

Supplementary Information

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A Microbial Fermentation Mixture Reduces Fusarium Head Blight and Promotes Grain Weight but does not impact Septoria tritici blotch.

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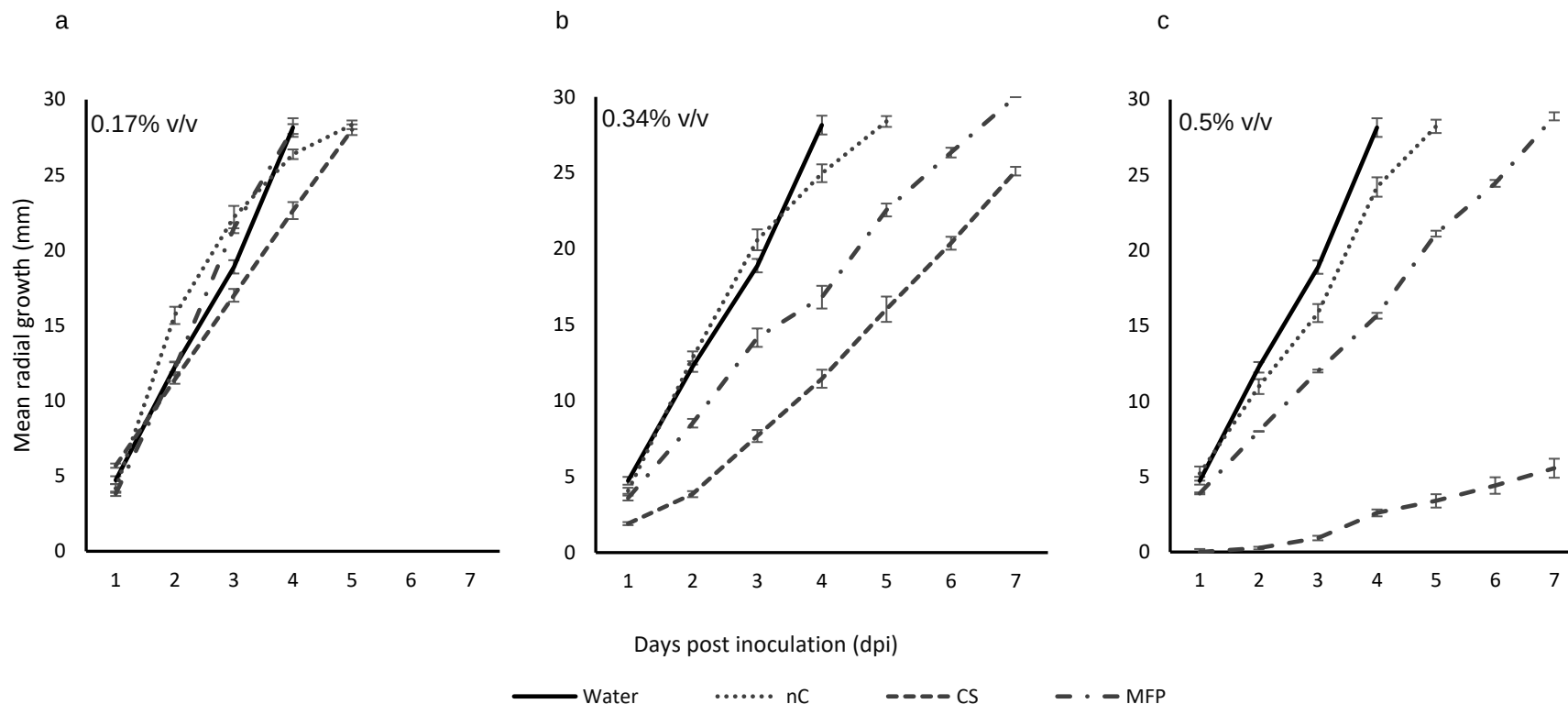
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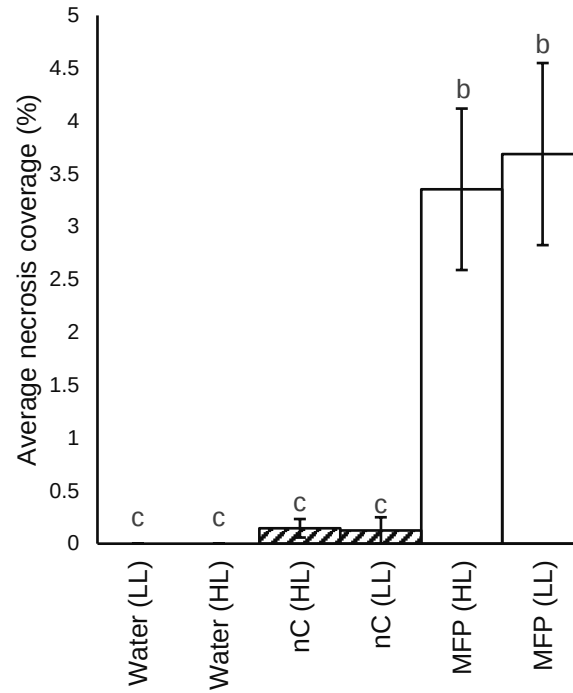
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Supplementary Fig S1. Assessment of the sensitivity of *F. graminearum* to MFP, nC and CS. Plates were amended with MFP, nC or CS. Radial growth was measured every day for 7 days from the circumference of each 8 mm plug. Three treatment concentrations were used; (a) 0.17%, (b) 0.34% and (c) 0.5%. Sterilised distilled water was used as a control. Results represent the mean (three plates per treatment concentration with three plugs per plate, repeated in three independent experiments, n=27) and error bars indicate $\pm$ SEM. Different letters denote significant ($p \leq 0.05$) differences between treatments.



Supplementary Fig. S2. Phytotoxicity of copper under two lighting conditions. Post treatment with water, 0.5% nC, or 0.5% MFP, on wheat cv Avatar, under high light 200 $\mu\text{mol m}^{-2} \text{s}^{-1}$ (HL) or low light 45 $\mu\text{mol m}^{-2} \text{s}^{-1}$ (LL) light intensity. Coverage of symptoms on four representative leaf sections per leaf for three leaves (one leaf per plant of three plants) (n=36) were measured. Two independent experiments were performed. Bars represent mean and error bars represent SEM. Letters denote significant differences ($p \leq 0.05$) between treatments.

Supplementary Table 1. Data complementary to Supplementary Fig 1. Means within a column followed by different letters denote significant ($p \leq 0.05$) differences. Once radial growth (mm) from plugs had reached plate capacity, measurements were not included (-) in statistical analysis.

Treatment	Days post inoculation											
	1		2		3		4		5		6	7
Water	5	abc	12	bc	19	bc	28	a	-	-	-	-
0.17% nC	4	cd	12	bc	21	ab	28	a	-	-	-	-
0.17% CS	6	a	11	bc	17	cd	23	c	28	a	-	-
0.17% MFP	4	bcd	16	a	22	a	26	ab	28	a	-	-
0.34% nC	4	cd	13	b	21	a	25	bc	28	a	-	-
0.34% CS	2	e	4	e	8	g	11	e	16	c	20	b
0.34% MFP	4	d	9	d	14	ef	17	d	23	b	26	a
0.5% nC	5	ab	11	c	16	de	24	bc	28	a	-	-
0.5% CS	0	f	0	f	1	h	3	f	3	d	4	c
0.5% MFP	4	cd	8	d	12	f	16	d	21	b	24	a