Frost, now and in the Future

Nathan Dovey, CEO, SCF

Stirlings to Coast Farmers are pleased to be a part of a larger Grower Group Alliance led project examining agronomic factors for frost risk mitigation.

Trial Objectives

- 1. Within a sowing window, compare the relative frost susceptibility of wheat, barley, oats and break crops in frost prone landscapes.
- 2. To develop across a sowing program the most stable and profitable cereal production in frost prone landscapes.

Hypothesis

Wheat is as profitable as barley, oats and break crops when phenology matches the optimum sowing time.

Methodology

Site Selection

A trial site has been selected on a frost prone soil type in a low lying part of the landscape at Amelup. The site was chosen due to the host farmer observation that the paddock is frosted most years.

Treatment List

Trt No.	Сгор Туре	Variety
1	Wheat	Denison
2	Wheat	Rockstar
3	Wheat	Scepter
4	Barley	Rosalind
5	Barley	RGT Planet
6	Oat	Bannister
7	Canola	HyTTec Trident – Hybrid TT
8	Lupin	Jurien

Trial layout

TOS 1										TOS 2													
Buffer	B2	01	B1	W3	W2	W1	Buffer	Buffer	C1	L1	Buffer	Buffer	L1	C1	Buffer	Buffer	W2	W1	W3	O1	B2	B1	Buffer
Buffer	01	W3	W2	B1	W1	B2	Buffer	Buffer	C1	L1	Buffer	Buffer	L1	C1	Buffer	Buffer	B1	O1	B2	W3	W1	W2	Buffer
Buffer	W1	B1	01	W2	B2	W3	Buffer	Buffer	C1	L1	Buffer	Buffer	L1	C1	Buffer	Buffer	W3	W2	B1	W1	01	B2	Buffer

wheat, B = barley, O = oat, C = Canola, L = Lupin

The trial will have two sowing times to highlight the value of matching crop phenology with the optimum sowing time. Living Farm will manage the small plot trial at Amelup, with SCF assisting with some of the trial observations and assessments. Senior research scientist Rebecca Smtih

from Living Farm will be presenting at the trial site during the 2022 growing season. Keep an eye out for what should be an excellent field walk later this year.

