

Suppression of Wong Bok Club Root with soil biocide Terracin

Ross MacDiarmid BioStart Limited
Tony Young Pukekohe

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Key words

Club Root suppression, Wong Bok, Terracin

Overview

- The block has a history of Club Root infection
- Total of 500m² was divided into two 250m² halves
- Treatments used were Shirlan at 8lt/ha equivalent sprayed onto damp soil prior to planting and a cell tray drench of 250ml/30lt of water. The BioStart half was treated with Terracin at 60lt/ha equivalent sprayed onto damp soil prior to planting and cell tray drench of 100ml of Mycorrcin/30lt water. During the growing season the BioStart block was sprayed with 3 applications of Mycorrcin at 20lt/ha equivalent
- Planting layout 3 rows to a bed.

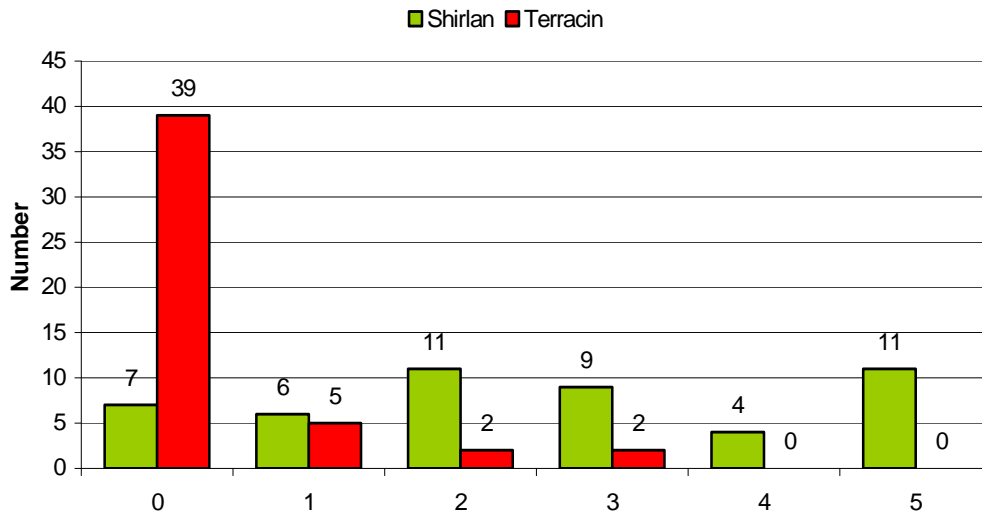


The trial block had a history of Club Root infection

Visual score

	Terracin + Mycorrcin													Shirlan											
D	0	0	1	0	0	0	0	3	0	0	2	0	3	2	1	5	3	1	5	2	5	2	5	5	
C	0	0	0	0	0	0	0	0	0	0	3	0	2	0	0	5	5	3	2	3	2	2	0	2	
B	0	1	0	0	0	0	0	0	0	0	1	0	4	3	0	4	4	3	2	1	1	3	3	0	
A	0	0	0	1	0	0	0	1	0	0	2	0	5	5	5	5	5	2	3	1	0	1	0	2	4

Distribution of visual scores





Terracin + Mycorrhizae



Shirlan

Packout



Number of heads per crate

Shirlan	Terracin + Mycorrcin
8	8
8	8
8	8
8	8
2	7
34	39

Total crate weight

Shirlan	Terracin + Mycorrcin
15.2kg	17.6kg
15.5kg	17.7kg
15.3kg	22.5kg
14.8kg	18.3kg
4kg	19.8kg
64.8kg	95.9kg

Average head weight

Shirlan	Terracin + Mycorrcin
1.906kg	2.459kg

Conclusion

- The Terracin + Mycorrcin has reduced the total instance of Club Root. The Shirlan block had 85% of assessed plants showing some form of club root (41 plants out of 48) while the Terracin + Mycorrcin block had 19% of plants showing some sign of Club Root (9 plants out of 48). Alternatively 81% of assessed plants (39 plants out of 48) in the Terracin + Mycorrcin block showed no sign of Club Root while the Shirlan treatment only 14% of plants (7 plants out of 48) were clear of any infection.
- The Terracin + Mycorrcin treatment has reduced the severity of the Club Root with the highest assessment score of 3 (2 plants). This compares with the Shirlan treatment where 24 plants scored 3 and above.
- There was a noticeable difference in how the plants responded to the summer heat. Late in the afternoon the Terracin + Mycorrcin treated plants showed less signs of wilting when compared to the plants in the Shirlan block.
- The Terracin + Mycorrcin treatment increased total number of marketable cabbages by 15% and increased total weight by 48% and average head weight increased by 29%
- Further trials are needed to investigate the optimum application rate.