



08



Thomas Cullen
BAgrSc

Head of Division

Seed Testing Laboratory

The role of seed testing which started in Ireland in 1895, has undergone a fundamental change since Ireland joined the EU. All seeds from the important agriculture and horticulture crops are now subject to compliance with statutory instruments and require official testing for germination, purity and other seed determination. Consequently, the majority of tests are now carried out for official certification purposes, while in the past they were mainly done for seed merchants and farmers as an advisory service. This advisory service is still availed of today.

History

Dr. Thomas Johnson, Professor of Botany at the Royal College of Science, was the founding father of seed testing in Ireland. While studying in Germany he had noted with interest the setting up of a small number of laboratories in that country and the great benefits that accrued to the seed industry and to agricultural in general. On his return to Ireland he started a seed testing service in 1895 on St Stephens Green, the first in these islands.

The service developed steadily, due to the growing demand from both farmers and merchants. Eventually the need for the service was recognised officially and early in 1901 the newly established Department of Agriculture and Technical Instruction for Ireland took on the responsibility for the task and provided a Seed Testing Laboratory (known then as the Seed Testing and Plant Diseases Laboratory) for Britain and Ireland under the direction of Professor Johnson. This was the first control laboratory set up by the new Department.

The demand for the service grew rapidly and in 1911 the Seed Testing Laboratory was transferred from the Royal College of Science then on St. Stephen's Green to more extensive laboratories in the new College of Science Building in Merrion Street where it remained for the next eighty years.

The Seed Testing staff moved from Merrion Street to Abbotstown in February 1991. The facilities at Abbotstown provided a much needed improvement in both laboratory and office space. The Department of Agriculture and Food decided to relocate all its Dublin based laboratories to one central location at Backweston and the Seed Testing moved to its new facility at Backweston in August 2005.

Current Work of Laboratory

As already mentioned the majority of tests are now carried out for official certification purposes under EU rules. Tests are conducted on a wide range of species Cereals, Grasses (including mixtures) Pulses, Legumes, Oil/Fibre, Vegetable Seeds, Tree Seeds and Wildflowers

The main tests are as follows:

Germination & Purity, Biochemical Test for Viability (rapid indicator of potential germination in cereals) Fluorescent Test (Determine the presence of *Lolium multiflorum* in *Lolium perenne* using ultra violet light) International Certificate Tests, Moisture Test, Intervention Standard Test, 1000 Grain Weight, Hectolitre Weight, Other Seed Determinations, Conductivity Test (Vigour testing for pulses), General Pathology Test, Loose Smut Embryo Test, Phytosanitary Certificate Tests and Microscopy

The Seed Testing Laboratory has had a very long association with the International Seed Testing Association (ISTA) going back to the very early part of the last century. The Laboratory was affiliated to ISTA in 1926 and has remained a long time member to the present day. The Laboratory reached another milestone when it was accredited by ISTA in 2001 just one year after its centenary celebrations. It is now one of more than 90 Laboratories accredited by ISTA ensuring worldwide uniformity in seed testing



All seeds from the important agriculture and horticulture crops are now subject to compliance with statutory instruments and require official testing for germination, purity and other seed determination.

