

## SUPPLEMENTARY INFORMATION

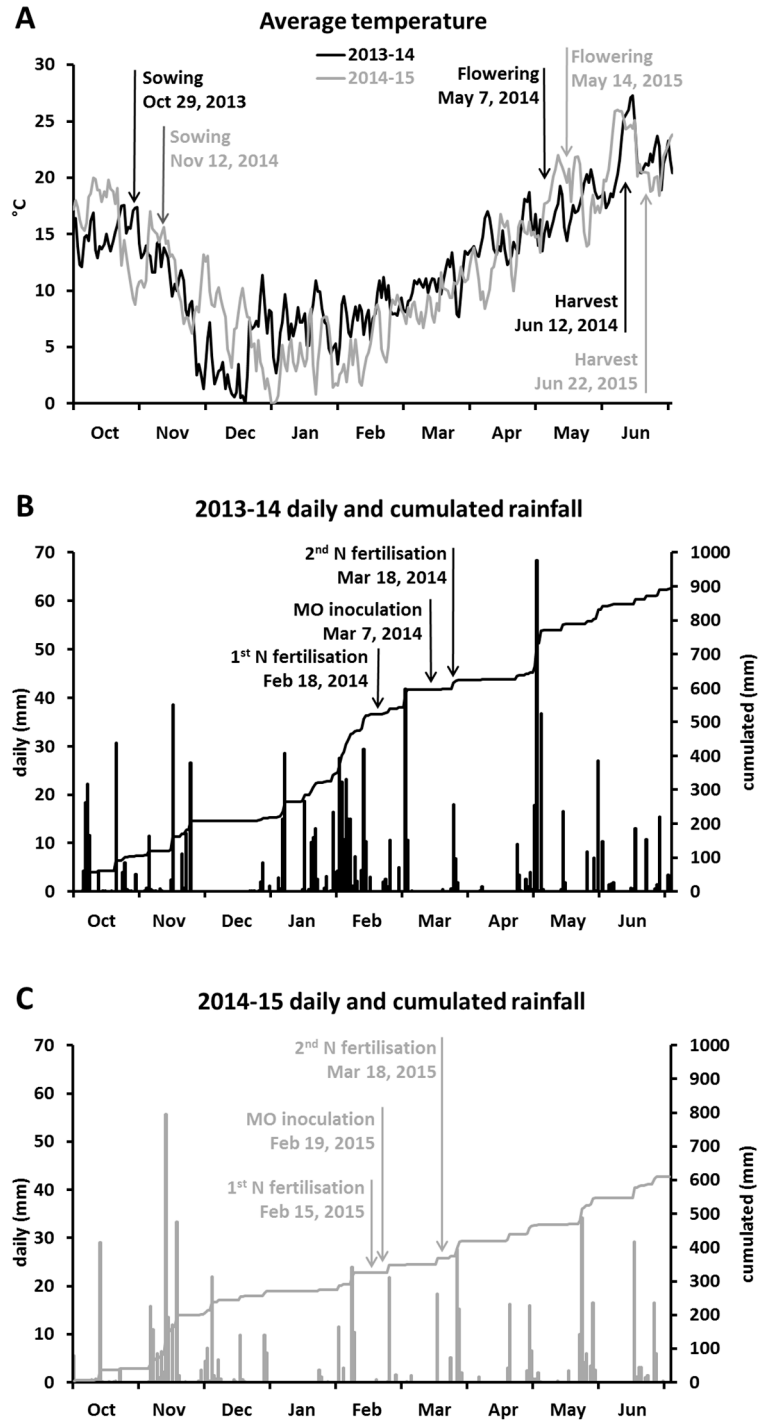
**Table SI1.** Root surface density (RSD) (mean $\pm$ SE; n=3) at the flowering stage in the whole soil profile (0-1 m depth), the arable layer (0-0.4 m depth) and the subsoil (0.4-1 m) of inoculated (+MO) *Triticum aestivum* L. plants *vs.* non-inoculated controls at various N fertilization doses (80, 120 and 160 kg ha<sup>-1</sup>) in a two-year field trial. Letters: significant differences among treatments within the same parameter and soil layer (Newman-Keuls test,  $P \leq 0.05$ ). In brackets: % variation in inoculated plants *vs.* non-inoculated controls at each N fertilization dose.

Variety (year)	Treatment	RSD (cm <sup>2</sup> cm <sup>-3</sup> )											
		0-1 m				0-0.4 m				0.4-1 m			
Africa (2013- 14)	80 N	0.3 ±0.0				0.5 ±0.0				0.1 ±0.0			
		0	1	a		7	4	a		3	1	ab	
	80 N + MO	0.2 ±0.0				0.5 ±0.0				0.1 ±0.0			
		6	4	ab	(-14)	0	7	ab	(-13)	0	1	bc	(-19)
	120 N	0.1 ±0.0				0.3 ±0.0				0.1 ±0.0 ab			
		9	3	c		2	5	c		1	1	c	
	120 N + MO	0.2 ±0.0 ab (+29				0.4 ±0.0 (+28				0.1 ±0.0 (+31			
		5	2	c	)	1	4	bc	)	4	1	a	)
	160 N	0.2 ±0.0				0.3 ±0.0				0.0 ±0.0			
		1	2	bc		8	5	bc		9	1	c	
	160 N + MO	0.2 ±0.0 ab (+21				0.4 ±0.0 (+25				0.1 ±0.0 (+12			
		5	1	c	)	8	4	ab	)	0	1	bc	)
	Fertilisation	*				*				ns			
	MO												
	application	ns				ns				ns			
	Fert. x MO												
	app.	ns				ns				ns			

Bologn a (2014- 15)	80 N	0.4 $\pm$ 0.0	0.8 $\pm$ 0.0	0.2 $\pm$ 0.0
		7 1 a	2 2 a	4 1 a
	80 N + MO	0.4 $\pm$ 0.0	0.7 $\pm$ 0.0	0.1 $\pm$ 0.0
		1 3 ab (-12)	7 1 a (-6)	8 5 ab (-26)
	120 N	0.4 $\pm$ 0.0	0.8 $\pm$ 0.0	0.1 $\pm$ 0.0
		3 1 ab	0 5 a	9 4 ab
	120 N + MO	0.4 $\pm$ 0.0	0.8 $\pm$ 0.0	0.2 $\pm$ 0.0 (+10)
		6 3 ab (+5)	2 6 a (+3)	1 2 ab )
160 N		0.3 $\pm$ 0.0	0.6 $\pm$ 0.0	0.1 $\pm$ 0.0
		6 3 b	9 8 a	4 6 b

160 N + MO	0.4 ±0.0 3 5	(+18 ab )	0.7 ±0.1 5 1	a (+9)	0.2 ±0.0 1 2	(+46 ab )
Fertilisation		ns		ns		ns
MO						
application		ns		ns		ns
Fert. x MO						
app.		ns		ns		ns

ns = not significant; \*, \*\* and \*\*\* = significance at  $P \leq 0.05$ ,  $P \leq 0.01$  and  $P \leq 0.001$ , respectively.



**Figure SI1.** Dynamics of seasonal daily mean temperatures (A) during the wheat crop cycle in both years of the trial, and daily and cumulated rainfall in the first year (B) and the second year (C) at the Legnaro experimental site (Padua, Italy).