures as intercrop in problem soils such as saline, alkaline and tannery –affected soils.	
3.	Single bud/single bud settling transplanting must be adopted based on local conditions for obtaining maximum yield.	
4.	Ideally 4.5 feet of row- to- row spacing must be adopted by the factories	
5.	Seedling to seedling space should preferably be 1.5 feet (late planting season) and 2 feet (early planting season)	
6.	Since cane planting under Sub Surface Drip system (SSD) and mechanical cane cultivation are complimentary to each other, all the SSD cane fields must be targeted for mechanized inter-cultural operations and machine harvesting	
7.	Trash burning must be strictly avoided in the machine harvested cane plots as a measure to maintain soil health besides preventing soil compaction due to machine harvesting	
8.	Adequate number of farm machinery and implements like harrows, power tillers, mini-tractors and harvester machines must be built up in the factory command areas to lend timely services to the cane growers through customized service centres at affordable costs.	
9.	The innovative measure adopted by Dharani Sugars & Chemicals Ltd in using nylon nets for unloading the billet cane from the cane trucks is well appreciated and recommended for adoption wherever tipplers are not available for the movement and unloading of machine harvested cane.	
10	BMT results shall be reported by the factories for the varieties Co 0212/CoV93056/Co 06030 in the forthcoming R&D workshops	
11	Most of the factories have reported higher yields for the new varieties at the time of introduction but it was observed that there has been a reduction in yield at later stages. Director, ICAR-SBI had suggested that nursery and other developmental activities taken up by the factories should be focused to revive the original yield levels.	
12	Agronomy and nutrient packages have to be standardized for Co 11015 by the research institutions.	
13	Studies on micro nutrient management in ratoon crop of Co 11015 and INB shall be initiated by the institutions	
14	The red rot incidence in the varieties Co 06022 and Co 06030 is to be closely monitored.	
15	Co 11015, Co 13018, Co 15007 and Co 09004 were found promising in the SBI-	

S. No	Recommendation/Action point	Action taken
	SISMA trials conducted at nine sugar factory areas in the state of Tamil Nadu. Out of these, Co 11015 has already been released for Tamil Nadu and Puducherry. Hence, factories may take necessary steps to multiply this variety.	
16	Factories should provide feedback to ICAR-SBI about the quality of the seed material they have lifted.	

Topic ii: Ratoon management in sugarcane

Percentage of area under ratoons – number of ratoons taken – average cane yield levels obtained from different sugarcane varieties from plant and ratoon crops - Tools used for harvesting Plant crop – mechanical/manual - duration of harvesting – type of trash disposal – Stubble shaving – breaking ridges and gap filling operations for ratoon crop – mechanical/manual & percentage of adoption for both – constraints in adoption – promotional efforts taken up (like demonstrations) to disseminate such ratoon management practices.

Fertilizer application for ratoons – recommended dosage – method and time of application of NPK – extent of adoption in the sugar factory area – constraints in adoption - promotional efforts taken up to spread such technologies. Micro nutrient deficiencies observed in ratoon crop – corrective measures taken. Percentage of incidence of different pests and diseases in the sugar factory area in ratoon crop vis-à-vis Plant crop – extent of adoption of integrated pests and disease management practices in ratoon crop – constraints in adoption and promotional efforts. Target fixed by the factory for ratoon yields in the next three years – plan of action proposed to achieve this target. Cases of successful farmers who had adopted ratoon management effectively.

S.No.	Name of variety	Average Cane Yield (t/ha)				Remarks*
		Plant Crop	Ratoon crop			
			R1	R2	R3	

(* Good ratooner/Moderate ratooner/ Poor ratooner | Multi-ratooning potential)

Topic iii: Enhancing the agronomic performance of Co 11015

Area under Co 11015 in factory area – planting season – land preparation – spacing followed – planting pattern – settling/sett - seed multiplication - planting system (Ridges and furrows/Trench system/Pit method etc.) – weed management practice – earthing-up operations – detrashing – mulching – Intercropping. Soil type – saline/alkali/calcareous/normal – irrigation water (normal vs saline) – Irrigation method (Drip/furrow)– nutrient management – Blanket recommendation vs soil-test based for plant and ratoon –Method of application (Basal/topdressing)– Micro-nutrient management – mode of application of micronutrients (soil application vs foliar spray) – frequency of application. Yields under Plant and ratoon (yield improvement/reduction; cost effectiveness) – provide information on specific management practice followed for the variety. Efforts taken to popularize the variety - perception of farmers about the variety - Constraints in adoption.

Area under Co 11015	:	
Average Plant crop yield (ha.)	:	
Average Ratoon crop yield (ha.)	:	

Topic iv: Current varietal position and Performance of new sugarcane varieties

Varietal position

Sugar factory personnel to provide the following details:

2017-18

S.No	Variety	Area covered	Percentage	Highest yield t/ ha	Yield at the time of introduction (t/ha) (Mention year)	Yield, at present (t/ha)

2018-19

S.No	Variety	Area covered	Percentage	Highest yield t/ ha	Yield at the time of introduction (t/ha) (Mention year)	Yield, at present (t/ha)

2019-20

S.No	Variety	Area covered	Percentage	Highest yield t/ ha	Yield at the time of introduction (t/ha) (Mention year)	Yield, at present (t/ha)

Performance of new sugarcane varieties

Scientists from ICAR-Sugarcane Breeding Institute, Coimbatore & Sugarcane Research Stations of Tamil Nadu Agricultural University would be presenting the characteristics of new sugarcane varieties and their performance in different regions.

Participants may present their observations on the performance of these varieties especially with reference to cane yield (average and highest yield recorded) quality (including SMT and BMT results), performance in different soil types and months of planting, optimum age at harvest and incidence of pest and diseases, tolerance to abiotic constraints like drought, water-logging etc. may also be indicated.

Topic v: All India Co-ordinated Research Project on Sugarcane, Co-ordinated agronomic experiments/Adaptive Research Trial and SBI-SISMA/SBI-TNCSF Varietal trials

The results of AICRP (S) trials, CAE/ART trials and SBI-SISMA/SBI-TNCSF trials conducted during the previous crop season would be presented by the Research Institutions and Sugar mills.

Topic vi: Sugarcane seed nursery programme

Details of three-tier seed nursery programme adopted by the factory to sustain the yield of sugarcane varieties to be provided.

Particulars	Area in hectares		
	Sector I	Sector II	Sector III
Area under primary nursery Variety 1. Variety 2. Variety 3.			
Area under secondary nursery Variety 1. Variety 2. Variety 3.			
Area under commercial nursery Variety 1. Variety 2. Variety 3.			

Breeder seed production programme of ICAR-Sugarcane Breeding Institute and Tamil Nadu Agricultural University would be discussed. Sugar factories may indicate their breeder seed requirements for the ensuing season.

Please note:

Kindly provide the data in tabular form, wherever required. You may include additional information if you feel that this would help in enhancing the purpose of the workshop. Please restrict your paper to the main themes of the workshop only.
