

Seed-Borne Disease Testing after a Pea Fungicide Trial



This spring, when we were looking to clear out last year’s harvest samples, we asked ourselves: Is there more information we can glean from these samples? With fungicide trials, the answer was clear – we have not yet evaluated the impact a fungicide application (or two) may have on the amount of seed-borne disease carrying over to the next growing season. This is a valuable consideration.

Composite seed samples from treated versus untreated strips of pea fungicide trials were sent for testing. When comparing single application versus none for 2022 trials, seed-borne Ascochyta infection was present in 83 per cent of trials (five out of six trials) and infection ranged from 0.5 to 10.5 per cent (average 4.3 per cent). At three trials, a single application of fungicide

reduced the amount of seed-borne Ascochyta to 0 per cent at three out of six trials. Comparing two applications versus one in 2022 found seed-borne infections at 57 per cent of trials (four out of seven trials) ranging from 0.5 to 5 per cent (average 2.2 per cent) and the second application of fungicide reduced infection at every trial where the disease was present.

In 2023, seed-borne Ascochyta was present at 71 per cent of trials tested so far (five out of seven trials), ranging from 0.5 to 3.9 per cent infection (Table 1). A single application of fungicide (versus none) reduced the amount of seed-borne Ascochyta at every trial where it was present in 2023. Two trials near Swan River, comparing two applications versus one, have yet to be processed.

Table 1. Percentage of seed-borne ascochyta found in post-harvest seed samples from 2023 pea fungicide trials evaluating a single fungicide application vs. none.

SEED-BORNE ASCOCHYTA (%)				
Trial	Nearest Town	Single Fungicide Application		None
		Product 1	Product 2	
PF01	Dauphin	0.8		3.9
PF02	Roblin	0		0.5
PF04	Elm Creek	0.1		0
PF06	Notre Dame	0		0.5
PF07	Stonewall	1.0		1.5
		Product 1	Product 2	None
PF03	Sperling	0	0	0
PF05	Altamont	1.0	0.1	2.3