

**UNIVERSITY OF AGRICULTURAL SCIENCES
BENGALURU**



**ALL INDIA CO-ORDINATED RESEARCH PROJECT OF
SUGARCANE**

ANNUAL REPORT

2013-14

Compiled by

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. Sugarcane Entomology (AICRP) 2013-14

1. Title of the Experiment: Evaluation of Zonal Entries / Genotypes for their reaction against Major Insect pests.

2. Objectives: To grade the entries in the Zonal varietal trials for their behavior towards damage by key pests in the area.

3. Experimental details:

- a. Location: ZARS, Mandya b. Situation: Irrigated
 c. No. of Entries: 12 +03 d. Fertilizer (kg/ha) 250:100:125 NPK
 e. Replication: Three f. Plot size: 6M x 6R x 1.2M =43.2 m²

4. Date of planting: 25/01/2013

5. Results:

Table1: Reaction of Sugarcane Genotypes under IVT Early 1st plant trials against Early Shoot Borer and Top Shoot Borer.

Genotype	Incidence of Borers (%)					
	ESB	Infestation Grade	TSB	Infestation Grade	INB	Infestation Grade
Co 10004	9.25	LS	16.25	LS	10.66	LS
Co 10005	7.33	LS	17.75	LS	16.00	LS
Co 10006	10.25	LS	15.00	LS	14.66	LS
Co 10024	6.75	LS	9.25	LS	20.00	LS
Co 10026	8.00	LS	11.50	LS	12.00	LS
Co 10027	11.25	LS	18.25	LS	17.33	LS
CoM 10081	13.50	LS	16.50	LS	12.00	LS
CoM 10082	12.75	LS	13.25	LS	14.66	LS
CoN10071	14.5	LS	19.00	LS	17.33	LS
CoN 10072	9.75	LS	14.25	LS	20.00	LS
CoT 10366	13.0	LS	17.75	LS	9.33	LS
CoT 10367	11.50	LS	10.50	LS	12.00	LS
CoC 671	15.33	MS	16.75	LS	18.66	LS
Co 94008	20.00	MS	20.25	MS	16.00	LS
Co 85004	17.25	MS	24.25	MS	13.33	LS

Experimental details:

- a. Location: ZARS, Mandya b. Situation: Irrigated
 c. No. of Entries: 14+02 d. Fertilizer (kg/ha) 250:100:125 NPK
 e. Replication: Three f. Plot size: 6M x 6R x 1.2M =43.2 m²

2. Date of planting: 25/01/2013

Table2: Reaction of Sugarcane Genotypes under IVT Mid-late 1st plant trials against Early Shoot Borer and Top Shoot Borer.

Genotype	Incidence of Borers (%)					
	ESB	Infestation Grade	TSB	Infestation Grade	INB	Infestation Grade
Co 10015	4.75	LS	17.25	LS	16.00	LS
Co 10017	7.25	LS	16.75	LS	10.66	LS
Co 10031	9.25	LS	10.25	LS	12.00	LS
Co 10033	10.25	LS	18.75	LS	13.33	LS
CoN 10073	6.75	LS	20.0	LS	18.66	LS
CoM 10083	5.25	LS	11.25	LS	10.66	LS
CoM 10084	8.00	LS	19.25	LS	12.00	LS
CoVSI 10121	10.25	LS	9.75	LS	17.33	LS
CoVSI10122	13.25	LS	15.50	LS	21.33	LS
CoT 10368	14.25	LS	14.25	LS	9.33	LS
CoT 10369	12.50	LS	16.25	LS	13.33	LS
PI 100131	16.75	MS	14.50	LS	20.00	MS
PI 10132	14.25	LS	18.25	LS	16.00	LS
Co VC 10061	13.25	LS	17.25	LS	10.66	LS
Co 86032	18.50	MS	21.25	MS	24.00	MS
Co99004	20.00	MS	24.00	MS	16.00	LS

Among the genotypes screened under IVT Early group, all the entries except the standards scored LS Reaction against ESB and TSB. In IVT Midlate group also except PI 10131, Co 86032 and Co 99004 all other genotypes scored LS Reaction against ESB and TSB.

1. Title of the Experiment: Survey and Surveillance of Sugarcane insect pests

2. Objectives: To identify the key insect-pests in the area

3. Experimental details:

a. Location: Mandya district b. Situation: Irrigated

c. Methodology: Survey was conducted once in a month in different sugar factory areas of Mandya district. Data collected on the incidence of different sugarcane pests in the factory areas is pooled and presented briefly in the table given below

4. Results:

Survey and Surveillance of Sugarcane insect pests in Mandya district

Sl. No.	PEST	LEVEL OF INCIDENCE (%)
1	Early Shoot Borer	5.50 – 33.00
2	Top Shoot Borer	10.25 – 25.50
3	Internode Borer	09.50 – 29.25
4	Sugarcane Pyrilla	<0.25 adult or nymph/clump
5	Woolly aphid	Few clumps to one gunta area (40-50% leaf area covered by aphids) affected
6	Sugarcane mite	<10% area was affected by the mite in two fields of Madarahally village
7	Root Grub	34 Instances with larval population of 3-4larvae/clump

