

Project: *Pratylenchus thornei* & main-season cereals
 Trial: RH1106
 District: Weemelah
 Planted: 18/05/2011

Disclaimer:

This document is based on the results from an individual trial and may contain experimental use patterns that are currently off-label. **This document does not provide any interpretation and should not be taken as an endorsement of any unregistered use pattern.**

Professional advice should be sought for specific recommendations to ensure access to the most up to date information and knowledge.

Any product referred to in this document must be used strictly as directed, and in accordance with all label or permit instructions. Always consult the label prior to use.

Starting *Pratylenchus thornei* populations:

Low	~3 g/soil
High	~9 g/soil

Split Plot Analysis		Plants/m ² 6/06/2011 19 DAP	NDVI Score 27/07/2011 70 DAP	Yield kg/ha 1/11/2011
Variety	B52	55 fg	0.70 ghi	5677 ab
	Caparoi	69 abcd	0.70 hi	5597 abc
	Commander	64 bcdef	0.82 ab	5597 abc
	Crusader	68 abcde	0.68 i	4544 h
	EGA Gregory	63 cdefg	0.76 cd	5531 bc
	Gairdner	75 ab	0.84 a	5024 defg
	Grout	70 abcd	0.76 cd	5191 cdef
	Hindmarsh	57 efg	0.71 efghi	4840 fgh
	Hyperno	60 defg	0.69 i	5523 bc
	Livingston	54 fg	0.70 fghi	5022 defg
	Oxford	61 cdefg	0.83 a	5901 a
	QT8447	62 cdefg	0.74 defgh	5325 bcde
	QT9050	64 bcdef	0.75 cde	5310 bcde
	Shepherd	72 abc	0.79 bc	5040 defg
	Skiff	75 ab	0.84 a	5363 bcd
	Spitfire	78 a	0.72 efghi	4921 efgh
	Sunguard	62 cdefg	0.71 efghi	5251 cde
	Sunvale	52 g	0.74 defg	5142 def
	Sunvex	62 cdefg	0.67 i	4681 gh
	Ventura	64 bcdef	0.75 cdef	4994 defg
P=		0.00	0.00	0.00
LSD=		11.6	0.05	366 to 449
RLN status				
Low		65	0.75	5228
High		64	0.74	5219
P=		0.31	0.56	0.60
LSD=		nsd	nsd	nsd

Variety x RLN interaction				
Variety	RLN status			
B52	High	56 ghijk	0.70	5912
B52	Low	53 hijk	0.69	5443
Caparoi	High	65 bcdefghijk	0.70	5752
Caparoi	Low	73 abcdef	0.69	5443
Commander	High	65 bcdefghijk	0.82	5741
Commander	Low	63 cdefghijk	0.82	5454
Crusader	High	69 bcdefgh	0.68	4355
Crusader	Low	67 bcdefghi	0.68	4733
EGA Gregor	High	60 cdefghijk	0.76	5406
EGA Gregor	Low	66 bcdefghij	0.76	5656
Gairdner	High	87 a	0.84	4979
Gairdner	Low	63 cdefghijk	0.85	5069
Grout	High	70 bcdefg	0.76	5042
Grout	Low	69 bcdefgh	0.77	5340
Hindmarsh	High	51 ijk	0.69	4851
Hindmarsh	Low	63 cdefghijk	0.72	4829
Hyperno	High	62 cdefghijk	0.69	5299
Hyperno	Low	59 efghijk	0.70	5746
Livingston	High	49 k	0.67	5239
Livingston	Low	59 cdefghijk	0.73	4805
Oxford	High	58 fghijk	0.83	5933
Oxford	Low	63 cdefghijk	0.84	5869
QT8447	High	66 bcdefghi	0.76	5325
QT8447	Low	58 fghijk	0.72	5324
QT9050	High	59 defghijk	0.76	5434
QT9050	Low	68 bcdefgh	0.75	5187
Shepherd	High	69 bcdefgh	0.78	5002
Shepherd	Low	76 abc	0.79	5077
Skiff	High	75 abcde	0.84	5282
Skiff	Low	75 abcde	0.84	5444
Spitfire	High	74 abcdef	0.70	4862
Spitfire	Low	81 ab	0.73	4981
Sunguard	High	75 abcd	0.73	5208
Sunguard	Low	49 k	0.70	5293
Sunvale	High	50 jk	0.74	5208
Sunvale	Low	54 ghijk	0.74	5075
Sunvex	High	52 ijk	0.68	4724
Sunvex	Low	73 abcdef	0.66	4638
Ventura	High	58 fghijk	0.71	4830
Ventura	Low	70 bcdefgh	0.79	5157
P =		0.02	0.68	0.57
LSD =		16.5	nsd	nsd
CV =				6.1 %

Split Plot Analysis		Grain Quality					30/04/2012
		Test Weight kg/hL	Protein %	Moisture %	Adj Screenings %	Grain N Recovery kg/ha	<i>P thornei</i> /g soil
Variety							
B52		78.8 abc	10.6 defg	12.3 bcd	0.6 fg	105	2.7 fg
Caparoi		80.1 a	10.6 cdefg	12.0 cd	0.3 g	104	1.5 h
Commander		63.1 de	10.5 fgh	12.2 bcd	1.2 abcd	102	4.3 bcde
Crusader		80.1 a	11.3 abcd	12.1 bcd	0.7 ef	90	5.6 abc
EGA Gregory		78.4 bc	10.3 fgh	12.3 abcd	1.0 bcdef	100	4.7 abcd
Gairdner		61.4 fg	11.3 abc	12.1 bcd	1.2 abcd	99	5.7 abc
Grout		60.5 g	9.9 gh	12.1 bcd	1.3 ab	90	4.6 bcd
Hindmarsh		63.8 de	10.7 bcdefg	12.3 bcd	1.6 a	90	4.4 bcde
Hyperno		78.7 abc	10.2 gh	12.2 bcd	1.4 ab	98	0.6 i
Livingston		77.4 c	11.2 abcd	12.0 cd	1.4 ab	99	5.0 abc
Oxford		63.4 de	9.9 h	12.0 d	1.0 bcde	102	3.3 defg
QT8447		79.3 ab	10.0 gh	12.3 abcd	0.6 fg	93	2.3 gh
QT9050		79.9 a	10.9 abcdef	12.2 bcd	0.8 def	102	2.5 g
Shepherd		64.6 d	11.3 abcd	12.2 bcd	1.3 abc	99	3.9 cdef
Skiff		62.3 ef	11.5 a	12.4 ab	1.6 a	108	6.0 ab
Spitfire		79.9 a	11.2 abcde	12.0 d	0.9 cdef	96	3.0 efg
Sunguard		77.6 c	10.5 efgh	12.2 bcd	0.8 cdef	96	4.0 cdef
Sunvale		79.9 a	11.0 abcdef	12.4 abc	0.8 def	99	5.9 ab
Sunvex		78.2 bc	11.4 ab	12.6 a	1.1 bcde	93	6.8 a
Ventura		79.4 ab	10.2 fgh	12.1 bcd	1.0 bcdef	89	5.5 abc
P=		0.00	0.00	0.07	0.00	0.07	0.00
LSD=		1.42 to 1.74	0.69 to 0.85	0.32 to 0.39	0.42 to 0.52	nsd	Log transformed
RLN status							
Low		73.1	10.6	12.2	1.1	97	3.0
High		73.6	10.8	12.2	1.0	99	4.7
P=		0.23	0.30	0.65	0.26	0.58	0.07
LSD=		nsd	nsd	nsd	nsd	nsd	nsd

Variety x RLN interaction						
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Variety	RLN status						
B52	High	78.9	9.9	12.4	0.6	103	3.7
B52	Low	78.8	11.2	12.1	0.5	107	2.0
Caparoi	High	80.3	10.5	11.9	0.2	106	2.4
Caparoi	Low	79.9	10.6	12.2	0.3	101	0.8
Commander	High	62.8	10.7	12.3	1.2	107	5.6
Commander	Low	63.3	10.2	12.1	1.1	97	3.2
Crusader	High	79.8	11.1	12.1	0.8	85	6.3
Crusader	Low	80.4	11.4	12.0	0.7	94	4.9
EGA Gregor	High	78.3	10.4	12.3	1.1	98	4.1
EGA Gregor	Low	78.5	10.2	12.3	0.8	101	5.4
Gairdner	High	62.9	11.9	12.0	1.1	104	6.7
Gairdner	Low	59.9	10.7	12.2	1.3	95	4.8
Grout	High	61.6	10.0	12.4	1.1	89	6.1
Grout	Low	59.4	9.8	11.8	1.6	92	3.4
Hindmarsh	High	64.6	10.6	12.3	1.0	90	5.7
Hindmarsh	Low	63.1	10.7	12.2	2.3	91	3.4
Hyperno	High	78.8	10.1	12.2	1.2	94	0.7
Hyperno	Low	78.7	10.2	12.1	1.5	103	0.6
Livingston	High	77.3	11.7	12.1	1.5	107	6.6
Livingston	Low	77.6	10.8	12.0	1.2	91	3.8
Oxford	High	63.6	10.0	11.7	1.0	104	5.6
Oxford	Low	63.2	9.7	12.3	1.0	100	1.7
QT8447	High	79.6	10.2	12.3	0.6	95	2.4
QT8447	Low	79.0	9.7	12.3	0.6	90	2.3
QT9050	High	79.8	10.9	12.2	0.9	104	4.2
QT9050	Low	80.0	11.0	12.2	0.7	100	1.4
Shepherd	High	64.6	11.5	12.0	1.2	101	5.8
Shepherd	Low	64.5	11.0	12.4	1.3	98	2.5
Skiff	High	61.9	11.6	12.7	1.6	108	8.3
Skiff	Low	62.7	11.3	12.2	1.7	108	4.3
Spitfire	High	81.2	11.4	12.0	0.9	97	4.0
Spitfire	Low	78.5	10.9	12.1	0.8	95	2.1
Sunguard	High	77.7	10.4	12.2	0.6	95	4.4
Sunguard	Low	77.4	10.5	12.1	1.0	97	3.6
Sunvale	High	80.0	11.3	12.4	0.7	103	5.7
Sunvale	Low	79.7	10.6	12.3	0.8	94	6.2
Sunvex	High	78.5	11.4	12.8	0.7	94	8.7
Sunvex	Low	78.0	11.4	12.4	1.4	93	5.2
Ventura	High	79.6	10.7	12.0	1.2	90	5.8
Ventura	Low	79.3	9.8	12.2	0.7	88	5.2
P =		0.58	0.41	0.13	0.10	0.31	0.07
LSD =		nsd	nsd	nsd	nsd	nsd	nsd