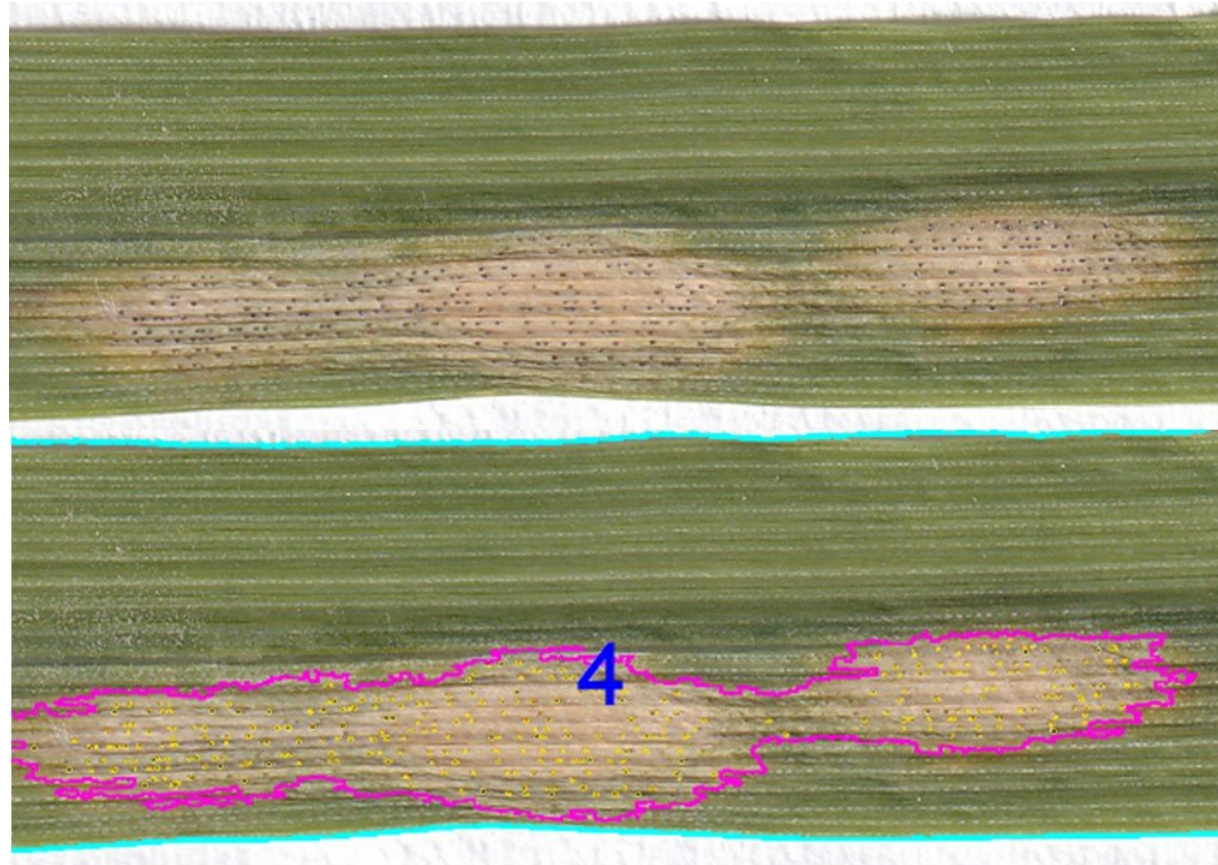
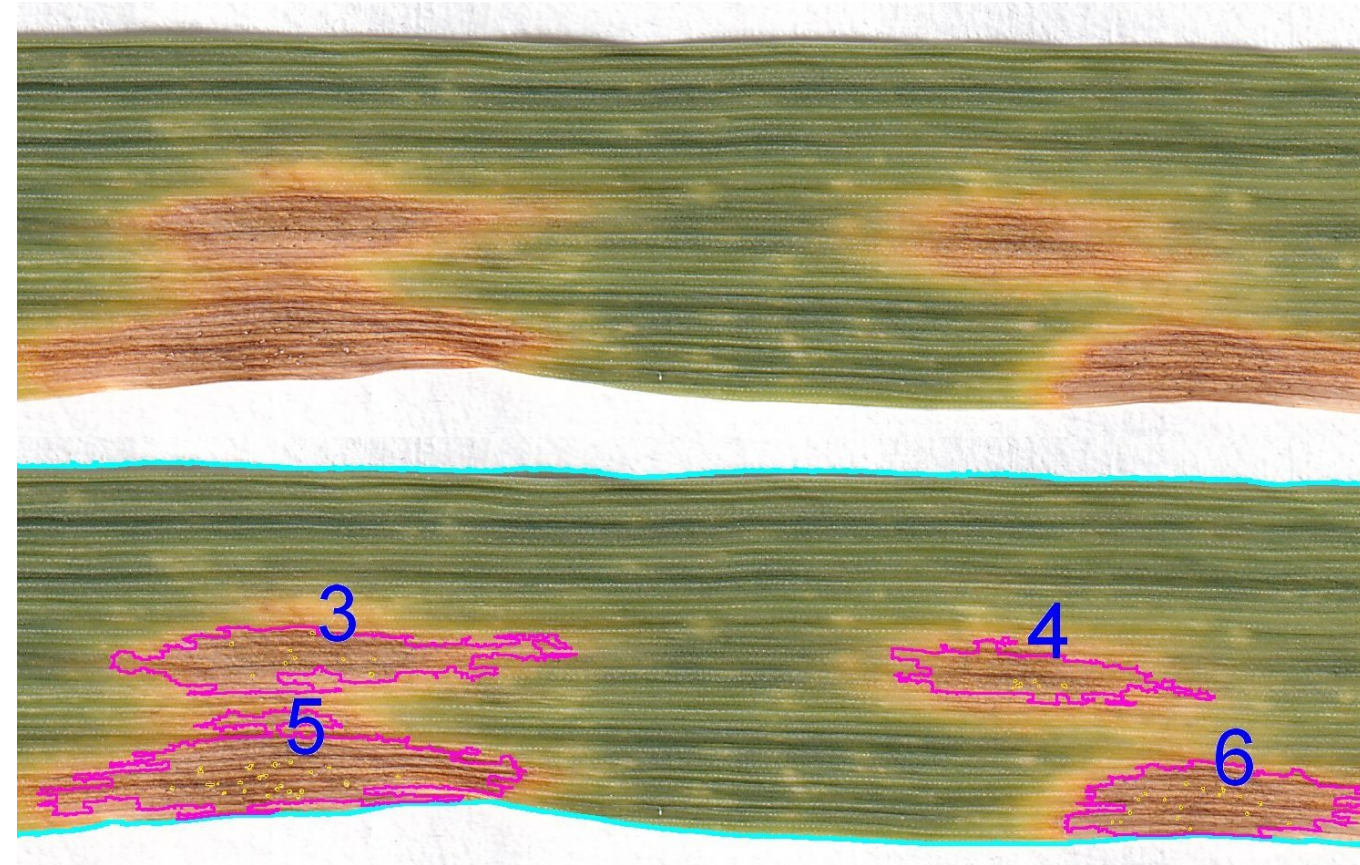


Sy Leonardo



LG Origen



RGT Rumbadur

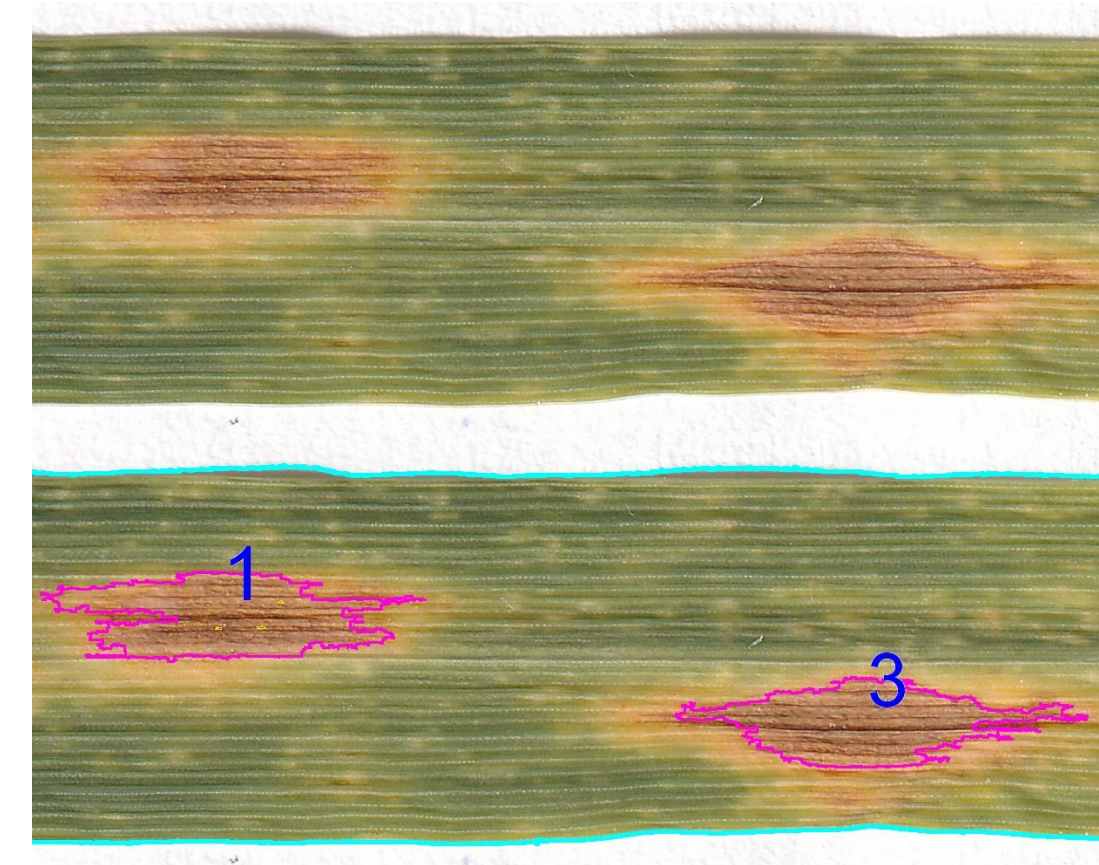


Figure S1. Output example of *Septoria tritici* blotch (STB) image analysis in the studied durum wheat accession Sy Leonardo, LG Origen and RGT Rumbadur. Upper panels show original leaves. Lower panels show the analyzed leaves in which leaf area, lesion area and pycnidia were selected in blue, purple and yellow colors, respectively. Numbers indicate selected necrotic areas to be analyzed.

Table S1. Microscopic stages of spores and fungal development of the *Z. tritici* infection in three selected durum wheat accessions under baseline and climate change environments ^[1].

Accession	Environmental Set	4 dpi			21 dpi		
		SP (%)	DP (%)	NP (%)	NCS (%)	CS (%)	Pyc (%)
Sy Leonardo	SB	16.85 ± 4.26 a	25.57 ± 4.42 a	57.58 ± 3.80 c	16.59 ± 1.09 c	24.37 ± 2.87 c	59.04 ± 2.82 a
	S1	8.48 ± 1.56 b	11.48 ± 1.99 b	80.04 ± 1.97 b	27.70 ± 0.82 ab	35.93 ± 1.12 ab	36.37 ± 1.44 bc
	S2	7.58 ± 1.37 b	10.77 ± 0.82 b	81.65 ± 1.06 b	28.37 ± 4.42 ab	27.78 ± 3.74 bc	43.85 ± 6.71 b
	S1G	6.22 ± 0.42 b	5.26 ± 1.34 c	88.52 ± 1.20 a	33.19 ± 1.74 a	34.66 ± 2.63 ab	32.15 ± 1.30 c
	S2G	5.14 ± 0.94 b	5.86 ± 0.65 c	89.00 ± 0.92 a	23.01 ± 2.12 b	42.71 ± 1.11 a	34.28 ± 1.69 bc
LG Origen	SB	23.98 ± 2.86) a	21.34 ± 2.80 a	54.68 ± 0.50 c	37.90 ± 8.05 d	35.98 ± 5.55 a	26.12 ± 3.68 a
	S1	6.66 ± 0.55) b	10.77 ± 1.73 b	82.57 ± 1.86 b	51.45 ± 3.12 c	25.85 ± 3.17 b	22.70 ± 1.53 a
	S2	7.02 ± 1.00) b	10.69 ± 0.74 b	82.29 ± 1.24 b	50.37 ± 1.80 cd	26.82 ± 1.19 ab	22.81 ± 1.96 a
	S1G	5.78 ± 0.29) b	7.16 ± 1.36 b	87.06 ± 1.37 a	97.56 ± 1.24 a	2.44 ± 1.24 d	0.00 ± 0.00 b
	S2G	5.13 ± 0.49) b	6.22 ± 1.25 b	88.65 ± 0.78 a	66.52 ± 0.98 b	13.70 ± 1.32 c	19.78 ± 0.34 a
RGT Rumbadur	SB	15.75 ± 3.82) a	25.80 ± 3.73 a	58.45 ± 4.35 c	42.74 ± 2.12 ab	45.11 ± 2.40 a	12.15 ± 0.30 ab
	S1	5.41 ± 0.87) b	11.35 ± 1.25 bc	83.24 ± 1.78 ab	44.64 ± 4.71 ab	45.74 ± 3.66 a	9.62 ± 1.39 b
	S2	6.62 ± 1.84) b	12.15 ± 1.22 b	81.23 ± 0.66 b	36.45 ± 6.86 b	49.48 ± 6.51 a	14.07 ± 0.75 a
	S1G	5.00 ± 0.06) b	10.00 ± 0.51 bc	85.00 ± 0.52 ab	57.60 ± 9.18 a	36.83 ± 9.06 a	5.57 ± 0.86 c
	S2G	3.83 ± 0.62) b	8.27 ± 0.75 c	87.90 ± 0.66 a	48.37 ± 3.77 ab	42.02 ± 3.04 a	9.61 ± 0.73 b

^[1] Values are mean ± standard error for three leaves evaluated for each accession, time point and environmental set in three different experiments. Data with the same letter within an accession and column are not statistically different (Duncan test, $p < 0.05$). SP, spores leading to a stomatal penetration; DP, spores leading to a direct penetration; NP, spores without penetration; NCS, non-colonized stomata; CS, colonized stomata but not yet transformed into pycnidia; Pyc, colonized stomata transformed into pycnidia. SB: plants grown, inoculated, incubated and maintained for evaluation under baseline weather conditions (24°C and [CO₂] around 420-450 ppm). S1 and S2: plants inoculated and incubated under baseline weather conditions, and then maintained for evaluation under far future weather conditions (S1, 30°C and [CO₂] around 420-450 ppm; S2, 30°C and elevated [CO₂] around 620-650 ppm). S1G and S2G: plants grown, inoculated, incubated and maintained for evaluation under far future weather conditions (S1G, 30°C and [CO₂] around 420-450 ppm; S2G, 30°C and elevated [CO₂] around 620-650 ppm).