

## **Report on WLD Vector Population in Sugarcane Nursery - Gal Maduwa**

### **Inspection**

The population status of the vector of WLD (*Deltocephalus menoni*) in the each of nursery blocks (105 fields) was recorded using sweeping canopy technique. Two thousand sweeps were done per hectare during the study.

### **Observations**

Vector populations were recorded in different levels in the fields inspected during the study (annexure 01) and higher vector populations were recorded in the blocks numbered 11, 12, 16, 21, 25, 30, 31, 37, 40 and 41.

### **Conclusions**

Nursery blocks with higher vector population are at the age group of 3 to 5 month which is most susceptible for the WLD vector feeding.

### **Suggestions to overcome the condition**

#### ***Short term strategies***

- Block numbers 11, 12, 16, 21, 25, 30, 31, 37, 40 and 41 which are associated with higher populations should be treated initially with pesticides to minimise the available vector population. Application for other fields will be considered after monitoring population in next month. As WLD vector available in the canopy area from 6.00 am to 9.00 am in the morning and 4.30 pm to 6.30 pm in the evening, chemical application should be practiced during this time durations of the day for the higher effectiveness of the application.
  - a. Apply tank mixture to the canopy of the sugarcane clumps thoroughly and WLD symptomatic clumps should be treated specially (as vectors colonies at the WLD symptomatic clumps for feeding and breeding).
    - Thiomethoxam 25% (Actara): 5g/ 16L tank
  - b. Repeat application after two week period
  - c. Rogueing out the WLD symptomatic clumps after second application
- All the symptomatic clumps should be removed as soon as possible since WLD vector always prefer disease symptomatic clumps for feeding and breeding.

#### ***Long term strategies***

- Avoiding establishment of crops at different ages in the same location, to avoid migration of the vector to younger crops from older crops (over 6 months).
- Use the varieties SL 83 06, SL 92 5588 for cultivation as these varieties are less preferred by WLD vector compared to the other varieties cultivated in Gal Maduwa nursery.

### **Follow Ups**

WLD vector count in nursery will be continued in monthly intervals for one year period by Crop Protection Division of the Sugarcane Research Institute and recommendation will be given accordingly.

**ANNEXTURE 01**

<b>Field No</b>	<b>Extent (ha)</b>	<b>Crop cycle</b>	<b>Variety</b>	<b>No of vectors</b>
1		Fallow		
1	3.46	P	SL 96 128	0
1		R1	SL 96 128	1
1		R1	SL 96 128	0
1				
2	4.46	P	SL 96 128	0
2		P	SL 96 128	0
2		Fallow		
2		P	SL 96 128	Over 7 month
2		R1	SL 96 128	2
2		P	SL 96 128	Over 7 month
3	2.04	Fallow		
4	1.9	Fallow		
5	3.4	P	SL 98 2524	Over 7 month
6		P	SL 7130	0
6		P	SL 96 128	1
6		P	SL 00 652	0
6		P	SL 96 128	0
6		P	SL 96 128	0
6		P	SL 96 128	0
7	1.88	P	SL 00 652	0
7		P	SL 96 128	1
8	3.2	R1	M 438 59	Over 7 month
8		R1	M 438 59	Over 7 month
8		Fallow		
8		R1	M 438 59	Over 7 month
8		P	SL 96 128	Over 7 month
8				
9	2.9	P	SL 96 128	1
9		P	SL 00 652	0
9		P	SL 00 652	0
10	2.55	P	SL 96 128	0
10		R1	SL 96 128	0
10		R1	SL 96 128	1
10		R1	SL 96 128	0
11	2.66	R1	SL 98 2524	5
11		R1	SL 98 2524	9
11		R1	CO 775	Over 7 month
12	2.49	P	SL 00 662	2
12		P	SL 96 128	9
13	2.01	R1	SL 96 128	0
13		R1	SL 96 128	0

14		R1	SL 96 128	1
14	3.49	R1	SL 96 128	1
14		R1	SL 96 128	0
15		R1	SL 96 128	Harvested
15	2.68	R1	SL 96 128	Harvested
15		R1	SL 96 128	Harvested
15		R1	SL 2000 603	Harvested
16		P	SL 96 128	Harvested
16	4	R1	SL 96 128	4
16		R1	SL 96 128	1
17		P	SL 98 2524	0
17	3.35	P	SL 98 2524	0
17		Fallow		
18		R1	SL 96 128	1
18		R1	SL 96 128	
18	3.98	R1	SL 92 4918	
18		Fallow		
18		R1	SL 92 4918	
18		R1	SL 92 4918	1
19	2	R1	SL 92 4918	2
20		P	MIX 01	
20	3.98	P	MIX 02	
20		P	MIX 03	0
20		Fallow		
21		R2	SL 92 4918	17
21	3.92	R2	SL 96 128	7
21		Fallow		
22		P	SL 00 95	0
22	2.39	P	SL 00 354	0
22		P	CO 775	0
23	1.11	R2	SL 92 5588	0
24	0.87	P	SL 92 4918	Over 7 month
24		P	SL 92 4918	Over 7 month
25		R1	SL 96 128	1
25		P	SL 98 2524	Over 7 month
25		R1	SL 98 2524	0
25		R1	Trial	
25	7.39	R1	SL 98 2524	0
25		R1	SL 96 128	16
25		R1	CO 775	0
25		P	SL 98 2549	Over 7 month
25		P	CO 775	Over 7 month

25		P	SL 98 2549	Over 7 month
25		R1	SL 69 328	Over 7 month
25		R1	SL 69 328	0
26		R3	SL 2000 652	Harvested
26		P	SL 98 2524	
26		R1	SL 98 2524	2
26		R1	SL 96 128	0
26	6.43	P	SL 00 652	2
26		Fallow		
26		R2	SL 98 2524	Harvested
26		R1	SL 32 4918	Over 7 month
26		R2	SL 32 4918	Harvested
27		R1	SLC 2009 01	0
27		P	SLC 2009 01	Over 7 month
27		R1	SLC 2009 01	0
27		R1	SLC 2009 01	1
27	3.15	R1	SL 96 128	1
27		R1	SL 96 128	3
27		R1	SL 2000 652	2
27		R1	SL 96 328	2
27		R1	SL 92 4918	2
27		R1	SL 98 2524	0
28		P	SL 00 603	0
28	3.87	P	SL 92 4918	0
28		P	SL 92 4918	0
29		P	SL 2000 652	1
29	2.67	P	SL 96 128	13
30		P	SL 96 128	9
30	5.18	P	SL 96 128	9
31	3.75	p	SL 96 128	25
32		P	SL 96 128	0
32	4.23	Fallow		
33		P	SL 98 2524	0
33	2.57	P	SL 92 4918	0
33		P	SL 96 128	0
34		R1	SL 98 2524	2
34		P	SL 96 328	Over 7 month
34		R1	SL 96 328	0
34	5.52	R1	SL 96 328	0
34		R1	M 438 59	1
34		R1	SL 96 128	1
34		R1	SL 96 128	0

34		P	SLC 2009 01	Over 7 month
34		R1	SL 96 328	0
34		P	SL 96 328	
35		Fallow		
35		R1	SL 98 2524	Harvested
35		R1	SL 98 2524	Harvested
35	4.6	R1	SL 92 4918	Over 7 month
35		R1	SL 92 4918	Harvested
35		R1	SL 92 4918	Harvested
35		R1	SL 92 4918	Over 7 month
36	1.79	P	SL 98 2524	0
36		P	SL 98 2524	0
37	2.62	R1	SL 96 128	6
37		P	SL 96 128	1
38	3.5	Fallow		
38		R1	SL 98 2524	Over 7 month
39		P	Trial	
39		R1	Trial	
39		R1	Trial	
39		R2	Trial	
39		P	SL 98-2524	1
39		Fallow		
40		Fallow		
40		P	SL 96 128	1
40	6.7	P	SL 92 4918	0
40		R1	SL 96 128	Harvested
40		R1	SL 96 128	Harvested
40		R1	SL 92 4918	4
41		R2	SL 96 128	10
41	5.17	Fallow		
41		R1	SL 96 128	Over 7 month
41		R1	SL 98 2524	3
42	2.85	Fallow		
42		R1	SL 96 128	Over 7 month
43	2.86	Fallow		
43		R1	SL 96 128	Over 7 month
44	1.36	R1	SLC 2009 01	0
44		P	SLC 2009 01	
45		P	SL 92 4918	0
45	1.02	P	SL 98 2524	0
45		P	SL 98 2524 1	0
46	2.75	R1	SL 2000 354	0

46		P	SL 96 328	Over 7 month
46		P	SL 2000 652	Over 7 month
47		P	SL 98 2524	0
47	3.47	P	SL 92 4918	2
47		P	SL 98 2524	0
47		P	SL 92 4918	0
48	1.27	P	SL 98 2524	0
49	0.25	R1	SL 2000 354	2