

Delli Compagni, E., Pardossi, A. & Pecchia, S. (2025). Root and crown rot caused by *Fusarium pseudograminearum* in the euhalophyte *Salicornia europaea*: pathogenicity and mycotoxin production in plants grown in soilless culture. *Phytopathologia Mediterranea* 64(1): 9-23. doi: 10.36253/phyto-15597

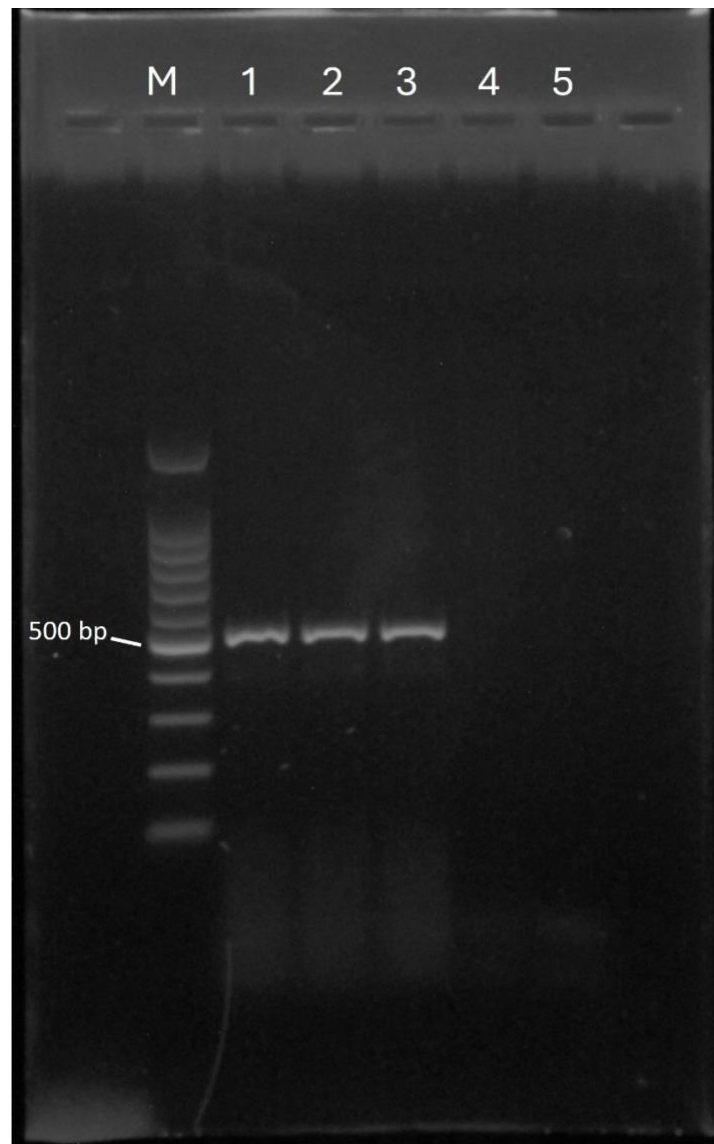


Figure S1. Agarose gel (1% v/v) showing the 523 bp fragments of the *ef-1 α* gene of *Fusarium pseudograminearum* amplified by species-specific PCR with Fp1-1/Fp1-2 primers (Aoki and O'Donnell, 1999). M: marker 100 bp; lane 1: *F. pseudograminearum* isolate 3B; lane 2: *F. pseudograminearum* isolate PD-A; lane 3: *F. pseudograminearum* isolate PD-B; lane 4: *Fusarium oxysporum* isolate DAFE SP21-23; lane 5: non-template control.

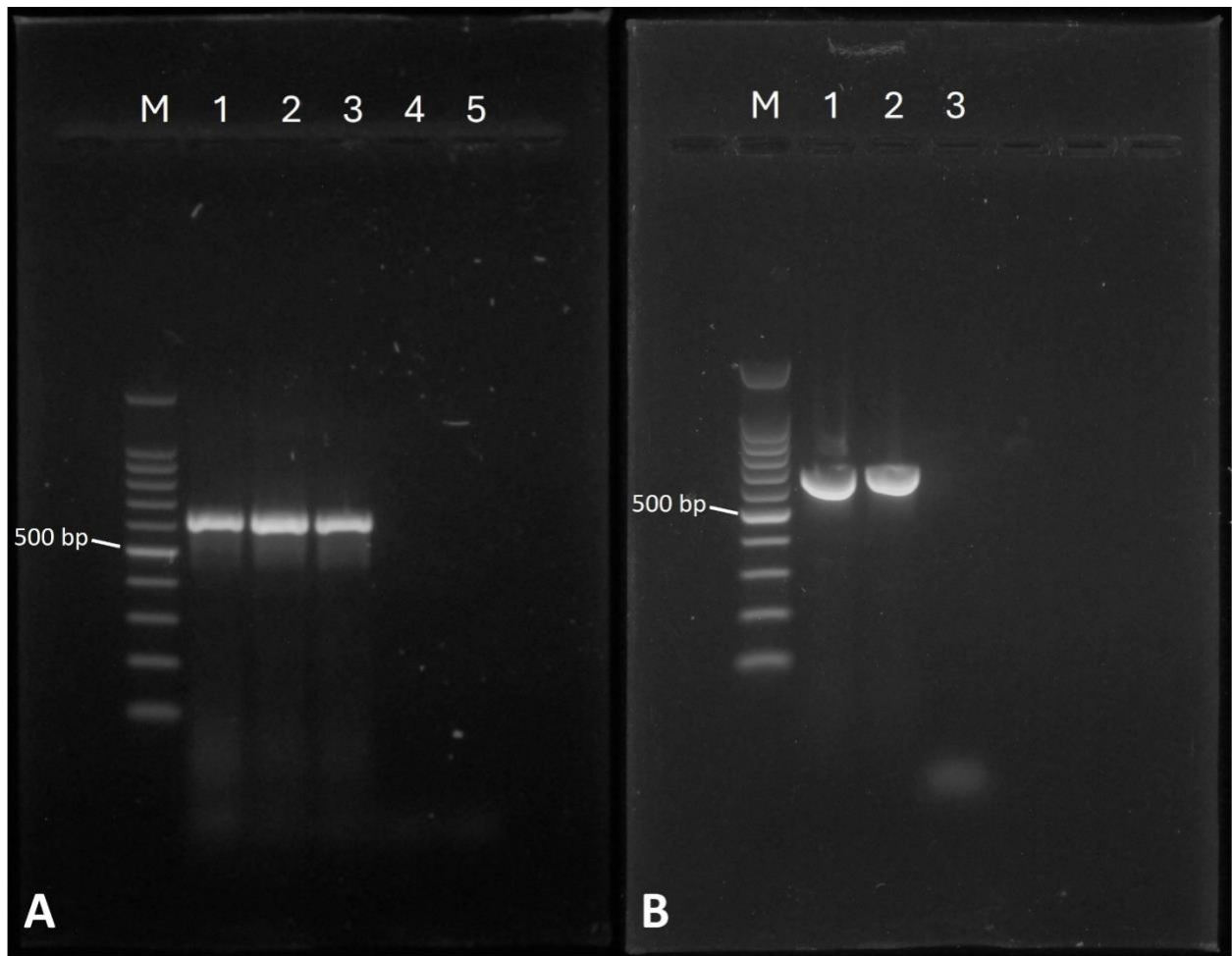


Figure S2. Agarose gel (1% v/v) showing the 650 bp fragments of the *tri5* gene of *Fusarium pseudograminearum* amplified Tox5-1/Tox5-2 primers (Niessen and Vogel, 1998).

A) M: marker 100 bp; lane 1: *F. pseudograminearum* isolate 3B; lane 2: *F. pseudograminearum* isolate PD-A; lane 3: *F. pseudograminearum* isolate PD-B; lane 4: *Fusarium oxysporum* isolate DAFE SP21-23; lane 5: non-template control.

B) M: marker 100 bp; lane 1: *F. pseudograminearum* isolate ColPat-351; lane 2: *F. pseudograminearum* isolate PVS Fu-7; lane 3: non-template control.

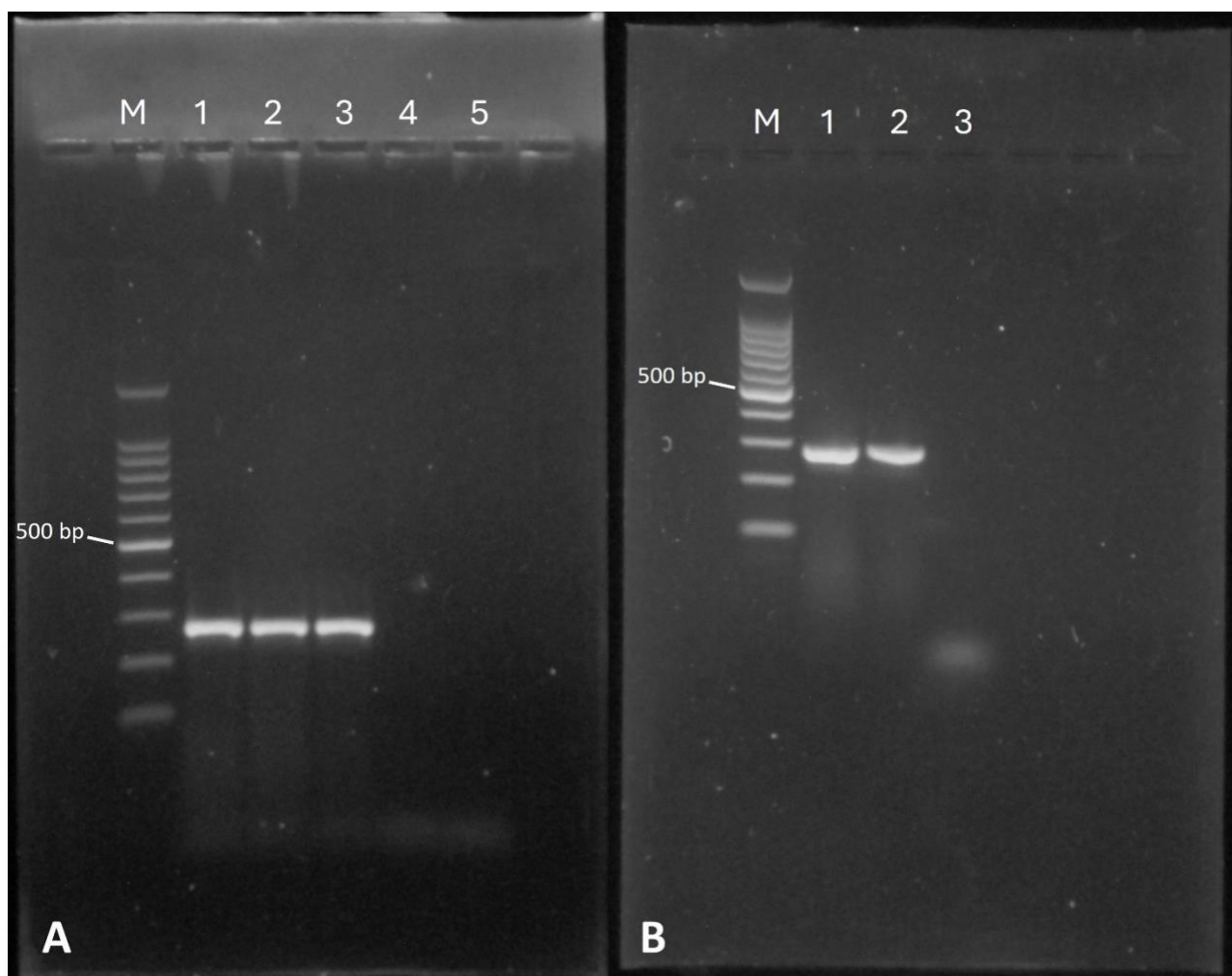


Figure S3. Agarose gel (1% v/v) showing the 280 bp fragments of the *pks4* gene of *Fusarium pseudograminearum* amplified PKS4F/PKS4R primers (Meng et al, 2010).

A) M: marker 100 bp; lane 1: *F. pseudograminearum* isolate 3B; lane 2: *F. pseudograminearum* isolate PD-A; lane 3: *F. pseudograminearum* isolate PD-B; lane 4: *Fusarium oxysporum* isolate DAFE SP21-23; lane 5: non-template control.

B) M: marker 100 bp; lane 1: *F. pseudograminearum* isolate ColPat-351; lane 2: *F. pseudograminearum* isolate PVS Fu-7; lane 3: non-template control.

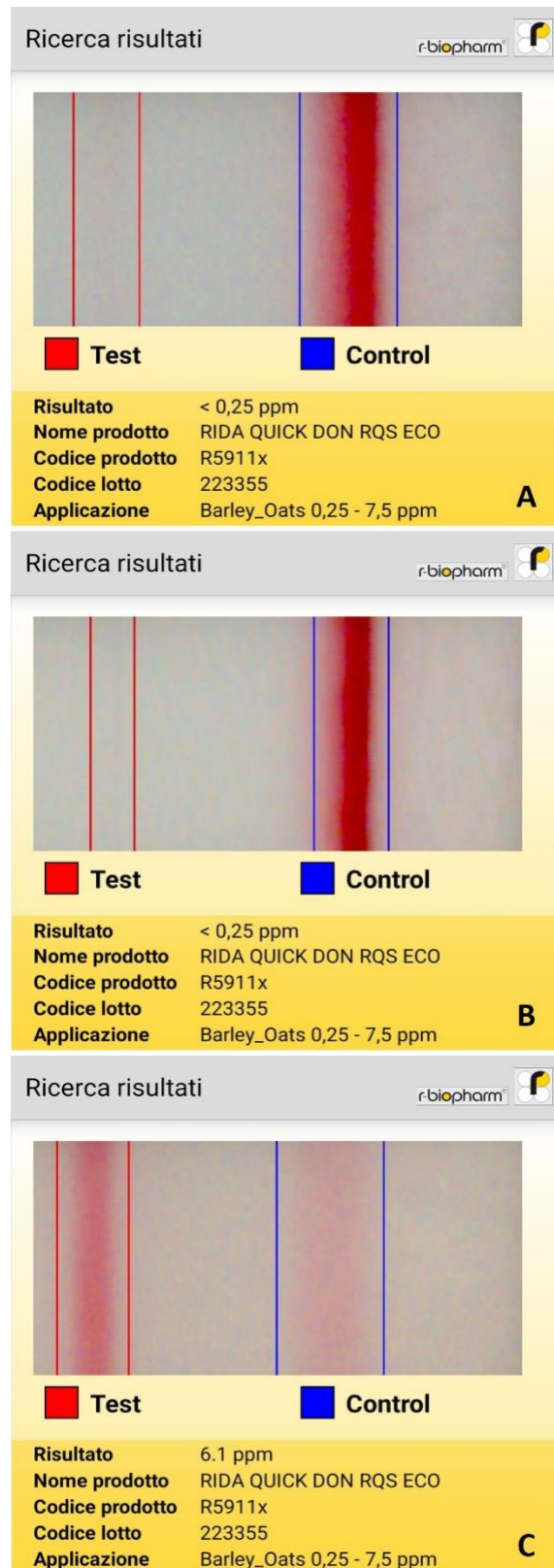


Figure S4. The output of the RIDA® QUICK DON RQS ECO test kit. Results are acquired using the RIDA® SMART APP. A) Mock control; B) *Fusarium oxysporum* isolate DAFE SP21-23; C) *F. pseudograminearum* isolate 3B.



Figure S5. The output of the RIDA® QUICK Zearalenon RQS test kit. Results are acquired using the RIDA® SMART APP. A) Mock control; B) *Fusarium oxysporum* isolate DAFE SP21-23; C) *F. pseudograminearum* isolate 3B.

Table S1. Conidial size, on PDA, of the three *Fusarium pseudograminearum* isolates grown at 25 ± 1°C in complete darkness for two weeks. The averages and the 95% confidence levels were determined, and the extremes of conidial measurements (*n* = 50) are given in parentheses.

		Isolate		
		<i>F. pseudograminearum</i> 3B	<i>F. pseudograminearum</i> PD-A	<i>F. pseudograminearum</i> PD-B
Conidial size (length X width) (µm)	5-septate	(46.76-)53.35-54.48-55.6(-62.08)	(43.9-)52.78-53.99-55.2(-62.13)	(42.81-)52.64-53.75-54.87(-61.17)
		X (3.95-)4.99-5.14-5.3(-6.13)	X (4.08-)4.89-4.98-5.08(-5.89)	X (4.03-)4.95-5.06-5.17(-6.11)
	3-septate	(30.62-)38.55-39.67-40.79(-52.13)	(32.41-)39.19-40.41-41.62(-51.97)	(31.92-)39-40.11-41.22(-52.17)
		X (3.22-)4.08-4.18-4.27(4.85)	X (3.28-)4.11-4.2-4.29(-4.88)	X (3.26-)4.05-4.14-4.23(-4.83)
	1-septate	(21.23-)26.83-27.65-28.47(-33.83)	(21.23-)27.5-28.14-28.77(-33.14)	(23.21-)27.17-27.77-28.41(-32.61)
		X (3.18-)3.65-3.74-3.82(-4.65)	X (3.23-)3.69-3.77-3.84(-4.68)	X (3.22-)3.7-3.77-3.84(-4.23)

Table S2. Recovery of *Fusarium pseudograminearum* isolate 3B inoculated on *Salicornia europaea* plants at 80 days post inoculation. Infected tissues were disinfected, washed, and plated onto PDA plates amended with streptomycin, and incubated at room temperature (22 – 25°C).

Growth method	Plant tissue	n. of plated pieces	<i>F. pseudograminearum</i> colonies	% of recovery
Pot	Roots	23	22	96
	Crowns	11	11	100
	Stem	69	28	41
	First lateral branches	22	20	91
	Second lateral branches	22	13	59
Hydroponics	Roots	23	20	87
	Crowns	11	9	82
	Stem	66	56	85
	First lateral branches	22	20	91
	Second lateral branches	22	14	64