

RECOMMENDED LIST OF SUGAR BEET VARIETIES 2021 - untreated trials (Based on trials from 2018-2019)



Rz1 rhizomania varieties		Daphna	Sabatina KWS	Cantona KWS	BTS 3325	Degas	BTS1915	Evalotta KWS	Kortessa KWS	BTS1140	Advena KWS	Castriona KWS	Eldorana KWS	Lightning	Sancha KWS	Lacewing	BTS4100	Conger	Vixen	Puffin	Philina KWS	Smart Rivetta KWS	Smart Janninka KWS
Status: (C) = control variety ¹		R(C)	R(C)	R(C)	R(C)	R	PR1	PR1	PR3	PR3	PR2	PR1	PR1	PR2	PR1	PR1	PR1	PR2	PR2	PR2	PS3	PS1	PS1
AYPR/BCN as claimed by the Breeder		BCN	-	BCN	-	-	-	-	-	-	-	-	-	-	-	BCN	-	-	-	-	AYPR	ALS	ALS
CROP YIELDS	MEAN																						
Adjusted tonnes % of C=100% ²	98.5 t/ha	101.5	100.1	100.0	99.1	95.8	110.1	101.9	101.0	100.4	99.0	98.1	94.8	98.4	97.7	97.6	100.0	94.9	97.8	91.5	95.0	91.5	85.3
Sugar yield % of C=100% ²	15.1 t/ha	101.7	100.3	99.8	98.8	95.8	110.3	102.0	101.2	100.8	98.8	98.2	95.0	99.1	97.7	97.5	99.5	95.7	99.1	91.4	95.6	92.1	85.8
Root yield % of C=100% ²	85.8 t/ha	102.7	101.0	99.3	97.5	96.3	111.1	102.9	101.6	102.0	97.5	99.2	94.9	102.3	97.2	97.7	96.5	98.4	103.9	92.0	97.7	93.8	87.6
Sugar content %	17.7%	98.8	99.7	100.5	101.2	99.4	99.3	99.0	99.5	99.0	101.5	99.2	100.4	96.7	100.7	99.6	103.3	97.6	95.8	99.6	98.3	98.3	98.2
BOLTERS per 100,000 plants/ha	MEAN																						
Normal sowing	9/ha	0	0	0	52	0	47	0	52	0	52	0	0	0	0	47	0	0	0	0	54	52	0
PRE-GAPPING ESTABLISHMENT ³																							
Control	100%	98.8	97.6	102.7	102.3	102.6	104.3	101.4	100.7	98.1	102.5	100.8	104.6	105.3	100.9	103.4	99.5	99.4	100.8	98.8	105.0	98.0	102.7
DISEASE PERCENTAGE	%																						
Rust	11	9	9	10	12	14	8	22	6	10	17	20	21	11	11	16	11	14	11	15	20	13	12
Powdery mildew	9	9	7	9	9	28	10	14	8	10	12	10	9	16	14	17	18	12	16	15	14	10	26
RL SYSTEM																							
Year first listed		2017	2015	2016	2017	2017	2020	2020	2018	2018	2019	2020	2020	2019	2020	2020	2019	2019	2019	2019	2018	2020	2019
BREEDER/UK CONTACT ⁴																							
Breeder		KWS	KWS	KWS	BTS	STR	BTS	KWS	KWS	BTS	KWS	KWS	KWS	SV	KWS	SV	BTS	SV	SV	SV	KWS	KWS	KWS
UK Agent		KWS	KWS	KWS	LG	STR	LG	KWS	KWS	LG	KWS	KWS	KWS	SV	KWS	SV	LG	SV	SV	SV	KWS	KWS	KWS

Mean of control values include BTS 860 which is no longer listed.

1 Unlike the main treated RL table, the data in this table are from just two years. Provenance is determined by use in treated trials. (See supplementary table).

2 Yields based on an average plant population of 103,900 plants/ha in these trials. Differences in adjusted tonnes of less than 8.9% should be treated with reserve.

3 Differences in establishment of less than 7.3% should be treated with reserve.

4 BTS = Betaseed, KWS = KWS UK Ltd, LG = Limagrain UK Ltd, STR = Strube Sugar Beet UK Ltd, SV = SESVanderHave UK Ltd

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Rz1 rhizomania varieties 2-year data			Daphna	Sabatina KWS	Cantona KWS	BTS 3325	Degas	BTS1915	Evalotta KWS	Kortessa KWS	BTS1140	Advena KWS	Catriona KWS	Eldorana KWS	Lightning	Sancha KWS	Lacewing	BTS4100	Conger	Vixen	Puffin	Philina KWS	Smart Rivetta KWS	Smart Janninka KWS	
STATUS (C) = control variety			R(C)	R(C)	R(C)	R(C)	R	PR1	PR1	PR3	PR3	PR2	PR1	PR1	PR2	PR1	PR1	PR1	PR2	PR2	PR2	PS3	PS1	PS1	
AYPR/BCN as claimed by the Breeder			BCN	-	BCN	-	-	-	-	-	-	-	-	-	-	-	BCN	-	-	-	-	AYPR	ALS	ALS	
ADJUSTED TONNES (Gapped Trials)		T's per ha																							
% Mean of (C)	Mean	98.5	101.5	100.1	100.0	99.1	95.8	110.1	101.9	101.0	100.4	99.0	98.1	94.8	98.4	97.7	97.6	100.0	94.9	97.8	91.5	95.0	91.5	85.3	
	2019	115.3	103.2	101.5	99.5	96.0	92.9	109.7	100.6	101.7	101.6	98.1	99.0	90.3	95.4	99.8	96.9	99.4	91.4	91.6	90.0	96.5	90.8	85.2	
	2018	81.8	99.0	98.2	100.8	103.5	99.8	110.7	103.6	100.0	98.8	100.3	96.7	101.2	102.7	94.8	98.7	100.8	99.8	106.6	93.6	93.0	92.6	85.4	
SUGAR YIELD (Gapped Trials)																									
% Mean of (C)	Mean	15.1	101.7	100.3	99.8	98.8	95.8	110.3	102.0	101.2	100.8	98.8	98.2	95.0	99.1	97.7	97.5	99.5	95.7	99.1	91.4	95.6	92.1	85.8	
	2019	17.8	103.5	101.8	99.2	95.6	93.0	109.9	100.9	102.0	102.1	97.8	99.2	90.6	96.3	99.7	96.8	98.8	92.7	93.4	89.9	97.3	91.6	85.8	
	2018	12.4	99.1	98.2	100.7	103.4	99.9	110.8	103.6	100.0	98.8	100.2	96.8	101.2	103.2	94.8	98.7	100.6	99.9	107.3	93.6	93.1	92.7	85.7	
ROOT YIELD (Gapped Trials)																									
% Mean of (C)	Mean	85.8	102.7	101.0	99.3	97.5	96.3	111.1	102.9	101.6	102.0	97.5	99.2	94.9	102.3	97.2	97.7	96.5	98.4	103.9	92.0	97.7	93.8	87.6	
	2019	103.7	104.6	102.3	98.6	94.5	93.4	110.8	101.6	102.7	104.3	96.5	99.9	91.4	99.1	99.2	96.4	95.4	96.7	99.5	90.0	100.3	93.8	87.3	
	2018	67.9	100.0	99.1	100.2	102.1	100.7	111.6	105.0	99.9	98.4	99.1	98.0	100.2	107.3	94.3	99.7	98.0	101.1	110.7	95.0	93.8	93.6	88.0	
SUGAR CONTENT (Gapped Trials)		%																							
Sugar %	Mean	17.7	98.8	99.7	100.5	101.2	99.4	99.3	99.0	99.5	99.0	101.5	99.2	100.4	96.7	100.7	99.6	103.3	97.6	95.8	99.6	98.3	98.3	98.2	
	2019	17.1	98.8	99.7	100.5	101.0	99.7	99.1	99.2	98.9	98.1	101.4	99.1	99.6	97.1	100.6	100.4	103.7	95.9	94.3	100.1	96.9	97.5	98.7	
	2018	18.3	98.8	99.7	100.4	101.4	99.2	99.5	98.7	99.9	99.9	101.7	99.3	101.2	96.4	100.7	99.0	103.0	99.2	97.1	99.1	99.6	99.2	97.8	
NORMAL SOWN BOLLERS		Mean of (C)																							
Bollers/ha (per 100,000 plants)	Mean	9	0	0	0	52	0	47	0	52	0	52	0	0	0	0	47	0	0	0	0	54	52	0	
	2019	0	0	0	0	0	0	0	0	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2018	0	0	0	0	107	0	96	0	0	0	107	0	0	0	0	96	0	0	0	0	112	109	0	
PRE-GAPPING ESTABLISHMENT		Mean of (C)																							
Plant population as % mean of (C) Seed sown at 9cm spacing	Mean	186.6	98.8	97.6	102.7	102.3	102.6	104.3	101.4	100.7	98.1	102.5	100.8	104.6	105.3	100.9	103.4	99.5	99.4	100.8	98.8	105.0	98.0	102.7	
	2019	205.6	100.7	97.9	103.2	99.1	102.8	104.2	101.4	100.6	99.1	104.1	102.4	103.0	102.8	97.7	105.1	102.3	99.9	100.9	98.2	106.6	94.1	101.0	
	2018	167.6	96.5	97.3	102.1	106.3	102.4	104.3	101.4	100.9	96.8	100.7	98.9	106.4	108.4	104.9	101.5	96.2	98.8	100.7	99.6	103.2	102.8	104.7	
RUST		Mean of (C)																							
% leaf infection Natural infection (means re-transformed)	Mean	11	9	9	10	12	14	8	22	6	10	17	20	21	11	11	16	11	14	11	15	20	13	12	
	2019	7	8	4	9	8	13	5	24	5	7	16	18	14	8	9	15	10	8	10	15	19	12	12	
	2018	13	11	15	11	17	14	11	20	6	14	17	22	28	14	12	17	13	19	12	15	20	13	13	
POWDERY MILDEW		Mean of (C)																							
% leaf infection Natural infection (means re-transformed)	Mean	9	9	7	9	9	28	10	14	8	10	12	10	9	16	14	17	18	12	16	15	14	10	26	
	2019	15	15	11	17	14	36	19	21	16	16	18	14	17	27	21	21	20	21	16	21	21	18	33	
	2018	2	3	3	1	4	20	1	8	0	4	5	5	1	6	8	12	16	3	15	10	8	3	18	

Data based on two trials in 2018 and two trials in 2019. Data in bold from commercial seed.