

Table S1. Results of multiple comparisons of the different treatments presented in Fig. 1a.

	0d	2d	4d	6d	8d	10d	12d	14d	16d	18d	20d
0.02-1	a	a	a	a	ab	a	a	a	a	a	a
0.02-5	a	a	ab	ab	a	a	a	a	ab	ab	ab
0.05-1	a	a	ab	bc	ab	a	a	ab	ab	bc	bc
0.05-5	a	a	ab	b	ab	a	a	ab	abc	ab	b
0.1-1	a	a	b	d	cd	b	b	b	c	c	d
0.1-5	a	a	ab	cd	bc	a	ab	ab	bc	cd	cd
0.5-1	a	a	b	d	e	c	d	c	d	e	d
0.5-5	a	a	b	d	de	d	c	c	d	e	e

Table S2. Results of multiple comparisons of the different treatments presented in Fig. 1b.

	2d	4d	6d	8d	10d	12d	14d	16d	18d	20d
0.02-1	a	a	ab	ab	ab	a	ab	a	ab	a
0.02-5	ab	a	a	a	ab	ab	ab	a	ab	a
0.05-1	ab	ab	ab	ab	ab	a	ab	ab	ab	a
0.05-5	ab	ab	ab	a	ab	ab	ab	ab	a	a
0.1-1	ab	ab	b	ab	ab	ab	ab	ab	ab	a
0.1-5	a	ab	b	a	a	ab	ab	ab	ab	a
0.5-1	b	b	b	b	b	b	a	ab	b	a
0.5-5	ab	b	b	ab	ab	ab	b	b	ab	a

Table S3. Results of multiple comparisons of the different treatments presented in Fig. 2.

	0d	2d	4d	6d	8d	10d	12d	14d	16d	18d	20d
0.02-1	a	a	a	a	a	a	a	a	a	a	a
0.02-5	a	a	a	ab	ab	bc	b	ab	a	a	a
0.05-1	a	a	a	ab	ab	abc	b	bc	ab	a	a
0.05-5	a	a	a	a	ab	abc	b	ab	a	a	a
0.1-1	a	a	a	b	b	c	b	de	c	a	a
0.1-5	a	a	a	a	a	abc	b	cd	bc	a	a
0.5-1	a	a	a	ab	b	bc	b	e	d	c	c
0.5-5	a	a	a	a	a	ab	b	e	d	b	b

Table S4. Effect of pulse treatments and phosphate on the chl-a of *C. ovalisporum* by two-way ANOVA.

Influence factor	2d		4d		6d		8d		10d	
	F	p	F	p	F	p	F	p	F	p
Pulse treatments	0.50	0.49	0.00	0.99	10.13	0.01	7.45	0.01	1.06	0.32
Phosphate	0.46	0.71	0.91	0.46	2.16	0.13	1.19	0.34	2.06	0.15
Interaction	1.38	0.28	1.95	0.16	5.73	0.01	11.00	0.00	10.92	0.00
Influence factor	12d		14d		16d		18d		20d	
	F	p	F	p	F	p	F	p	F	p
Pulse treatments	0.69	0.42	0.06	0.81	1.06	0.32	7.19	0.02	24.07	0.00

Phosphate	11.38	0.00	84.41	0.00	130.26	0.00	133.83	0.00	193.84	0.00
Interaction	6.67	0.00	2.12	0.14	0.48	0.70	6.28	0.01	24.13	0.00

Table S5. Results of multiple comparisons of the different treatments presented in Fig. 3a.

	0d	2d	4d	6d	8d	10d	12d	14d	16d	18d	20d
0.02-1	a	a	a	a	ab	a	ab	a	a	a	a
0.02-5	a	a	ab	a	a	a	ab	a	a	b	ab
0.05-1	a	a	c	b	bc	a	ab	a	b	bc	b
0.05-5	a	a	ab	b	ab	a	ab	a	b	b	ab
0.1-1	a	a	bc	b	abc	a	ab	a	b	d	c
0.1-5	a	a	bc	b	c	a	a	a	b	d	c
0.5-1	a	a	bc	b	abc	a	ab	a	b	d	d
0.5-5	a	a	bc	b	abc	a	b	a	b	cd	cd

Table S6. Results of multiple comparisons of the different treatments presented in Fig. 3b.

	0d	2d	4d	6d	8d	10d	12d	14d	16d	18d	20d
0.02-1	a	a	a	a	abc	abc	bc	a	a	a	a
0.02-5	c	a	a	a	a	a	a	ab	a	ab	a
0.05-1	abc	a	c	b	bcd	abc	abc	ab	b	b	a
0.05-5	abc	a	ab	b	ab	ab	abc	ab	b	b	a
0.1-1	ab	a	c	bc	cde	bc	abc	a	b	c	b
0.1-5	bc	a	bc	cd	de	abc	ab	a	b	c	b
0.5-1	ab	a	c	d	e	c	bc	ab	b	c	c
0.5-5	abc	a	c	cd	cde	bc	c	b	b	c	c

Table S7. Results of multiple comparisons of the different treatments presented in Fig. 4a.

	0d	2d	4d	6d	8d	10d	12d	14d	16d	18d	20d
0.02-1	a	a	ab	a	a	a	a	a	a	ab	ab
0.02-5	a	a	a	a	a	a	ab	a	a	ab	abc
0.05-1	a	a	ab	a	a	a	ab	a	a	ab	b
0.05-5	a	a	ab	ab	a	a	a	a	a	a	a
0.1-1	a	ab	b	a	a	a	bc	a	a	a	a
0.1-5	a	a	ab	ab	a	a	a	a	a	ab	a
0.5-1	a	bc	c	ab	b	b	c	b	b	bc	abc
0.5-5	a	c	c	b	b	b	c	b	b	b	c

Table S8. Results of multiple comparisons of the different treatments presented in Fig. 4b.

	0d	2d	4d	6d	8d	10d	12d	14d	16d	18d	20d
0.02-1	a	ab	ab	a	abc	ab	ab	b	abc	a	ab
0.02-5	a	a	ab	a	bc	a	ab	a	a	a	ab
0.05-1	a	a	a	a	abc	abc	ab	a	abc	a	b
0.05-5	a	abc	ab	a	bc	ab	a	a	ab	a	ab
0.1-1	a	abc	ab	a	ab	bc	ab	a	ab	a	ab
0.1-5	a	abc	ab	a	a	ab	ab	a	a	a	a

0.5-1	a	c	b	a	c	c	c	b	c	a	ab
0.5-5	a	bc	ab	a	abc	c	b	a	bc	a	ab

Table S9. Results of multiple comparisons of the different treatments presented in Fig. 6.

	0d	2d	4d	6d	8d	10d	12d	14d	16d	18d	20d
0.02-1	a	c	c	c	d	c	d	d	d	d	d
0.02-5	a	bc	b	bc	cd	b	c	c	cd	cd	cd
0.05-1	a	abc	b	abc	bc	ab	bc	bc	c	bc	bc
0.05-5	a	bc	b	bc	bc	ab	c	c	bc	bc	bc
0.1-1	a	bc	b	a	ab	ab	ab	ab	ab	b	b
0.1-5	a	abc	b	ab	bc	ab	ab	ab	ab	b	b
0.5-1	a	ab	a	a	a	a	a	a	a	a	a
0.5-5	a	a	a	a	a	a	a	a	a	a	a

Table S10 Results of multiple comparisons of the different treatments presented in Fig. 7.

	4d	8d	12d	16d	20d
0.02-1	a	c	b	b	b
0.02-5	a	bc	b	b	b
0.05-1	a	bc	b	b	b
0.05-5	a	bc	b	b	b
0.1-1	a	ab	b	b	b
0.1-5	a	bc	b	b	b
0.5-1	a	a	a	a	a
0.5-5	a	a	a	a	a