

Vigor Tests – Pitfalls and Causes of Unwanted Variation

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Missoula, Montana
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This half-day workshop aims to train analysts on recognizing sources of unwanted variation in specific vigor tests, and ways of avoiding such variation to increase test uniformity within and among seed labs.

The workshop will focus on specific vigor tests, with preference to commonly and widely used methods of evaluating both agricultural and vegetable seed kinds. For each test, a brief review of accepted methodology will be followed by a closer look at sources of common errors in performing the test, sources of unwanted (*and hidden*) variation, and ways of reducing such variation.

Syllabus

1:00 pm to 2:45 9m

- 1:00-1:30 pm AA Testing Evolution Over 30 Years: successes in reducing sources of variation
(*Tim Gutormson, SoDak Labs, Inc.*)
- 1:35-2:05 pm The Cotton Cool Test: research to reduce variation among laboratories (*Michael Phillips, North Carolina State Univ.*)
- 2:10-2:40 pm The Cotton Cool Test: laboratory variation and test termination innovation
(*Lauren Shearer, SoDak Labs, Inc.*)

2:40 pm to 2:55 pm **Break**

2:55 pm to 5:00 pm

- 2:55-4:50 pm Seedling Performance Tests: principles and sources of variation (*Riad Baalbaki, CDFR*)
- What is a *Seedling Performance* test?
 - Uniformity tests
 - Seedling fresh weight tests
 - Seedling dry weight tests
 - Seedling length tests
 - Radicle emergence tests
 - Other seedling performance tests
 - Quantifying and interpreting *Seedling Performance* test results
- 4:50-5:00 pm General discussion and conclusions