United Nations ECE/TRADE/C/WP.7/GE.6/2010/9

Economic and Social Council

Distr.: General
25 March 2010

Original: English

Economic Commission for Europe

Committee on Trade

Working Party on Agricultural Quality Standards

Specialized Section on Standardization of Seed Potatoes

Thirty-ninth session
Geneva, 15-17 March 2010

Report of the Specialized Section on Standardization of Seed Potatoes

Summary

The Specialized Section: (a) agreed on the definition of rot for inclusion in annex VII; (b) extended the List of Diseases and Pests to cover dry and wet/soft rots and selected images to illustrate them; (c) extended annex III to cover internal defects; (d) adopted a new annex on international dispute settlement; (e) included field inspection procedures in annex II; (f) included post-harvest evaluation procedures in annex IV; (g) decided to carry out an experimental demonstration trial in 2010 in the Russian Federation; (h) decided to hold a workshop in Indonesia in October 2010; (i) agreed on its future work; (j) expressed its preference for not showing "United Nations Economic Commission for Europe" in the upper part of the cover page of the Standard; (k) accepted the proposal to include a provision on intersessional approval in the working procedures of the Working Party; and (l) formulated its position regarding blackleg of seed potatoes:

- 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 favour 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.

I. Introduction

1. Mr. Pier Giacomo Bianchi (Italy), the Chair of the Specialized Section, opened the meeting. Ms. Virginia Cram-Martos, Director of the UNECE Trade and Timber Division, welcomed the participants.

II. Attendance

2. Representatives of the following countries attended the meeting: 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.

3. The European Union was also represented.

4. A representative of the following organization participated in the session: Europatat.

III. Adoption of the agenda

Documentation: ECE/TRADE/C/WP.7/GE.6/2010/1

5. The delegations adopted the provisional agenda with proposed changes and amendments.

6. Texts of documents with the revisions introduced by the delegations, and country presentations can be found as post-session documents at: http://www.unece.org/trade/agr/meetings/ge.06/2010-in-session.htm

IV. Matters of interest since the last session

Documentation: Report of the Working Party (ECE/TRADE/C/WP.7/2009/24)

Comparison of the UNECE Standard with RUCIP rules (INF.1, Informal document)

Legal advice on the change in the title of UNECE standards (INF.9, Informal document)

7. The Specialized Section discussed two issues resulting from the November 2009 session of the Working Party: the change in the title of the UNECE standards and the introduction of the possibility for intersessional approval in the working procedures of the Working Party.

8. The delegations took note of the advice by the United Nations Legal Office regarding the title and the cover page of the UNECE standards. Following that advice the Specialized Section agreed to put back "UNECE" into the title of the Standard. However, bearing in mind that the Standard is the only international normative document for certification of seed potatoes, the Specialized Section expressed its preference for not showing "United Nations Economic Commission for Europe" in the upper part of the Standard cover page.

9. The delegations were in favour of including a provision on intersessional approval in the working procedures of the Working Party, provided there is a consensus within the Working Party. Such a provision could be used in exceptional cases to approve changes to

the Standard, for example when the Specialized Section cannot meet at its regular session in Geneva.

10. The representative of Europatat presented his organization and the results of the comparison of the UNECE Standard with provisions in the RUCIP rules, with particular emphasis on tolerances for defects and diseases allowed for seed potato tuber. The delegations agreed that the two documents aiming at ensuring the quality of potatoes were largely consistent with each other. The Specialized Section invited Europatat to consider the possibility of further aligning the RUCIP rules with the UNECE Standard with regard to internal defects, size tolerances for long varieties, and categorizing seed into pre-basic, basic and certified material.

11. The representative of the European Union provided information on their work on "better legislation", the purpose of which would be to reduce the administrative burden and costs while maintaining the high quality of the propagation material circulating within the European Union. The revised marketing directive for seed potatoes would be submitted to the Commission for consideration before the end of 2011. The revision would take into account the UNECE work on standardization of seed potatoes.

V. Information on the results of the meetings of the Bureau

Documentation: Meetings of the Bureau (GE.6/BUR/2008 - Emmeloord, Netherlands; GE.6/BUR/2009/7 - Cairo; GE.6/BUR(2)/2009/8 - Belgium/ Luxembourg)

Changins Bureau meeting report (INF.6, Informal document)

12. The Chairman informed the participants about the results of the Extended Bureau meetings held in Emmeloord, Cairo, Belgium/Luxembourg and Changins in October 2008, March 2009, October 2009 and February 2010, respectively. The Specialized Section thanked the authorities of the Netherlands, Egypt, Belgium, Luxembourg and Switzerland for having hosted these meetings.

13. The Specialized Section agreed on its following position on blackleg.

- 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 favour 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.

14. The Extended Bureau decided to amend the definition of blackleg in annex VII of the Standard and in the List of Diseases and Pests to read “formerly E. *carotovora*” instead of “syn.”.

VI. List of diseases and pests

Documentation: Definitions of rots (ECE/TRADE/C/WP.7/GE.6/2010/2)

Definitions of rots, proposal by the United Kingdom (INF.8, Informal document)

15. The Specialized Section agreed on the following definition of rot for inclusion in annex VII:

> "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 tuber rot may be classified as either a wet (also called soft) or dry rot according to its external and internal appearance, and the diseases causing these types of rots are specified in the List of Diseases and Pests." ([†] From “Holliday P (1989) *A Dictionary of Plant Pathology*. Cambridge University Press”)

16. The Specialized Section decided to extend the List of Diseases and Pests to cover the following types of rot:

- Dry rot: externally, the tubers will have dry, necrotic or discoloured 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 discoloured, wet and soft to the touch, often exuding moisture and producing a range of odours, depending on the causal organism. In such cases, the internal tissue will have collapsed into a wet pulp. Examples of such rots are bacterial soft rots, pink rot, watery wound rot ("leak") and rots triggered by late blight or frost damage.
- Rots caused by *Ralstonia solanacearum* (brown rot) and *Clavibacter michiganensis* spp. *sepedonicus* (ring rot) are considered separately from other rots in respect of minimum quality for lots in the Standard.

17. The Specialized Section decided to include the description of the different types of rot at the beginning of the List of Diseases and Pest under the title of "Tuber rot" and to illustrate the text with the two pictures provided by the delegations of the United Kingdom and the United States.

VII. Internal defects

Documentation: Internal defects (ECE/TRADE/C/WP.7/GE.6/2010/3)

Proposal on defects caused by insects (INF.2, Informal document)

Internal defects, proposal by Germany (INF.5, Informal document)

18. The delegations agreed to extend annex III of the Standard to cover internal defects. The title of section A of the annex was changed to read: "Tolerances for defects and disorders allowed for seed potato tubers". The following new items 8 and 9 were added to the annex:

"8. Any tuber affected by low temperature injury

- Pre-basic TC 0 per cent by weight
- Pre-basic 0.2 per cent by weight
- Basic and Certified 1 per cent by weight

9. Galleries caused by tuber moth when affecting more than 20% of the cut surface

- Pre-basic TC 0 per cent by weight
- Pre-basic 4 per cent by weight
- Basic and Certified 4 per cent by weight"

19. In the future the Specialized Section may wish to revisit the issue of low temperature injury to define more precisely what a low temperature injury is, bearing in mind that it would normally cause discolouration and would affect the ability to germinate.

20. The delegations added *Phthorimaea operculella* (Zeller) to the list of pathogens at the end of section B of the annex.

21. The delegation of Spain pointed out that annex III reflected more the requirements of exporting countries and less the concerns of importing countries. The Specialized Section encouraged importing countries to provide more input for the work on the Standard.

VIII. Non-compliance at destination

Documentation: Non-compliance at destination (ECE/TRADE/C/WP.7/GE.6/2010/4)

22. The Specialized Section decided to make the text in document ECE/TRADE/C/WP.7/GE.6/2010/4 a new annex X (International dispute settlement) of the Standard. No changes were made to that document.

IX. Field inspection practices

Documentation: Field inspection practices (ECE/TRADE/C/WP.7/2010/5)

23. The delegations renamed annex II to read: "Minimum conditions to be satisfied by the crop and field inspection procedures" and split it into two parts: A. Minimum conditions to be satisfied by the crop; and B. Field inspection procedures.

24. The Specialized Section extended annex II to include the following provisions for part B.

1. Scope of inspections

All seed potato crops to be certified under the Standard must be inspected during growth. Field inspections should be carried out in accordance with the following procedures.

The DA should adopt a risk-based approach to the inspection of ware potato crops growing in the vicinity of seed potato crops.

Other measures, e.g. specifying provenance of seed potatoes which may be planted, may also be deployed to control the health of non-seed potato crops on seed-producing farms.

2. Level and timing of inspection

A minimum of two inspections is recommended on growing plants. Where possible, inspections should start at or shortly before the flowering stage.

The DA shall specify the inspection procedures. In general, the inspection procedure should allow the inspector to inspect at random a representative sample of plants from a crop. The number of plants affected by the diseases listed in annex II, section A, points 2 and 3 and those not true to variety or of another variety (annex II, section A, point 4) should be recorded separately in the field inspection report and each expressed as a percentage of the total number of plants inspected in the crop.

The first generation derived from Pre-basic TC class seed potatoes is recommended to be inspected at a more intensive rate to identify off-types.

3. Additional measures to support crop inspections

Field inspection results will normally be determined by visual assessment of the crop. Inspectors may be supported by appropriate tests when confirmation of the cause of a particular symptom is required.

4. Removal of plants with faults mentioned in annex II, section A, points 2-4

The DA may permit roguing within specified limits, provided the tolerances specified in annex II, section A are met at the time of inspection. Roguing must include removal of all tubers, as well as the foliage of the plant, to ensure that no affected material will be harvested.

5. Second opinion inspections

Growers will be entitled to ask for a confirmatory inspection to be conducted by another inspector in the case of a disputed inspection.

X. Post-harvest evaluation

Documentation: Post-harvest evaluation (ECE/TRADE/C/WP.7/GE.6/2010/6)

Proposal on statistical comparability (INF.3, Informal document)

25. The delegations renamed annex IV to read: "Minimum conditions to be satisfied by direct progeny of seed potatoes and post-harvest evaluation procedures" and split it into two parts: A. Minimum conditions to be satisfied by direct progeny of seed potatoes; and B. Post-harvest evaluation procedures.

26. The Specialized Section extended annex IV to include the following provisions for part B.

The tolerances in the Standard for the post-harvest evaluation are the "Minimum conditions to be satisfied by direct progeny of seed potatoes" (Section A).

Sampling may be done during the harvest, just before harvest after haulm destruction is complete, or from storage.

The DA shall specify the sample size depending on field size, category, tolerance and the desired confidence level (see annex IX. Sampling tubers for virus testing).

Dormancy breaking may be done chemically and/or by temperature treatment.

The requirement for a post-harvest evaluation may depend on "regulated haulm destruction dates" or for specific reasons defined by the DA depending on local circumstances.

There are two possibilities for post-harvest evaluation:

(a) by grow-out

The grow-out, usually aimed at virus indexing, may be done in field or green house. The evaluation may be visual and/or confirmed by laboratory testing.

If a variety mixture and/or chemical damage is observed during a grow-out post-harvest evaluation, the DA shall take appropriate action.

Trueness-to-type can only be assessed in a field grow-out.

(b) by laboratory test

A laboratory test for viruses may be done on leaves of a grow-out sample by ELISA (Enzymelinked immunosorbent assay), PCR (Polymerase chain reaction) or other appropriate technique, on sprouts or sprouted tubers by ELISA or PCR and/or on tubers by PCR.

A laboratory test for bacterial diseases referred to in annex III.B may be done by tuber testing, using ELISA, PCR and/or IF (Immunofluorescence test) and additional confirmation techniques (plating, bio-assay).

27. The Specialized Section decided to continue work on the revised version of the note on statistical comparability of the evaluation results.

XI. Questionnaire on varietal identity and purity

Documentation: Varietal identity and purity (ECE/TRADE/C/WP.7/GE.6/2010/7)

28. The delegations revised the varietal identity part of the draft questionnaire. The second part, on varietal purity, will be reviewed at the Extended Bureau meeting in Indonesia.

XII. Demonstration trials

Documentation: Demonstration trials protocol (ECE/TRADE/C/WP.7/GE.6/2010/8)

29. The Specialized Section considered the draft technical protocol for demonstration trials presented by the delegation of Switzerland. The delegations stressed that any demonstration trial carried out by the Specialized Section should be limited to harmonizing inspection methods across countries in accordance with the UNECE Standard. The demonstration trial should not be a comparative variety trial. Confidentiality of the demonstration trial results must be guaranteed.

30. The Specialized Section thanked the Lorkh Potato Cultivation Institute of the Russian Federation for the offer to host the first UNECE demonstration trial. The delegations agreed that before launching a large-scale trial it would be appropriate to undertake an experimental trial in 2010 on a limited number of varieties and lots. The Working Group composed of the delegations of France, Russia, Switzerland (focal point) and the United Kingdom will prepare and carry out the experimental trial and will report on its results to the Specialized Section, who will then decide on launching a large-scale demonstration trial in 2011. The 2011 trial may be financially supported by the UNECE secretariat drawing on the Russian Voluntary Contribution Fund.

XIII. Promotion of the Standard

Documentation: Draft workshop programme (INF.4, Informal document)

31. 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 18-22 October 2010. The Specialized Section asked the Steering Group, the Bureau and the secretariat to finalize, together with the host country, the workshop programme.

XIV. Future work

Documentation: Reproductive cycles, proposal by Germany (INF.7, Informal document)

32. The Specialized Section decided to include the following items in its future work:

- questionnaire on varietal identity and purity
- statistical comparability of the post-harvest evaluation results
- internal defects caused by low temperatures
- practices in cutting tubers for internal defects during inspection
- crop rotation practices
- reproductive cycles
- validity period for conformity (grade inspection) certificates
- demonstration trials
- silver scurf
- update of information on the national certification schemes.

33. The Specialized Section would also like to consider ways of making the UNECE Standard the officially recognized reference for international trade in seed potatoes.

XV. Other business

34. No issues were raised under this agenda item.

XVI. Election of officers

35. The Specialized Section elected Mr. Pier Giacomo Bianchi (Italy) as its Chair and Mr. Willem Schrage (United States) as its Vice-Chair.

XVII. Adoption of the report

36. The Specialized Section adopted the report of the session.