

Small Seeded Legume Seed Testing Services

SMALL SEEDED LEGUME GERMINATION

METHODS

Testing is conducted according to the Association Official Seed Analysts (AOSA), International Seed Testing Association (ISTA) Rules for Testing seeds or Canada Methods and Procedures (Canada M&P) based on customer need. Each germination test consists of four hundred randomly selected pure seeds.

WHAT IS REPORTED

Percentages of normal seedlings, abnormal seedlings, dead and hard (dormant seed) seed. The standard germination test is required by the Federal Seed Act (FSA) for labeling.

SMALL SEEDED LEGUME PURITY & NOXIOUS WEED EXAMINATIONS

METHODS

Purity and Noxious weed seed examination or Other Seed determination can be conducted using the Association Official Seed Analysts (AOSA) Rules for Testing Seed or International Seed Testing Association (ISTA) testing methods. Samples are physically examined for inert, weed and crop seeds.

WHAT IS REPORTED

Pure seed, inert matter and other seed percentages by weight. For AOSA Rules other seeds are reported as other crop seed and common weed seeds per Handbook 29 classification.

Noxious weeds seeds in specific state(s) or the entire lower 48 states are reported. ISTA examination also available.

VALUE OF RESULTS

Purity and noxious results are required on the seed bag label.

SMALL SEEDED LEGUME TETRAZOLIUM TEST

METHODS

Tetrazolium tests are conducted on a 200 seed sample. Legume seeds are typically imbibed for 16 hours and then transferred into a 1% Tetrazolium solution.

WHAT IS REPORTED

A percentage of viable seed (normal staining embryos and hard seeds). Hard seeds can be nicked to allow imbibition and then stained.

VALUE OF RESULTS

Tetrazolium is a quick estimate of germination and can be useful in determining viability of hard seeds.



FIGURE 1. Seven day old alfalfa seedlings germinating using the rolled towel method.



FIGURE 2. Purity test on alfalfa seed.



FIGURE 3. Topographical tetrazolium staining on small-seeded legumes to estimate germination %.