



Aim: The review of the efficacy of registered insecticide products on the control of Jassids/Leafhoppers in a commercial layout.

Producer: Dreyer Senekal, Jurie Steyn

Location: Mkuze, KZN

Varieties: DP 1240

Plant Population: Approx 50 000 plants/ha

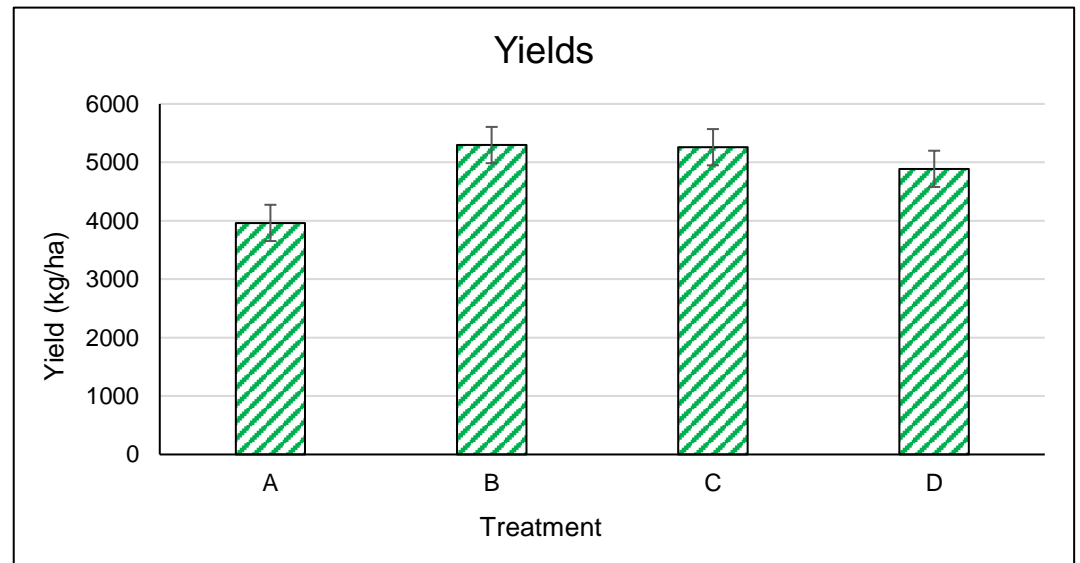
Plot size: 0.25 ha

Scheme: Irrigated

	6 Weeks	8 Weeks	12 Weeks
Treatment A	Control	Control	Control
Treatment B	Imidacloprid (Confidor)	Imidacloprid (Confidor)	Bifenthrin
Treatment C	Pymetrozine (Chess)	None	Acetamiprid (Maintain)
Treatment D	Pymetrozine (Chess)	None	Pymetrozine (Chess)

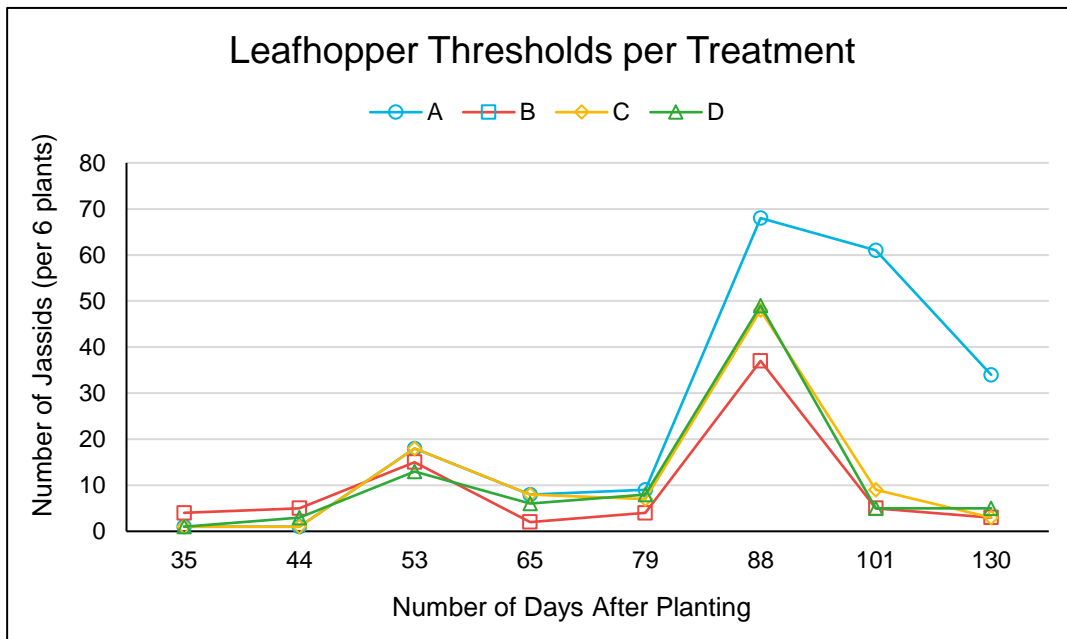
Yield and GOT			
Treatment	Yield (kg/ha)	% increase compared to control	GOT (%)
A	3 963	0.0%	40.8%
B	5 296	33.6%	40.5%
C	5 259	32.7%	42.3%
D	4 889	23.4%	42.0%
Average	4 852	22.4%	41.4%

All treatments proved to be very effective and improving yield values and reducing losses due to insect damage. Treatment B provided the best advantage in yield at 5 296 kg/ha, followed closely by treatment C. The average yield was 4 852 kg/ha.





Jassid Thresholds						
Days post planting	Treatment (Counting Average number of Jassids per 6 plants)				Average	
	A	B	C	D		
35	1	4	1	1	2	
44	1	5	1	3	3	
53	18	15	18	13	16	
65	8	2	8	6	6	
79	9	4	7	8	7	
88	68	37	48	49	51	
101	61	5	9	5	20	
130	34	3	3	5	11	



The insect pressure from Jassids was low during the early stages of the season as seen by the low counts. However all 3 treatments proved effective at preventing a severe rise in insect pressure as well as keeping the total populations low. Treatment B seems to have been most effective at reducing the insect pressure from Jassids. Although the treatment A had no chemicals sprayed to reduce Jassid populations it seems to have naturally reduced.



Fibre Quality			
Treatment	Staple Length (Inches)	Strength (g/tex)	Micronaire
A	1 1/8"	29.1	4.6
B	1 1/8"	29.8	4.9
C	1 1/8"	30.8	4.8
D	1 5/32"	31.1	4.9
Average	1 5/32"	30.2	4.8

The fibre qualities are as expected for irrigated cotton production. However the strength and micronaire of treatment A are notably lower than the other treatments, possibly due to insect pressure. The average length was 1 5/32" which is rather long. The strength 30.2 g/tex and the micronaire 4.8.