

HOW TO

Take a Representative Sample of Your Grain

Stream sampling while unloading a truck, cart or transferring bin to bin

SEED
SMART



Here's what you'll need to get started:

- ▶ Four identical pails, holding a minimum of 20 litres each, two labeled 'A,' two labeled 'B'
- ▶ A large grain scoop or Pelican sampler
- ▶ Sealable sample containers
- ▶ Permanent marker

To make a sample representing the entire contents of a grain bin, you will need a composite sample of each truck filling the bin.

Here's how to build a composite grain sample representing one truckload of grain:

▶ **Safety First!** Ensure all guards are securely in place on all grain handling equipment. Moving augers & belts can be deadly.

1

Let the grain flow for a few seconds before taking your first sample. Use a scoop that you can pass through the entire stream of grain such as a pelican sampler. It should be deep enough so that the seed does not bounce out.

2

Start unloading the grain truck and pass the sampler through the entire grain stream. Pass it through quickly enough that it does not overflow.

3

Continue to sample at regular intervals throughout the entire unload or transfer process. A representative sample is key.

▶ *For a tandem truck, about 10-15 samples are required. For a Super B, about 35-40 samples are required. This may sound like a lot, but keep in mind that sampling error is responsible for unreliable testing results.*

4

Place all the scoop samples for the truck in one of the pails labeled A to create a representative composite sample.

▶ *Scooping a sample from the door of a bin does not create a representative sample of the bin; rather it is just a sample of the grain in the bin door.*

5

Continue this procedure for each and every truck for a particular field or lot.

▶ *Limit field or lot sizes to fields estimated to be "uniform." Remember that field conditions vary, so larger lots or fields create a larger probability for sample variance.*

▶ *Using permanent markers to label your sample containers is recommended. The date and lot reference can be crossed off or removed with acetone for container reuse. If the label fails, the sample fails.*

For more information on submitting a sample for testing, visit seedsmart.ca



Photos courtesy of the Canadian Grain Commission

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Reduce your composite grain sample

Next, use this procedure to reduce your composite sample into a smaller sample that stays representative of the grain in the bin. This will make the sample easier to handle and store. Keep in mind that you may need multiple samples for different purposes.

► Plastic buckets with lids or Rubbermaid® containers with tight fitting lids secure your sample and protect from foreign objects/rodent damage.



1

Mix the contents of pail A thoroughly by hand



2

Place the two empty pails labeled B side by side and touching on a level surface



3

Pour the contents of pail A at the point where the pails touch, ensuring that half the stream flows into each pail labeled B



4

Pour one of the pails labeled B back into pail A



5

Pour the contents of the other pail labeled B back into the grain bin



6

Repeat this process with the remaining sample until you have the amount you need for your seed testing purposes. Consult with your lab regarding how much seed is required. Typically 1-2 kilograms of seed is required



7

Place the final sample into the second pail labeled A



8

Place the final composite sample or samples in sealed containers and label each container to show the bin or lot it represents