



**Plot2  
Farm**

# W005 - Spring wheat seeding rate comparisons

**Objective:** Compare the yield and quality of spring wheat seeded at different seeding rates based on Thousand Kernel Weight (TKW).

## Research support

Research has demonstrated that the seeding rate of wheat 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.

This on-farm research protocol will help compare up to 3 spring wheat seeding rates on your farm under typical management.

## 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 (see trial design below). 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: 25 plants/ft<sup>2</sup> target:** Seed wheat based on TKW and seed quality (i.e. germination) to achieve a target plant stand of 25 plants/ft<sup>2</sup>.

**Treatment 2: 30 plants/ft<sup>2</sup> target:** Seed wheat based on TKW and seed quality (i.e. germination) to achieve a target plant stand of 30 plants/ft<sup>2</sup>.

**Treatment 3: 35 plants/ft<sup>2</sup> target:** Seed wheat based on TKW and seed quality (i.e. germination) to achieve a target plant stand of 35 plants/ft<sup>2</sup>.

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. All treatments will receive the same fertilizer, cultivar, seed treatments, herbicide, fungicide, pre-seed and harvest treatment.