

**Plant Pathology  
Results 2014-15  
Sugarcane Research Station, Buralikson**

**Experiment No. PP 17. Evaluation of Zonal varieties for resistance to red rot.**

The experiment was laid out to find out sources of resistance in sugarcane varieties / genotypes against red rot. For this purpose 21 varieties / genotypes including a local check was raised starting from last week of March, 2014. The canes were inoculated with spores of 10 day old cultures of red rot isolates 'Cf 08' and 'Cf 07'. Inoculation was done by both plug and nodal method during second week of August, 2014. Evaluation of the canes was done 60 days after inoculation. The findings are presented in Table 1.

The disease scoring of the inoculated cane genotypes revealed that no genotype showed resistant reaction to the red rot isolates. Out of the 21 genotypes / varieties CoP11440 and CoSe 11453 showed resistant reaction to CF07 while they were moderately resistant to CF08. Rest of the genotypes showed moderately resistant reaction to both the isolates except CoP 08436 and CoSe11454 which were moderately susceptible to isolate CF08.

**Table 1. Evaluation of sugarcane varieties/genotypes against red rot**

Sl. No.	Variety/ Genotype	Reaction to Red Rot					
		CF 07			CF 08		
		Plug Method	Reaction	Nodal Method	Plug Method	Reaction	Nodal Method
<b>IVT (Early)</b>							
1.	CoP 11436	2.75	MR	R	2.66	MR	R
2.	CoP 11437	2.55	MR	R	2.47	MR	R
3.	CoP 11438	3.20	MR	R	3.00	MR	R
4.	CoSe 11451	3.75	MR	R	3.80	MR	R
<b>AVT (Early) II Plant</b>							
5.	BO 153	3.00	MR	R	3.75	MR	R
6.	CoP 08436	3.65	MR	R	4.25	MS	R
7.	CoP 09452	3.52	MR	R	3.65	MR	R
8.	UP 09453	3.45	MR	R	3.67	MR	R
<b>IVT (Midlate)</b>							
9.	BO 155	3.16	MR	R	3.52	MR	R
10.	CoP 11439	3.42	MR	R	3.20	MR	R
11.	CoP 11440	2.00	R	R	2.14	MR	R
12.	CoSe 11453	2.00	R	R	2.20	MR	R
13.	CoSe 11454	4.00	MR	R	4.10	MS	R
14.	CoSe 11455	3.56	MR	R	3.60	MR	R
15.	CoSe 11456	3.25	MR	R	3.33	MR	R
<b>AVT (Midlate) I Plant</b>							
16.	CoSe 10451	3.75	MR	R	3.80	MR	R
17.	CoSe 10452	3.55	MR	R	3.65	MR	R
18.	CoSe 10453	3.25	MR	R	3.33	MR	R
<b>AVT (Midlate) II Plant</b>							
19.	BO 154	3.70	MR	R	3.77	MR	R
20.	CoP 09437	2.25	MR	R	2.20	MR	R
21.	Akipura	9.00	HS	S	9.00	HS	S



