

Online Resource 2

Article title: Mapping of quantitative adult plant field resistance to leaf rust and stripe rust in two European winter wheat populations reveals co-location of three QTL conferring resistance to both rust pathogens.

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Online Resource 2: Detailed description of stripe rust experiments

population		year	country ¹	location	coordinates	experimental design	No. Repl.	plot			spreader	
								No. rows per RIL	length in m	spacing in cm	cultivar	arrangement
CF	-	2009	AT	Reichersberg	48° 33' 17" N, 13° 34' 60" E	RCB ²	2	3	1	19	no	-----
CF	-	2010	AT	Reichersberg	48° 33' 17" N, 13° 34' 60" E	RCB ²	2	3	1	19	no	-----
CF	-	2010	AT	Tulln	48° 20' 0" N, 16° 3' 0" E	RCB ²	2	2	1	17	Victo+Furore	after each double row
CF	CA	2011	AT	Tulln	48° 20' 0" N, 16° 3' 0" E	RCB ²	2	2	1	17	Victo+Furore	after each double row
CF	CA	2012	AT	Atzenbrugg	48° 17' 00" N, 15° 52' 27" E	RCB ²	2	2	1	17	Victo+Furore	after each double row
-	CA	2012	AT	Reichersberg	48° 33' 17" N, 13° 34' 60" E	RCB ²	2	3	1	19	no	-----
CF	CA	2012	CH	Changins	46° 23' 46" N, 6° 14' 26" E	RCB ²	2	2	0.8	30	Eridano+Arbola+Coker	after every 2 nd double row
-	CA	2012	FR	Cappelle en Pévèle	50° 31' 00"N; 3° 10' 00" E	RCB ²	2	2	1	17	Toisonдор	after every 5 th double row
CF	CA	2012	GB	Cambridge	52° 14' 10"N; 0° 05 '32"E	RCB ²	2	2	1	19	Vuka	
CF	CA	2012	GB	Ickleton	0° 16' 81"E; 52° 06 '08"E	RCB ²	2	2	0.9	24	Vuka+AC Barrie	after every 2 nd double row

¹ Country abbreviated by the ISO 3166 country code, ² RCB = randomized complete block design.

population	year	location	inoculation technique	date of inoculation	plant growth stage	scoring method	used pathotype/pathotype mix	virulence profiles
CF	-	2009	Reichersberg	inoculation with microsprayer	17.04+29.04	EC29+EC32	% diseased leaf area	
CF	-	2010	Reichersberg	inoculation with microsprayer	27.04+01.05	EC30+EC31	% diseased leaf area	
CF	-	2010	Tulln	inoculation with microsprayers + planting infected seedlings into spreaders	21.04+26.04	EC29+EC30	% diseased leaf area	
CF	CA	2011	Tulln	inoculation with microsprayers + planting infected seedlings into spreaders	23.04+02.05	EC29+EC30	% diseased leaf area	
CF	CA	2012	Atzenbrugg	inoculation with microsprayers + planting infected seedlings into spreaders	14.04+18.04	EC27+EC29	% diseased leaf area	
-	CA	2012	Reichersberg	inoculation with microsprayer	20.04+24.04	EC27+EC29	1 – 9 ^a	
CF	CA	2012	Changins	inoculation with microsprayers + planting infected seedlings into spreaders	05.03+12.04	EC27+EC29	% diseased leaf area	
-	CA	2012	Cappelle en Pèvéle	planting infected seedlings into each spreaders	unknown	unknown	1 – 9 ^b	
CF	CA	2012	Cambridge	natural epidemic	----	-----	1 – 5 ^c	
CF	CA	2012	Ickleton	planting infected seedlings into each spreaders	27.03	unknown	1 – 9 ^a	

^a 1=0%, 2=1%, 3=2%, 4=5%, 5=10%, 6=25%, 7=50%, 8=75%, 9=100%

^b 1=0%, 2=10%, 3=20%, 8=90%, 9=100%

^c 1=5%, 2=20%, 3=40%, 4=70%, 5=90%