

2024 BSDF Rhizomania Nursery Results - Imperial Valley OVT

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Entry ^z	Variety Name	Foliar rating (% susceptible) ^y	Root rating ^x	Sucrose content (%)	Nitrate (ppm)	Conductivity (mmhos)	Root yield (tons/A)	ERS (lb/A) ^w
3	BTS 511N	0 d	1.6 e	16.84 b	78	0.72 a-c	47.86 a	13,768 a
1	BTS 5460	0 cd	2.0 bc	17.28 a	66	0.68 b-d	44.52 c	13,225 a
2	BTS 5678	1 bc	1.6 de	16.46 b	63	0.71 a-c	46.92 ab	13,198 a
8	SV 1927	0 d	1.8 c-e	16.64 b	71	0.68 b-d	46.14 a-c	13,181 a
4	BTS 5255	1 b	2.2 b	16.85 b	56	0.66 cd	41.94 de	12,184 b
7	SV 1915	1 bc	2.2 b	16.58 b	45	0.64 d	41.63 e	11,920 b
5	SV 602	1 bc	1.9 cd	15.62 c	90	0.72 ab	44.75 bc	11,900 b
6	SV 911	0 d	1.9 cd	15.82 c	82	0.73 ab	44.15 cd	11,883 b
Check		100 a	4.1 a	15.44 c	56	0.74 a	19.03 f	4,997 c
Mean		11	2.2	16.39	67	0.7	41.88	11,806
$P > F^v$		<0.0001	<0.0001	<0.0001	0.0644	0.0232	<0.0001	<0.0001
LSD		1	0.3	0.4	NS	0.06	2.26	697

^z BTS 4D20 was included as the BNYVV susceptible check cultivar.

^y Foliar rating = percentage of foliage with rhizomania symptoms (narrow yellow upright leaves).

^x Root rating using a scale of 0-9 (0 = healthy and 9 = dead; Plant Disease 93:632-638); ≥ 3 would be considered susceptible).

^w Estimated recoverable sucrose (ERS) = extraction x 0.01 x gross sucrose where extraction = $250 + [1255.2 \times (\text{conductivity} - 15000) \times (\text{percent sucrose} - 6185)] / (\text{percent sucrose} \times [98.66 - (7.845 \times \text{conductivity})])$.

^v $P > F$ was the probability associated with the F value. Within each variable, means followed by the same letter did not differ significantly based on Fisher's protected least significant difference (LSD; $\alpha = 0.05$). NS = not significant.