



**Plot2
Farm**

B001 - Barley Seeding Rates (malt or feed)

Objective: Compare the yield and quality of barley seeded at different seeding rates based on Thousand Kernel Weight (TKW) (malt or feed).

Research support

Research has demonstrated that the seeding rate of barley can impact yield and quality. In addition, new equipment and varieties may impact ideal seeding rates for specific regions of Alberta. Identifying the impact seeding rates have on yield and quality may help you make the most of your seed, inputs and land.

Field Layout and Selection

Field layout will depend on the number of treatments selected. Review the Research Guide for the best practices on treatment design, choosing your trial and how it should be laid out.

Treatments

To follow good experimental protocol, treatments should be both replicated and randomized. For example, if you are testing 2 treatments, the order of those treatments change in each replication. For example, in replication 1, treatment 1 precedes treatment 2, but in the second replication, treatment 2 precedes treatment 1. This reduces the effects of field variability on results. Take detailed notes to remember the order of treatment applications.

Treatment 1: 22 plants/ft² target: Seed barley based on TKW and seed quality (i.e. germination) to achieve a target plant stand of 22 plants/ft².

Treatment 2: 27.5 plants/ft² target: Seed barley based on TKW and seed quality (i.e. germination) to achieve a target plant stand of 27.5 plants/ft².

Treatment 3: 33 plants/ft² target: Seed barley based on TKW and seed quality (i.e. germination) to achieve a target plant stand of 33 plants/ft².

Replication 1	Treatment 1
	Treatment 2
	Treatment 3
Replication 2	Treatment 2
	Treatment 3
	Treatment 1
Replication 3	Treatment 3
	Treatment 1
	Treatment 2
Replication 4	Treatment 2
	Treatment 3
	Treatment 1

Additional Notes:

- 1. The same seeding depth and seed drill must be used for all treatments.
- 2. This on-farm research protocol will help compare 3 barley seeding rates on your farm under typical management.
- 3. All treatments will receive the same fertilizer, seed treatments, herbicide, cultivars, fungicide, pre-seed and harvest treatment.

