

## 5. TESTING AND RELEASE OF CERTIFIED SEED

### 5.1 Laboratory analysis

The official sample (drawn during seed processing) is submitted to the South Australian Seed Testing Laboratory for analysis. The analysis determines the physical purity and germination potential of the sample. This information can then be used to make reliable inferences about the physical quality of the seed line. The results are shown on the certificate of analysis.

#### 5.1.1 Purity analysis

The purity analysis determines the composition of the sample by percentage weight. The components measured are:

- **pure seed** is the seed of species being certified, or found to predominate in the test.
- **other seeds** are seeds of any plant species, other than pure seed.
- **inert matter** is all material not included in pure seed or other seeds.

#### 5.1.2 Prohibited and Declared seeds

Under State legislation, seed lots containing Prohibited seeds cannot be sold. Under the S.A. Seed Certification Scheme, seed lots containing Prohibited seeds will be rejected from certification.

Seeds proclaimed as Declared under the S.A. Seed Certification Scheme may be present in certified seed, subject to National Seed Quality Standards, but the vendor must declare the number of Declared seeds per unit mass on the label.

Prohibited and Declared weed seeds for South Australian certified seed are listed in Appendix 10.2.

#### 5.1.3 Germination analysis

The germination test measures the emergence and development of a seedling to a stage where the essential structures show it's ability to develop into a healthy plant under favourable field conditions. Germination results are shown as percentages of:

- **normal seedlings** are seedlings capable of continued development into normal healthy plants given favourable growing conditions.
- **hard seeds** are seeds which remain hard at the end of a test period because they have not absorbed water.
- **fresh seeds** are seeds which absorb water and swell but fail to germinate within the permitted test period. Fresh seeds have the potential to develop into a normal seedling but this cannot be presumed.
- **abnormal seedlings** are seedlings which germinate, but exhibit some physical deformity or irregularity which prevents normal development.

### 5.2 Application of National Standards

For certified classes of seed, final certification (ie acceptance or rejection) is dependent on the seed line meeting the applicable National Seed Quality Standards.

For Pre-Basic or Basic classes of seed, final certification is assessed on the basis of the seed line meeting the recommended seed physical standards as determined by the Australian Seeds Committee; however Seed Services may choose to consider other issues in determining the final certification status of the seed line.

### 5.3 Certificate of analysis

Following the completion of seed testing and the application of seed physical standards, an official seed certification analysis certificate is forwarded to the grower/proprietary owner and the seed processor.

### 5.4 Adhesive labels

Adhesive labels displaying seed physical information is produced for all seed lines certified as Pre-Basic or Basic seed.

Adhesive labels are produced only for those lines of certified class seed which:

- pass seed quality standards - but do not meet one or more of the standards appearing on the pre-printed certified seed label, or
- the seed line contains Declared weed seeds

### 5.5 Seeds Online

#### 5.5.1 Access to test results

Clients that have a direct interest in a particular test result may apply to Seed Services for authority to access their test results via the internet. There is also public access to certain test result information where the line number and cultivar name is known. For more information about the Seeds Online service visit the Seed Services website at [www.pir.sa.gov.au/seeds](http://www.pir.sa.gov.au/seeds).

#### 5.5.2 Test results available to the public

Test results for certified sample are available to the public if:

- the sample was accepted for certification
- the owner of the test result has allowed public access

The owner of the test result is:

- the proprietary seed company in the case of proprietary cultivars
- the seed grower in the case of public cultivars

Access to these test results is only through entry of the full line number and cultivar name.

#### 5.5.3 Changing availability of test results to the public

The owner (see 5.5.2) of the test result can change public access so that the result is not available to the public. This can be done by the owner via the internet at the Seeds Online site, or by contacting Seed Services.