

SEED TESTING LABORATORY

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The aim of seed testing is to provide information on the quality of a seed lot by assessing its physical purity and seed viability.

In the NSW Seed Testing Laboratory this is done in accordance with International Seed Testing Association rules which specify the size of samples and methods of testing.

A sample of seed is provided by a grower or a Departmental Officer etc.

Upon its arrival at the laboratory it is first blended, then a small sample is drawn and examined in detail for presence of foreign seeds and inert matter. These fractions are separated by hand, often aided by using such equipment as blower, diaphanoscope or microscope etc.

The foreign seeds are identified using a reference slide collection containing some 10000 specimens. The pure seed fraction is used in the germination test. This is done on moist paper in trays for smaller seeds, and in sand for larger seeds.

An environment of controlled light, temperature and humidity is then provided by using a number of incubators. The seedlings are examined at the stage when they are sufficiently developed to display all the essential structures. Each seedling is then evaluated and deficient seedlings - "abnormals" as well as dead seeds are not included in the germination count.

The Seed Testing Laboratory provides services to seed exporters, seed growers and buyers as well as to other government departments.

Routine purity and germination tests are conducted on samples of seed lots in process of certification (pastures etc) and registration (cereals). Samples of seed for sowing are taken under the Agricultural Seeds Act or of grains offered as stock food under the Stock Foods and Medicines Act by agricultural inspectors from various vendors throughout the state.

All seed entering NSW from abroad is identified and examined for presence of earth and unwanted weeds to ensure compliance with Australian Quarantine regulations.

A free seed identification service is also provided to the public, and to other government departments as well as assistance in various research projects.

The Laboratory does not test commercial seed which is outside the Certified or Registered seed schemes.