

**Economic Commission for Europe**

Steering Committee on Trade Capacity and Standards

**Working Party on Agricultural Quality Standards**

**Specialized Section on Standardization of Seed Potatoes**

**Meeting of Bureau and Rapporteurs**

Kimberley, South Africa, 13 – 18 March 2016

**UNECE Guide to Seed Potato Tuber Inspection:  
Recommended practices**

**(Draft, 27 January 2016)**

**Appendix**

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## Appendix 1:

### Defects not in “UNECE Guide to Seed Potato Diseases, Pests and Defects, 2014”

Appendix 1: Defects not in “UNECE Guide to Seed Potato Diseases, Pests and Defects, 2014”



01 Caked Dirt



02 Air Cracks



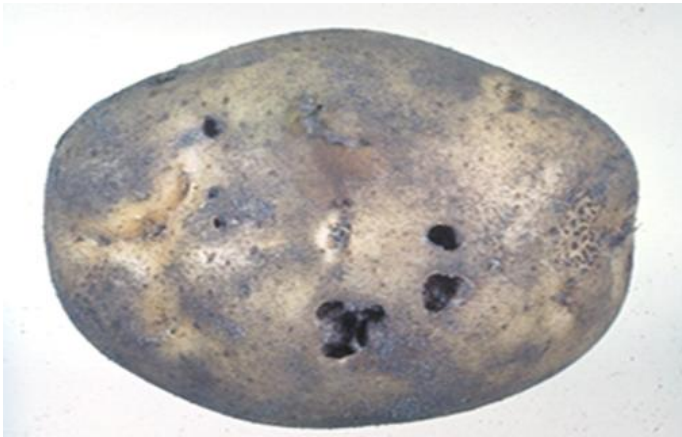
03 Elephant Hide



04 Enlarged Lenticels



05 Grass root symptoms



06 Grub Damage



07 Pink Eye



08: Russet Scab



09: Black Heart



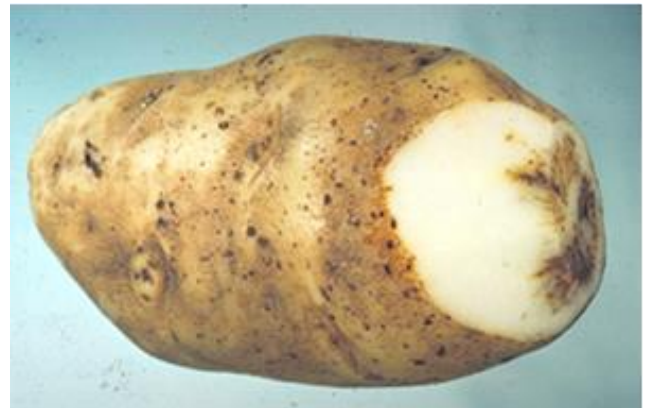
10: Hollow Heart



11: Hollow Heart with discoloration



12: Net Necrosis



13 Stem End Browning



14 Vascular Discolouration



15 Wet Breakdown

## Appendix 2:

### Minimum quality conditions for lots of seed potatoes (Annex III of the UNECE Standard)

#### A. Tolerances for defects and disorders allowed for seed potato tubers

##### 1. Presence of earth and extraneous matter

Pre-basic TC and Pre-basic	1% by weight
Basic and Certified	2% by weight

##### 2. Dry and wet rot not caused by pests listed under section B below, including wet breakdown due to extreme temperatures

Pre-basic TC	0% by weight
Pre-basic	0.2% by weight
Basic and Certified	1% by weight, of which wet rot cannot exceed 0.5%

##### 3. External defects (e.g. misshapen or damaged tubers)

All categories	3% by weight
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##### 4. Scab caused by *Streptomyces* spp. (common and netted): Tubers affected over a specified 0% of their surface (see annex VIII)

Pre-basic TC (0% surface cover)	0% by weight
All other categories (>33.3% surface cover)	5% by weight

##### 5. Powdery scab: Tubers affected over a specified 0% of their surface (see annex VIII)

Pre-basic TC (0% surface cover)	0% by weight
Pre-basic (> 10% surface cover)	1% by weight
Basic and Certified (> 10% surface cover)	3% by weight

##### 6. Rhizoctonia: Tubers affected over a specified 0% of their surface (see annex VIII)

Pre-basic TC (0% surface cover)	0% by weight
Pre-basic (> 1% surface cover)	1% by weight
Basic and Certified (> 10% surface cover)	5% by weight

**7. Shrivelled tubers: Tubers which have become excessively dehydrated and wrinkled, including dehydration caused by silver scurf**

Pre-basic TC	0% by weight
Pre-basic	0.5% by weight
Basic and Certified	1% by weight

**8. Chilling injury**

Pre-basic TC	0% by weight
Other categories	2% by weight

**9. Tuber moth: Tubers affected by galleries covering more than 20 % of the cut surface**

Pre-basic TC	0% by weight
Other categories	4% by weight

**10. Total tolerance for items 2 to 7:**

Pre-basic TC	3% by weight
Pre-basic	5% by weight
Basic and Certified	6% by weight

**B. Zero tolerances**

The seed potatoes shall be free from *Globodera rostochiensis* (Woll) and *Globodera pallida* (Stone), *Synchytrium endobioticum* (Schilb.) Perc., *Clavibacter michiganensis* Spp. *sepedonicus* (Spieck. and Koth.) Skapt. and Burkh., *Ralstonia solanacearum* (E.F. Smith) E.F. Smith, Potato spindle tuber viroid, Tomato Stolbur, *Meloidogyne chitwoodi* and *fallax*, *Ditylenchus destructor* and *Phthorimaea operculella* (Zeller).

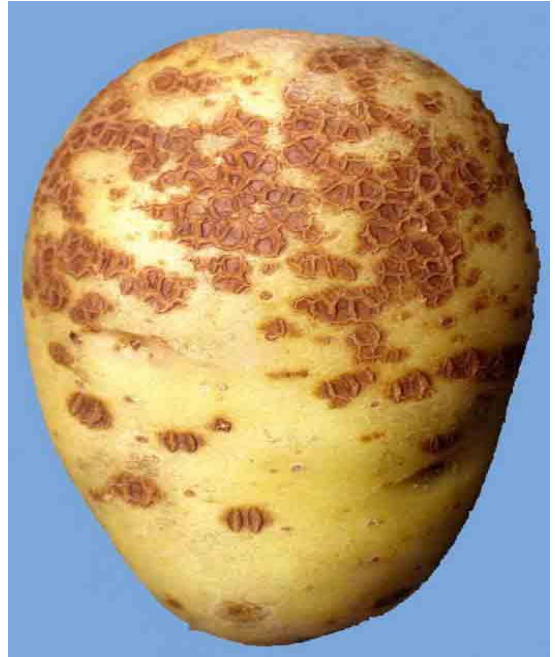
### Appendix 3:

## Assessment key for percentage tuber surface area coverage of blemish diseases (Annex VIII of the UNECE Standard)

**Common Scab (estimated 33.3%)**



**Netted Scab (estimated 33.3%)**



**Powdery scab (estimated 10%)**

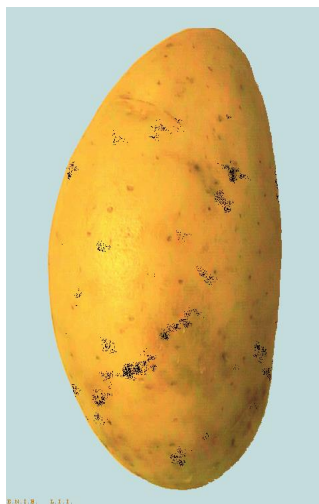




## Appendix 4:

### Countable tubers for *Rhizoctonia* (Annex VIII of the UNECE Standard)

area coverage



Homogeneous

Concentrated

area coverage

