



Procedure of Seed Sampling During Seed Certification

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The main objective of seed sampling is to obtain a representative sample of each lot of seed under certification. However, the seed samples received in the seed testing laboratory (submitted sample) are required to be reduced to obtain working samples for carrying out various tests.

Seed Lot

The term seed lot is used to represent a fixed quantity of agricultural seeds i.e. for seeds, the size of which is equal to or more than that of wheat, permissible limit is 200 quintals. For seeds, the size of which is less than that of wheat it is 100 quintals.

Primary Sample

When a seed lot is sampled either from containers or in bulk several individual samples are drawn from different containers, each such sample is called a primary sample.

Composite Sample

All the primary samples drawn from one lot are combined to form a bulk and is called composite sample which is generally much larger than required for analysis.

Submitted Sample

A portion of seed derived from the composite sample to be submitted for analysis to Seed Testing Laboratory is called submitted sample.

Working Sample

The sample derived in the laboratory from the submitted sample and is used for analysis is called as working sample.

Procedure of Seed Sampling

- ✓ Ensure that the entire quantity of seed to be sampled belongs to one lot.
- ✓ Ensure that the containers are so arranged that they are conveniently accessible.
- ✓ Check the name of kind/variety.
- ✓ Determine the number of containers in the lot and the number of containers to be sampled for the lot.

Intensity of Sampling

Intensity of sampling from the lots of seeds is as follows:

1. For Packed Seed		
1	Up to 5 containers	Sample from each container at least 5 primary samples
2	6 to 30 containers	Sample is drawn from 5 containers or at least one in every 3 containers whichever is greater
3	More than 30 containers	Sample from at least in every 5 containers or at least from 10 containers whichever is greater.

2. For Bulk Seed		
1	Less than 50 kg	At least 3 primary samples
2	50 to 500 kg	At least 5 primary samples
3	Above 500 kg up to 3000 kg	One primary sample for each 300 kg but the number should not be less than 5
4	Above 3000 kg	One primary seed sample for each 500 kg but the number of primary seed samples should not be less than 10

Precautions

- ✓ While drawing samples as per sampling intensity, draw approximately equal amounts of primary samples.
- ✓ For sampling seeds in containers such as coarsely woven jute bags or burlap bags and cloth bags triers can be used. For cloth bag few stitches at one of the top corners may be opened and be closed after sampling. For plastic or polyethylene bags samples by trier, probe or by hand may be taken.
- ✓ For sampling by hand in heaps as in case of cotton seeds insert hand into the seed in tight close position, open it after reaching any location inside the seed mass, collect seed and take out hand in tightly closed position.
- ✓ For sampling by triers, insert the trier into the bag in an inverted position i.e. cavity or slot of trier facing down, reverse the trier after it has gone sufficiently into the seed mass and draw out steadily with decreasing speed.

References

1. Rajasthan State Seed and Organic Certification Agency website: <https://agriculture.rajasthan.gov.in/content/agriculture/en/RSSOPCA-dep/seed-certification/process-of-certification>.
2. TNAU Agritech Portal: https://agritech.tnau.ac.in/seed/Seed_seedtesting.html