An International Seed Potato Export Standard

by Willem Schrage, North Dakota State Seed Department

The Specialized Section of the United Nations Economic Commission for Europe (UNECE) had its 39th annual meeting in Geneva, Switzerland in March of this year.

Attendees came from Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Indonesia, Ireland, Italy, Luxembourg, Netherlands, Romania, Russian Federation, Spain, Switzerland, United Kingdom of Great Britain and Northern Ireland, and United States of America (North Dakota and Colorado). The North Dakota representative had been elected by the NPC Seed Potato Certification Sub-Committee. Funding was provided by the export program of the US Potato Board. The European Union and the organization Europatat were also represented.

UNECE

The UNECE sets out norms, standards and conventions to facilitate international cooperation within and outside the region. The commercial quality standards of the UNECE help facilitate international trade, encourage high-quality production, improve profitability and protect consumer interests. UNECE standards are used by governments, producers, traders, importers and exporters, and other international organizations, and cover a wide range of agricultural products, including fresh fruit and vegetables, dry and dried produce, seed potatoes, meat, cut flowers, eggs and egg products. Any member of the United Nations can participate, on an equal footing. Fifty-six countries are cooperating within the UNECE and are working on trade standards of which the seed potato standard is one. Their website is: http://www.un-ce.org/trade/agri/.

Because more countries participate than just Europe, most of the people working in the different commodities would like to see “for Europe” removed from the title page of their documents. However, an expert opinion is that an organization working within the United Nations should be recognizable as not representing the UN as a whole. There are different standards within the UN framework and not all are from the UNECE.

The UNECE Seed Potato Standard has been used as a basis for European rules and is a framework for revisiting seed potato certification in the Russian Federation. During the meeting it has become clear that officials in other countries are looking at this standard for guidance when looking for practical import requirements and seed certification requirements in the respective countries. One example is tuber moth damage where a country is looking for establishing a tolerance which is both practical and protects the producers.

During the annual meeting in March most discussions were about the improvements in wording in the UNECE Standard on Seed Potatoes.

Definition of Tuber Rot

The section agreed on definitions for
tuber rot, i.e.: "Rot is the disintegration of tissue as a result of the action of invading organisms, usually bacteria or fungi. Rot can be triggered by environmental factors. A rot may be classified as either a wet/soft or dry rot according to its external and internal appearance, and the diseases are specified in the List of Diseases and Pests."

There is a list of diseases and pests with pictures of symptoms, which are intended to help in certification discussions on this UNECE website: http://www.unece.org/trade/agr/standard/potatoes/ListofDiseasesAndPests.htm.

An explanation on what is considered dry and soft rot is added to this list of diseases on the web:

Dry rot: externally, the tubers will have dry, necrotic or discolored patches on the surface. Internally, the disease will consist of brown necrotic areas surrounding fungus-lined cavities or dry powdery tissue. Examples of such rots are gangrene, Fusarium dry rots and tuber late blight.

Wet/soft rot: externally, the diseased tissue will appear discolored, wet and soft to the touch, often exuding moisture and producing a range of odors, depending on the casual organism. In such cases, the internal tissue will have collapsed into a watery pulp. Examples of such rots are bacterial soft rots, pink rot, watery wound rot ("leak") and rots triggered by late blight or frost damage. Because there is a tolerance for rot, but a zero tolerance for brown rot and ring rot these two are mentioned separately.

Tuber Moth Damage
When question arose about a tolerance for tuber moth damage, the first reaction of the Section had been to make it part of internal defects. However the main objective of including defects in the UNECE Standard is their potential negative effect on the yielding potential of the seed tubers. Not all internal defects mentioned in other standards have necessarily a detrimental effect on yield potential. It was therefore decided that for now only

---

Beautiful vegetables and potatoes change the way you look at things.

Ridomil Gold® is the one you can count on for vegetables and potatoes so beautiful, it's hard to keep your eyes off them. And now, Ridomil Gold has a new look itself, a modern liquid formulation that's clear—Ridomil Gold SL. New growth will continue to stay protected against soil and foliar disease that can damage appearance. And that leads to near-perfect vegetables and potatoes that make it hard not to stare.
frost and tuber moth damage would be included in the standard.

Winter Test
The winter test in the standard is called "post-harvest evaluation". Its procedures are now part of the standard. They include field readings as well as laboratory testing. Sampling procedures and testing procedures have been indicated. Statistical relevance is indicated in an addendum.

Field Inspection
Field inspection procedures as prescribed and/or suggested were included in an addendum on field inspections.

Black Leg
The section added a statement about black leg, because the importance of this disease is becoming greater, especially in areas with cooler summers.

Blackleg occurrence in seed potato crops is an important indicator of quality. In the UNECE Standard for Seed Potatoes, strict tolerances for blackleg in the growing crop and at lot inspection underpin, as part of the rot tolerance, the control of this disease in certified seed.

Disease expression in the progeny crop is not always directly related to either inspection findings or bacterial loading in mother tubers. This is due to the importance of the environmental and agronomic influences in the epidemiology of this disease. However, regular inspections remain an effective tool to limit the spread of the disease.

Conditions which favor blackleg, particularly excessive moisture and in the case of Dickeya, high temperatures, can lead to spread of the disease. For the time being, enforcing strict tolerances at certification continues to be the best available regulatory mechanism to control blackleg in marketed seed potatoes.

Good agronomic practices, such as forced ventilation immediately after harvest, removal of diseased tubers prior to planting, allowing mother tubers to fully deteriorate prior to harvest, are all important in blackleg control.

Dispute Settlement
A position on how to solve possible disputes in the export trade was...
added to the standard. When importing countries agree to abide by the conditions in the standard, including this chapter is expected to be useful to facilitate continuing trade for both parties. In Europe trade is done according to the conditions as described by “RUCIP”. To this effect a representative of the organization Europatat compared the tolerances between the UNECE standard and the commonly used RUCIP procedures. It was clear that most of the tolerances were very close.

Demonstration Trials
A paper was submitted to the meeting describing the procedures for a possible demonstration trial. The Lorkh Potato Cultivation Institute of the Russian Federation offered to host the first UNECE demonstration trial. Before launching a large-scale trial it was considered to be a good idea to undertake a limited experimental trial in 2010. It was emphasized that any demonstration trial carried out by the Section should be limited to harmonizing inspection methods across countries in accordance with the UNECE Standard.

Promotion Of The Standard
The delegation of Indonesia made a presentation on the potato sector in that country and has confirmed the offer to host a regional workshop on seed potatoes during the week of the 18th thru 22nd, of October 2010. A program is prepared including two talks from the US.

References
Texts of documents with revisions can be found as post-session documents at: http://www.unece.org/trade/agr/meetings/ge.06/2010-in-session.htm


From left to right: Netherlands, Belgium, UNECE (secretary), Canada, Austria, Indonesia, Romania, Luxembourg, UNECE, Italy (chair), Switzerland, Indonesia, CO, Indonesia, ND (vice chair), Russian Federation, Spain, Ireland, European Union, Denmark.