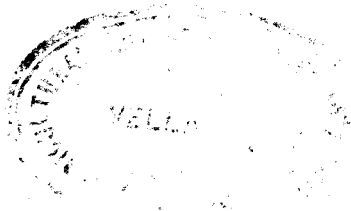


RICE RESEARCH STATION PATTAMBI

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In the protected plots Thimet at 12.5 kg/hect. was applied two times after planting i.e. 7 to 10 days after planting and at 15 days after the 1st application.

40 cultures derived from the following crosses were tried.

- | | |
|-------------------|--------------------|
| 1. IR.8 x Ptb. 21 | 5. IR.8 x W 1251 |
| 2. IR.8 x Ptb. 18 | 6. IR.8 x Siam-29 |
| 3. IR.8 x W 1263 | 7. CR.56-17 x IR.8 |
| 4. IR.8 x W 1257 | 8. CR.56-13 x IR.8 |
| | 9. CR.55-36 x IR.8 |

In general the cultures showing complete resistance to gall midge were very poor yielders. Considering the high yield potentiality, the cultures having less incidence of gall midge were selected. Altogether 27 cultures showing high yield performance combining with less gall midge incidence were finally selected for further trials. They included the following cross combinations.

<u>Sl.No.</u>	<u>Cross</u>	<u>Culture No.</u>	<u>IET. No.</u>
1	IR.8 x Ptb.21	1201	1788
		1202	2789
		1204	2791
2	CR-56-7 x IR.8	1205	2795
		1207	2797
		1208	2798
3	CR-56-36 x IR.8	1210	2802
4	IR. 8 x Siam-29	1212	2885
		1213	2886
		1214	2911
		1228	1901
		1229	2002
		1230	2903
		1237	3231
5	IR.8 x W.1263	1215	2886
		1227	2900
		1235	2946
6	IR.8 x W.1257	1217	2890
		1218	2891

11.

7	IR.8 x W. 1251	1219	2892
		1220	2893
		1221	2894
		1222	2895
		1223	1895
		1224	1897
8	CR-55-13 x IR.8	1231	2904
9	CR-55-12 x IR.8	1238	3232

Out of these cultures following cultures viz., 1219, 1220, 1221, 1222, 1223 derived from the cross IR.8 x W. 1251. Culture 1219 from the cross CR. 55-36 x IR.8; Culture 1207 from the cross CR.56-17 x IR.8 and culture 1217 from the cross IR.8 x W 1257 yielded the maximum.

Leaf folder screening

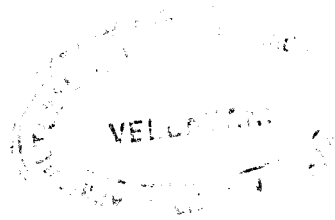
One hundred and forty varieties (entries) were screened in this trial for leaf folder resistance. The check varieties were Jaya and W. 1263.

In late season, cultures were evaluated for leaf folder incidence on five most damaged plants within each row when maximum damage was observed.

Out of 140 entries following 52 cultures having no incidence of leaf roller were selected for further trials.

Entry numbers:

5	30	59	70	120	133
7	31	60	78	125	134
19	32	61	79	126	135
14	33	62	101	127	137
15	34	63	105	128	138
18	39	64	106	129	139
24	40	66	107	130	140
26	45	67	110	131	
28	57	68	114	132	



Dead heart and white ears

Dead heart counts ranged from 2.4% (Ekalux 0.25) to 7.4% (Ecatox). Low incidence was noticed in Ekalux at 0.5 and 0.25 kg a.i/ha, Phosvel at 0.5 kg a.i/ha, Dimecron 0.5 kg a.i/ha, maximum protection treatment and Mipcin at 0.5 kg a.i/ha. At the time of harvest white ear counts ranged from 0.3% (Phosvel 0.5) to 7.6% (Ecatox). Low incidence was noticed in Phosvel (0.5), Dimecron (0.5) and Mipcin (0.25).

Table E.14. Dead hearts, silver shoot, white ears and grain yield as influenced by different chemicals

Treatment	Dose (kg ai/ha)	50 DAT			Mean grain yield (kg/ha)
		Dead heart (%)	Silver shoot (%)	White ears (%)	
1. Dursban	0.50	4.9	10.1	1.0	1925
2. ,,	0.25	4.0	12.0	1.7	1436
3. Ekalux	0.50	2.7	8.7	1.0	1736
4. ,,	0.25	2.4	11.7	3.6	1246
5. Folithion	0.50	5.4	8.7	5.5	1736
6. ,,	0.25	4.1	9.8	1.5	1057
7. Phosvel	0.50	2.7	8.9	0.3	2209
8. ,,	0.25	4.3	8.5	2.6	1878
9. Mipcin	0.50	3.3	11.2	1.3	2762
10. ,,	0.25	7.0	8.7	0.5	2525
11. Birlane	0.50	4.1	9.2	0.7	2478
12. ,,	0.25	6.3	11.1	1.1	2074
13. Dimecron	0.50	2.8	11.6	0.3	2146
14. ,,	0.25	6.0	10.3	4.7	1893
15. Thiodan	0.50	3.5	9.6	2.0	2225
16. ,,	0.25	6.3	10.2	1.5	2210
17. Maximum protection treatment		3.5	44.5	3.4	1184
18. Control		7.4	9.3	5.7	600
19. Local		4.6	10.2	7.6	1231
20. Filler		6.8	11.5	1.1	1136

New Insecticide Trial-1 (Granules)

Eleven chemicals in the form of granules at 1 kg ai/ha along with maximum protection treatment and untreated control were tried in this experiment.

There was very severe incidence of brown planthopper in all the treatments from 40 DAT onwards except in plots treated with Mipcin, Carlin and Thimet where the incidence was very low.

The yield recorded was very low, in all the plots which ranged from 439 kg/ha (maximum protection treatment) to 4212 kg/ha (Mipcin). Plots treated with Mipcin gave the maximum yield followed by Galecron, Thimet and Carlin ranging from 4212 kg/ha to 2740 kg/ha. The maximum protection treatment recorded the lowest yield (Table E.15).

Gall midge

Silver shoot counts ranged from 0.6% (Dasanit) to 9.8% (Folithion). Low incidence of gallmidge was recorded in plots treated with Dasnit, Thimet, and maximum protection treatment and high incidence in Folithion, Lebaycid, Carlin, Azodrin and Rogour.

Dead heart and white ears

The incidence of dead heart was low in all the treatments which ranged from 0.4% (Thimet) to 3.8% (Azodrin). Very low incidence was noticed in Thimet followed by Agronule, Carlin, Dasnit and Mipcin ranging from 0.4% to 1%. The percentage of white ears at the time of harvest ranged from 0.5 (Galicron) to 9.4 (Dasnit). Low incidence in the order of merit were noted in plots treated with Garlin, Birlane, maximum protection treatment and Galecron.

Table E.15. Dead hearts, silver shoot, white ears and grain yield as influenced by different granular chemicals in the new insecticide trial-I

Treatment	Dose (kg ai/ha)	50 DAT			Mean grain yield (kg/ha)
		Dead heart (%)	Silver shoot (%)	White ears (%)	
1. Agronule	1	0.6	7.1	5.8	770
2. Folithion	1	2.3	9.8	3.6	928
3. Lebaycid	1	2.7	9.2	6.2	1942
4. Mipcin	1	1.0	6.7	1.7	4212
5. Carlin	1	0.6	8.0	0.5	2740
6. Azodrin	1	3.8	9.7	2.5	1721
7. Galecron	1	1.5	8.6	1.1	3465
8. Birlane	1	1.0	5.8	1.0	3242
9. Thimet	1	0.4	1.8	1.6	2967
10. Dasnit	1	0.9	0.6	9.4	770
11. Rogour	1	2.4	9.2	4.0	1426
12. Maximum protection treatment		1.7	2.8	1.1	430
13. Control		0.7	7.3	10.3	996
14. Filler		2.1	5.9	3.7	1178

The yield recorded was very low, in all the plots which ranged from 430 kg/ha (maximum protection treatment) to 4212 kg/ha (Mipcin). Plots treated with Mipcin gave the maximum yield followed by Galecron, Thimet and Carlin ranging from 4212 kg/ha to 2740 kg/ha. The maximum protection treatment recorded the lowest yield (Table E.15).

Gall midge

Silver shoot counts ranged from 0.6% (Dasanit) to 9.8% (Folithion). Low incidence of gallmidge was recorded in plots treated with Dasnit, Thimet, and maximum protection treatment and high incidence in Folithion, Lebaycid, Carlin, Azodrin and Rogour.

Dead heart and white ears

The incidence of dead heart was low in all the treatments which ranged from 0.4% (Thimet) to 3.8% (Azodrin). Very low incidence was noticed in Thimet followed by Agronule, Carlin, Dasnit and Mipcin ranging from 0.4% to 1%. The percentage of white ears at the time of harvest ranged from 0.5 (Galicron) to 9.4 (Dasnit). Low incidence in the order of merit were noted in plots treated with Garlin, Birlane, maximum protection treatment and Galecron.

Table E.15. Dead hearts, silver shoot, white ears and grain yield as influenced by different granular chemicals in the new insecticide trial-1

Treatment	Dose (kg ai/ha)	50 DAT		White ears (%)	Mean grain yield (kg/ha)
		Dead heart (%)	Silver shoot (%)		
1. Agronule	1	0.6	7.1	5.8	770
2. Folithion	1	2.3	9.8	3.6	928
3. Lebaycid	1	2.7	9.2	6.2	1042
4. Mipcin	1	1.0	6.7	1.7	4212
5. Carlin	1	0.6	8.0	0.5	2740
6. Azodrin	1	3.8	9.7	2.5	1721
7. Galecron	1	1.5	8.6	1.1	3465
8. Birlane	1	1.0	5.8	1.0	3242
9. Thimet	1	0.4	1.8	1.6	2967
10. Dasnit	1	0.9	0.6	9.4	770
11. Rogour	1	2.4	9.2	4.0	1426
12. Maximum protection treatment		1.7	2.8	1.1	430
13. Control		0.7	7.3	10.3	996
14. Filler		2.1	5.9	3.7	1178