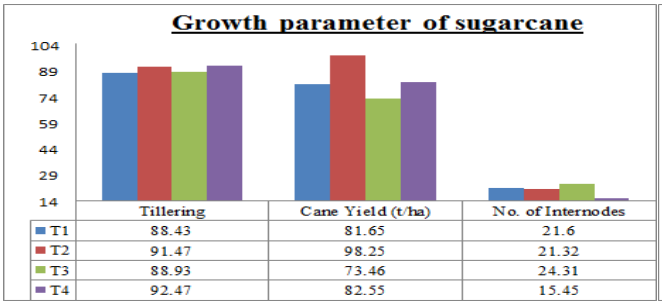
EVALUATION OF "SUGARY" IN SUGARCANE

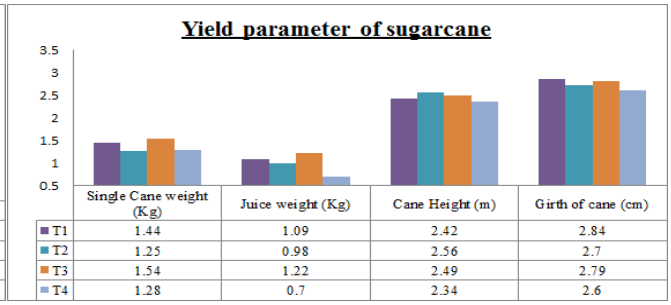
1. Name of Address of: Research Institute — Agricultural Research Station, University of Agricultural Sciences, Dharwad Sankeshwar - 591314
2. Scientific Person : Dr. B. T. Nadagouda, Sugarcane Agronomist, AICRP on Sugarcane ARS, Sankeshwar591314
3. Season /Period : *Kharif* 2015-2016
4. Crop / Variety : Sugarcane / CoSnk 07680
5. Location : ARS, Sankeshwara Tq, Hukkeri, Belgaum (D)
6. Soil Type / Irrigation : Black / Irrigated
7. Experimental Details

Design	No. of Treatment	No. of Replications	Plot Size	Spacing	Date of planting	Date of harvest
RDB	4	4	6.0 m X 6.0 m = 36 m	120 cm per row	28-02-2014	22-12-2015

8. Treatments :
   - T1: Control: Sugarcane crop applied with Recommended Dose of Fertilizer (RDF)
   - T2: RDF plus 3 kg of Sugary per acre applied along with basal fertilizer application
   - T3: RDF plus 3 kg of Sugary per acre applied along with basal fertilizer application and 3 kg of Sugary per acre applied with first top dressing of fertilizer application
   - T4: 75% of RDF plus 3 kg of Sugary per acre applied with basal fertilizer application and 3 kg of Sugary per acre applied with second top dressing of fertilizer application
9. Field evaluationof Sugary :

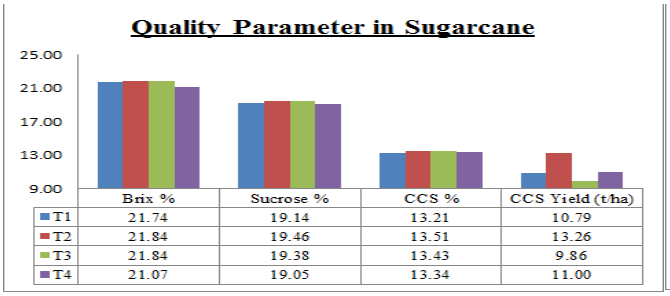


	Tillering	Cane Yield (t/ha)	No. of Internodes
T1	88.43	81.65	21.6
T2	91.47	98.25	21.32
T3	88.93	73.46	24.31
T4	92.47	82.55	15.45

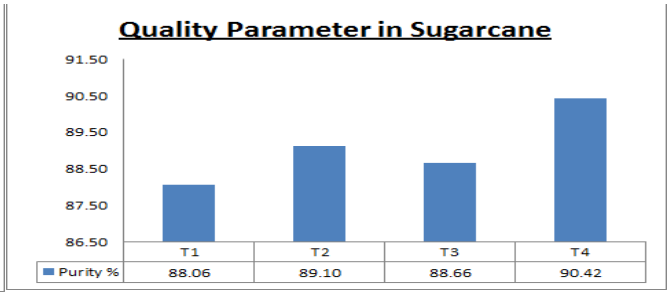


	Single Cane weight (Kg)	Juice weight (Kg)	Cane Height (m)	Girth of cane (cm)
T1	1.44	1.09	2.42	2.84
T2	1.25	0.98	2.56	2.7
T3	1.54	1.22	2.49	2.79
T4	1.28	0.7	2.34	2.6

10. Quality evaluation of Sugary :



	Brix %	Sucrose %	CCS %	CCS Yield (t/ha)
T1	21.74	19.14	13.21	10.79
T2	21.84	19.46	13.51	13.26
T3	21.84	19.38	13.43	9.86
T4	21.07	19.05	13.34	11.00



	T1	T2	T3	T4
Purity %	88.06	89.10	88.66	90.42

11. Conclusion:
    - Application of Sugary @ 3kg per acre as basal along with RDF recorded significantly higher can yield and CCS yield.
    - While applying, basal commercial fertilizer dose and FYM, Sugary @ 3kg per acre can be mixed with FYM and applied to crop could bring in 20 per cent higher yield than using recommended fertilizer alone.