

# Training for the Seed Industry

## Australia's Valuable Seed Industry

The Australian seed industry is relatively small, but valuable. The Australian seed with an estimated annual internal commercial value of \$500 million and annual exports of agricultural and horticultural seeds valued at \$75 million makes a significant contribution to Australian agriculture.

The increasing dominance of proprietary varieties in Australia and the requirements of modern agriculture and international trade in seed are reducing the proportion of farm-saved and uncertified seed and resulting in greater participation in a range of quality management schemes to provide assurances of varietal and physical purity, germination and other quality factors.

Because of changes in the seed industry, such as improvements in plant breeding technology, plant breeders rights and genetically modified plants, the need for adequate training for those involved in seed production has become more urgent.

## Until recently training for Seed Growers has been largely overlooked

Importance of Training for Seed Growers:

- With the possibility of the introduction of genetically modified plants (GM), training will be required amongst seed growers to ensure co-existence of GM and non/GM seed (segregation and hygiene will be particularly important at that level).
- Quality assurance, (be it through the certification process, or other QA programs), will only be as good as the skills of the people involved.
- Plant breeding technology has dramatically improved, and some very exciting plants are in the pipeline. Seed growing is the vital link between the plant breeders and the farmers' purchase of the seed. The job needs to be done right, we need to ensure that healthy, virile seed is produced, that the genetic purity of the new plant is protected, and that the seed is grown minimizing weed seeds and diseases.
- Farmers need to be educated regarding the Plant Breeders Rights system, and what their responsibilities are. (Particular warning needs to be given regarding the penalties of inappropriate use of farmer-saved seed<sup>1</sup>).
- Farmers need to be educated about contracts.  
Despite the obvious need for more skilled seed growers, for the past decade, seed growers have been leaving the industry at an estimated rate of 10% per annum. Many are citing the reason as difficulties with contracts.

During the last 2 years, 3 competency based training packages have been developed through the Primary Skills Victoria (PSV):

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<sup>1</sup> Refer to attached document entitled 'Warning'

VBN 797	Prepare Grain / Seed for Testing
VBN 798	Test Grain / Seed on Receival,
VBP461	Clean Seed on Receival (latter is due to be tabled before the Accreditation Panel on June 8 <sup>th</sup> )

This is a good beginning, but many areas still need to be covered.

## **Seed Analysts, Paddock Inspectors, Seed Certifiers**

The work of seed analysts is essential to the correct identification of cultivars of various species. Cultivars of the same species can be virtually impossible to distinguish visually, yet there can be an enormous difference between the characteristics of the plants.

Many seed analysts work in certification laboratories which have to be accredited by the International Seed Testing Authority (ISTA), and the testing must comply to stringent standards set by the OECD (more recently AOSCA standards have become relevant for some markets).

All seed to be exported must go through this process, and seed for the domestic market are usually produced through a quality assurance process which may also involve seed analysts.

The seed industry was dismayed when, three years ago, the Gatton University ceased to offer the Seed Analyst's Course. Gatton has been a past centre for training for the seed industry, but the University Board no longer supports seed related courses, although a private company has now begun to offer courses there. An absence in training in this highly specialized area would represent a serious shortcoming for Australian agriculture. Most commodities begin with the sowing of seed, and it is becoming increasingly important to be absolutely certain that the seed in the bag is the same as the seed described on the label. This importance will be magnified as more genetically modified seed is commercialized in Australia.