

**Supplementary Table S1.** Interaction between C- source used in ASD treatments and temperature (°C) in the peat and sandy-loam soils artificially infested with *Rhizoctonia solani*. The data are expressed as A) mean percentage of lettuce plants with basal rot at the end of the I and II crop cycle B), and mean fresh weights (g pot<sup>-1</sup>) at the end of the I and II crop cycle. All data represent results from trials 1 and 2.

C- source <sup>a</sup> × Temperature (°C)	Peat soil						Sandy-loam soil									
	Mean % affected lettuce plants			Mean plant fresh weight (g pot <sup>-1</sup> )			Mean % affected lettuce plants			Mean plant fresh weight (g pot <sup>-1</sup> )						
	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II				
<i>Trial 1</i>																
BCp ×21°C	29.4±1.7	bc <sup>b</sup>	51.4±8.0	ef	85.4±18.5	a-d	109.8±35.4	bc	38.7±2.3	d	34.2±2.6	ef	89.9±25.0	b-e	173.0±26.7	a-c
BCp×26°C	42.8±8.1	cd	44.6±3.1	c-f	50.3±8.3	de	65.3±13.2	c-f	39.8±3.8	d	47.7±5.8	f-h	92.3±23.6	b-e	167.4±27.8	a-d
Comp×21°C	75.9±5.4	fg	45.6±2.8	c-f	123.0±21.9	a-c	199.5±7.0	a	39.4±3.8	d	27.3±3.5	c-e	106.9±20.9	a-d	182.6±13.7	a-c
Comp×26°C	51.8±9.7	c-e	32.3±3.3	b-d	162.3±41.0	ab	137.5±16.2	b	40.7±2.1	d	36.8±2.5	e-g	114.1±15.4	a-d	158.8±17.9	a-d
WR (15 t ha <sup>-1</sup> )×21°C	70.7±7.0	e-g	49.6±4.1	d-f	67.9±12.1	c-e	86.3±9.6	b-d	46.9±5.0	de	31.3±2.2	de	118.5±31.5	a-d	219.9±32.9	ab
WR (15 t ha <sup>-1</sup> )×26°C	58.9±5.4	d-f	39.2±2.3	b-e	61.6±10.5	c-e	74.4±12.6	c-e	61.6±3.7	fg	54.7±3.5	h	40.8±11.4	e	75.6±14.5	de
INT- Standard control × 21°C	88.4±1.6	g	81.7±4.3	h	4.7±3.2	e	8.5±6.3	f	63.6±1.8	fg	59.1±2.1	h	51.8±10.1	e	88.1±6.1	c-e
INT- Standard control × 26°C	81.9±4.4	g	69.1±1.5	gh	9.2±2.2	e	14.3±2.4	f	67.6±3.0	g	59.7±2.7	h	34.7±8.8	e	62.7±10.0	e
INT- Anaerobic control ×21°C	76.1±6.0	fg	71.6±4.2	gh	15.0±3.6	e	16.5±3.9	ef	54.0±2.6	ef	48.7±3.8	gh	77.1±16.7	c-e	129.5±20.0	b-e
INT- Anaerobic control ×26°C	50.5±1.9	c-e	57.0±5.6	fg	33.7±5.6	de	37.9±7.5	d-f	58.8±1.7	e-g	57.1±2.3	h	51.1±12.2	e	88.1±15.5	c-e
TM×21°C	19.1±3.2	ab	30.9±2.2	bc	62.2±6.6	c-e	41.4±1.8	d-f	14.0±1.6	bc	16.2±1.3	bc	128.3±14.8	a-d	179.1±12.5	a-c
TM×26°C	17.6±1.2	ab	26.6±3.1	b	66.2±6.2	c-e	46.7±7.0	d-f	15.7±2.8	c	19.2±4.6	cd	140.6±14.9	a-c	185.4±19.1	ab
NINT- Anaerobic control ×21°C	0.0±0.0	a	0.0±0.0	a	156.6±40.7	ab	13.9±1.4	f	0.0±0.0	a	0.0±0.0	a	143.0±13.7	a-c	184.4±15.4	ab
NINT- Anaerobic control ×26°C	0.0±0.0	a	0.0±0.0	a	133.9±31.0	a-c	24.4±4.1	ef	1.2±1.2	ab	2.3±2.3	ab	157.2±10.8	a-c	181.7±14.8	a-c
NINT- Standard control ×21°C	0.0±0.0	a	0.0±0.0	a	180.7±33.4	a	62.2±8.0	c-f	0.0±0.0	a	0.0±0.0	a	181.5±20.8	a	250.4±21.3	a
NINT- Standard control ×26°C	0.0±0.0	a	0.0±0.0	a	154.2±17.6	ab	108.8±9.4	bc	0.0±0.0	a	0.0±0.0	a	172.4±16.0	ab	214.2±21.8	ab
<i>Trial 2</i>																
BCp×21°C	84.8±3.4	g	19.7±7.4	a-c	1.6±1.0	f	409.5±101.4	a	11.1±2.6	ab	5.0±1.3	a-c	39.0±2.6	c	89.0±6.1	b-e
BCp×31°C	71.7±8.4	e-g	17.2±6.6	ab	3.8±1.6	f	332.8±53.2	ab	9.8±4.2	ab	6.3±3.2	a-c	40.2±4.2	c	114.1±15.4	ab
BCp-No anaerobic control ×21°C	79.7±7.6	fg	30.7±5.1	bc	3.6±2.2	f	170.9±50.7	ab	16.5±4.0	bc	6.3±1.6	a-c	33.5±4.0	cd	103.8±15.1	bc
BCp-No anaerobic control ×31°C	68.1±8.4	d-g	20.8±6.0	a-c	9.8±5.0	ef	141.9±32.2	ab	9.3±3.0	ab	4.4±1.8	ab	40.7±3.0	c	154.0±9.3	a
Comp×21°C	72.0±6.2	e-g	33.3±2.1	bc	14.4±7.2	d-f	254.5±23.0	ab	32.7±3.4	de	28.8±2.3	de	18.6±2.6	de	61.8±5.6	d-g
Comp×31°C	49.3±7.7	c-f	42.0±2.6	bc	64.6±14.6	b-d	105.9±8.9	b	38.1±3.3	e	14.8±2.2	a-d	21.9±3.3	c-e	65.2±4.9	c-g
WR (15 t ha <sup>-1</sup> )×21°C	75.8±4.7	e-g	31.0±4.4	bc	9.3±4.0	ef	239.6±77.7	ab	19.9±4.1	b-e	14.4±4.3	a-d	30.1±4.1	c-e	67.0±5.8	c-g
WR (15 t ha <sup>-1</sup> )×31°C	35.9±4.1	b-d	23.6±7.5	a-c	55.7±7.4	b-e	265.4±75.6	ab	22.4±1.7	b-e	15.0±1.9	a-d	27.6±1.7	c-e	66.2±6.3	c-g
WR (30 t ha <sup>-1</sup> )×21°C	74.2±6.7	e-g	30.2±5.5	bc	17.4±10.2	c-f	293.4±81.3	ab	20.8±2.7	b-e	13.8±3.5	a-d	29.2±2.7	c-e	94.1±3.4	b-d
WR (30 t ha <sup>-1</sup> )×31°C	44.8±9.8	c-e	31.1±8.1	bc	51.7±17.6	b-f	227.8±61.7	ab	24.1±3.3	b-d	18.1±4.5	b-d	25.9±3.3	c-e	63.3±7.2	c-g
INT- Standard control × 21°C	71.9±7.0	e-g	42.6±4.6	bc	15.7±5.5	c-f	122.7±31.0	b	31.9±1.4	c-e	30.0±5.5	de	18.1±1.4	de	31.2±8.9	g
INT- Standard control × 31°C	75.5±5.6	e-g	45.0±2.3	c	5.8±2.6	ef	87.3±8.8	b	38.4±2.2	e	38.8±3.8	e	11.6±2.2	e	37.5±5.7	g
INT- Anaerobic control ×21°C	80.3±5.5	fg	40.4±5.8	bc	7.9±5.3	ef	162.1±46.8	ab	31.8±2.0	c-e	28.1±3.1	de	18.2±2.0	de	41.5±7.6	fg
INT- Anaerobic control ×31°C	48.5±9.1	c-f	39.0±6.0	bc	43.6±11.8	b-f	178.5±54.9	ab	33.4±2.0	de	30.6±3.2	de	16.6±2.0	de	42.6±3.7	fg

(Continued)

Supplementary Table S1. (Continued).

C- source <sup>a</sup> × Temperature (°C)	Peat soil						Sandy-loam soil									
	Mean % affected lettuce plants			Mean plant fresh weight (g pot <sup>-1</sup> )			Mean % affected lettuce plants			Mean plant fresh weight (g pot <sup>-1</sup> )						
	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II				
TM×21°C	31.6±6.2	a-c	26.5±5.5	bc	66.6±19.5	c-f	319.9±52.1	ab	27.3±3.6	c-e	22.5±3.1	c-e	22.7±3.6	c-e	50.3±8.7	e-g
TM×31°C	12.2±5.2	ab	25.4±4.9	a-c	72.9±12.0	ef	243.5±54.4	ab	23.5±5.8	b-d	21.3±2.2	b-e	26.5±5.8	c-e	51.7±10.6	e-g
NINT- Anaerobic control ×21°C	0.0±0.0	a	0.0±0.0	a	135.2±14.5	a	205.9±19.6	ab	0.0±0.0	a	0.0±0.0	a	100.8±7.7	b	82.2±6.6	b-f
NINT- Anaerobic control ×31°C	0.0±0.0	a	0.0±0.0	a	94.5±12.3	ab	227.3±9.3	ab	0.0 ±0.0	a	0.0±0.0	a	125.6±7.1	a	116.7±6.6	ab

<sup>a</sup> Comp: Compost; BCp: *Brassica carinata* pellet with or without anaerobic conditions; WR: *Diplotaxis* green manure; TM: Tolclofos methyl; INT-Anaerobic control: Inoculated untreated control with anaerobic conditions; INT-Standard control: Inoculated untreated control without anaerobic conditions; NINT-Anaerobic control: Non-inoculated untreated control with anaerobic conditions; NINT-Standard control: Non-inoculated untreated control without anaerobic conditions.

<sup>b</sup> Means in each column accompanied by the same letter are not significantly different ( $P \leq 0.05$ ), according to Tukey's test. Standard errors are also indicated.

**Supplementary Table S2.** Interaction between C- source used in ASD treatments and ASD duration (3 or 6 weeks) in the peat and sandy-loam soils artificially infested with *Rhizoctonia solani*. The data are expressed as A) mean percentage of lettuce plants with basal rot at the end of the I and II crop cycle B), and mean fresh weights (g pot<sup>-1</sup>) at the end of the I and II crop cycle. All data represent results from trials I and 2.

C- source <sup>a</sup> × ASD duration (weeks)	Peat soil						Sandy-loam soil									
	Mean % affected lettuce plants			Mean plant fresh weight (g pot <sup>-1</sup> )			Mean % affected lettuce plants			Mean plant fresh weight (g pot <sup>-1</sup> )						
	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II				
Trial I																
BCp × 3 weeks	45.4±3.9	c-e <sup>b</sup>	49.9±6.0	de	75.5±13.6	c-e	74.5±13.6	cd	35.0±1.9	c	38.0±2.6	de	62.4±13.4	a-d	110.3±10.4	c-e
BCp × 6 weeks	31.9±2.9	b-d	46.1±6.4	b-e	99.6±36.7	b-e	47.9±6.6	cd	43.4±3.7	cd	43.9±6.6	d-g	119.9±29.9	a-f	230.1±18.9	a
Comp × 3 weeks	53.7±4.8	de	41.6±3.0	b-e	181.7±13.3	a	115.3±17.5	c	36.9±3.2	c	27.7±3.7	cd	115.7±18.8	a-f	180.5±17.1	a-d
Comp × 6 weeks	44.4±6.8	b-d	36.3±4.5	b-d	155.3±18.9	ab	224.7±71.8	ab	43.2±2.8	cd	36.4±2.4	de	105.3±17.8	a-f	160.9±15.1	a-e
WR (15 t ha <sup>-1</sup> ) × 3 weeks	55.7±4.0	de	48.5±4.3	c-e	61.2±9.7	c-f	55.6±9.0	cd	46.9±3.6	c-e	40.3±5.6	d-f	98.6±31.5	a-f	185.4±45.6	a-d
WR (15 t ha <sup>-1</sup> ) × 6 weeks	51.3±4.6	de	40.2±2.5	b-d	99.6±7.8	b-e	92.0±13.0	cd	61.7±5.1	fg	45.7±4.8	e-h	56.8±16.1	a-c	110.0±17.2	c-e
INT- Standard control × 3 weeks	78.9±2.5	g	80.4±3.8	g	8.5±3.8	f	7.6±2.5	d	63.2±2.4	fg	57.4±2.0	gh	45.2±9.0	ab	76.1±7.2	e
INT- Standard control × 6 weeks	84.5±2.8	g	70.4±3.3	fg	14.4±5.5	ef	5.0±2.8	d	68.3±2.6	g	61.9±2.6	h	40.9±10.4	a	74.5±12.5	e
INT- Anaerobic control × 3 weeks	66.7±3.5	fg	69.0±4.9	fg	22.8±7.0	ef	20.9±3.9	cd	54.8±2.0	d-f	50.3±2.7	e-h	72.2±16.3	a-e	121.2±18.9	b-e
INT- Anaerobic control × 6 weeks	55.1±4.1	de	59.6±5.7	ef	31.6±7.1	ef	34.8±8.2	cd	58.1±2.4	e-g	56.2±4.1	f-h	55.0±12.6	a-c	92.8±18.1	de
TM × 3 weeks	25.6±1.7	bc	30.0±3.3	bc	37.9±1.4	d-f	54.6±4.3	cd	17.4±1.9	b	18.6±3.7	bc	132.2±16.2	b-f	186.7±15.7	a-d
TM × 6 weeks	17.5±2.9	ab	27.6±2.0	b	50.2±6.4	c-f	93.1±3.6	cd	12.3±2.4	ab	16.8±3.0	a-c	136.8±13.6	c-f	177.9±16.5	a-d
NINT- Standard control × 3 weeks	0.0±0.0	a	0.0±0.0	a	105.7±11.1	bc	122.2±14.0	bc	0.0±0.0	a	0.0±0.0	a	185.4±21.3	f	248.5±23.7	a
NINT- Standard control × 6 weeks	0.0±0.0	a	0.0±0.0	a	65.3±8.3	c-f	303.2±27.6	a	0.0±0.0	a	0.0±0.0	a	167.4±13.7	f	211.4±16.4	ab
NINT- Anaerobic control × 3 weeks	0.0±0.0	a	0.0±0.0	a	23.5±4.4	ef	116.2±30.6	c	1.1±1.1	a	2.0±2.0	ab	147.1±10.9	d-f	176.6±13.7	a-d

(Continued)

Supplementary Table S2. (Continued).

C- source <sup>a</sup> × ASD duration (weeks)	Peat soil						Sandy-loam soil					
	Mean % affected lettuce plants			Mean plant fresh weight (g pot <sup>-1</sup> )			Mean % affected lettuce plants			Mean plant fresh weight (g pot <sup>-1</sup> )		
	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II	Cycle I	Cycle II
NINT- Anaerobic control ×6 weeks	0.0±0.0 a	0.0±0.0 a	14.8±1.6 ef	232.5±24.1 a	0.0±0.0 a	0.0±0.0 a	0.0±0.0 a	0.0±0.0 a	153.5±14.1 ef	191.3±16.4 a-c		
Trial 2												
BCp×3 weeks	86.3±3.8 f	29.9±6.7 b-d	1.0±1.0 f	204.3±52.6 c-g	15.4±3.1 b-d	10.4±2.4 a	34.7±3.1 b-e	86.3±6.5 b-e				
BCp×6 weeks	70.5±8.0 d-f	7.0±3.9 a	4.3±1.5 f	538.1±52.9 a	5.5±2.8 ab	2.5±2.0 a	44.5±2.8 b	116.9±14.6 ab				
BCp-No anaerobiotic control ×3 weeks	78.8±7.7 ef	33.3±6.4 b-e	6.4±4.6 f	72.4±17.4 e-g	13.8±2.5 a-c	12.5±2.2 ab	36.2±2.5 b-d	122.8±17.0 ab				
BCp-No anaerobiotic control ×6 weeks	69.1±8.6 d-f	18.2±3.5 a-c	6.6±2.5 f	240.3±36.8 c-e	12.0±4.7 a-c	8.8±2.6 a	38.0±4.7 bc	135.0±14.0 a				
Comp×3 weeks	76.9±5.6 d-f	38.8±2.1 de	16.1±8.9 d-f	159.9±19.0 d-g	29.2±2.5 d-g	25.2±2.2 a-c	25.9±2.4 b-f	49.3±9.8 d-f				
Comp×6 weeks	44.5±5.3 cd	36.6±3.5 c-e	63.0±14.4 b-d	200.5±41.3 c-g	41.7±2.6 h	29.2±2.3 cd	14.6±1.8 ef	37.7±6.0 f				
WR (15 t ha <sup>-1</sup> )×3 weeks	61.5±7.9 c-f	39.7±3.6 de	26.0±9.7 d-f	72.1±9.1 e-g	23.9±3.8 c-g	16.2±2.9 bc	26.1±3.8 b-f	66.9±5.6 c-f				
WR (15 t ha <sup>-1</sup> )×6 weeks	50.1±9.0 c-e	14.8±4.8 ab	39.0±10.8 d-f	432.8±49.1 ab	18.4±2.0 b-e	17.9±1.8 bc	31.6±2.0 b-f	66.3±6.5 c-f				
WR (30 t ha <sup>-1</sup> )×3 weeks	71.8±8.9 d-f	47.2±2.4 de	10.8±7.1 ef	84.5±9.4 e-g	21.1±2.4 c-f	17.6±1.2 bc	29.0±2.4 b-f	69.2±8.3 c-f				
WR (30 t ha <sup>-1</sup> )×6 weeks	47.2±9.0 c-e	14.1±3.4 ab	58.3±16.9 c-e	436.7±42.2 ab	23.9±3.5 c-g	19.1±1.8 bc	26.1±3.5 b-f	88.2±6.1 b-e				
INT- Standard control ×3 weeks	90.0±0.0 f	51.2±1.6 e	1.1±1.1 f	60.3±14.0 fg	33.5±1.5 f-h	38.5±1.3 e	16.5±1.5 d-f	43.6±6.4 ef				
INT- Standard control ×6 weeks	57.4±2.2 c-f	36.3±2.9 c-e	20.3±4.1 d-f	149.6±19.0 d-g	36.8±2.7 gh	32.8±2.6 d	13.2±2.7 f	25.0±7.0 f				
INT- Anaerobic control ×3 weeks	76.6±8.8 d-f	51.3±2.2 e	8.2±5.6 ef	56.1±16.7 g	31.4±2.2 d-g	29.4±2.0 cd	18.6±2.2 c-f	48.2±5.6 d-f				
INT- Anaerobic control ×6 weeks	52.2±8.1 c-e	28.1±5.1 b-d	43.2±11.8 d-f	284.4±35.0 b-d	33.9±1.6 f-h	30.9±1.2 cd	16.2±1.6 d-f	35.9±5.4 f				
TM×3 weeks	9.8±4.2 ab	19.0±5.9 a-c	99.2±14.8 a-c	339.5±56.4 bc	16.7±4.6 b-d	13.7±3.6 ab	33.3±4.6 b-f	64.2±10.9 c-f				
TM×6 weeks	34.0±5.8 bc	32.8±2.5 b-e	40.3±7.9 d-f	224.0±44.3 c-g	34.1±2.2 f-h	30.1±2.2 d	15.9±2.2 ef	37.8±4.3 ef				
NINT- Anaerobic control ×3 weeks	0.0±0.0 a	0.0±0.0 a	120.2±12.5 a	203.1±17.6 c-g	0.0±0.0 a	0.0±0.0 a	113.0±4.8 a	107.1±8.8 a-c				
NINT- Anaerobic control ×6 weeks	0.0±0.0 a	0.0±0.0 a	109.5±17.8 ab	230.1±11.8 c-f	0.0±0.0 a	0.0±0.0 a	113.4±11.4 a	91.9±9.5 a-d				

<sup>a</sup> Comp: Compost; BCp: *Brassica carinata* pellet with or without anaerobic conditions; WR: *Diplotaxis* green manure; TM: Tolclofos methyl; INT- Anaerobic control: Inoculated untreated control with anaerobic conditions; NINT-Standard control: Inoculated untreated control without anaerobic conditions; NINT- Anaerobic control: Non-inoculated untreated control with anaerobic conditions; NINT-Standard control: Non-inoculated untreated control without anaerobic conditions.

<sup>b</sup> Means in each column accompanied by the same letter are not significantly different ( $P \leq 0.05$ ), according to Tukey's test. Standard errors are also indicated.