



UNECE Standard for Onions FFV-25 (2003)

Dr. Ulrike Bickelmann

BLE P1000587

Die BLE.
Für Landwirtschaft und Ernährung.

Photo: P1000587

Pursuant to article 2a of Regulation (EU) No 1580/2007 as amended by Reg. (EU) No 1221/2008 the general marketing standard must be applied for onions in the EU at all marketing stages (wholesale, retail, export, import). This EU standard is published in annex I part A part regulation 1580/2007. However, where the holder is able to show they are in conformity with any applicable standards by the United Nations economic Commission for Europe (UNECE), the product shall be considered as conforming to the general marketing standard.

As the general marketing standard does not provide any provisions on classification, the application of the UNECE standard for onions FFV-25 is an interesting option for the traders. The UNECE standard for onions was last amended in 2003.

The UNECE standard can be downloaded:

www.unece.org/trade/agr/welcome.htm



Statistics

World: 66.9 Mio. t

China	20.8 Mio. t	31 %
India	8.2 Mio. t	12 %
USA	3.3 Mio. t	5 %
Turkey	2.0 Mio. t	2.9 %
Pakistan	2.0 Mio. t	2.9 %
Russian Federation	1.9 Mio. t	2.9 %
Egypt	1.7 Mio. t	2.5 %
Iran	1.7 Mio. t	2.5 %
Brazil	1.3 Mio. t	1.9 %
Japan	1.2 Mio. t	1.8 %
Mexico	1.2 Mio. t	1.8 %
Netherlands	1.1 Mio. t	1.6 %
Spain	1.1 Mio. t	1.6 %
Ukraine	1.1 Mio. t	1.6 %

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Statistics from FAO-Stat



Onions in Germany	2008 (FAO-Stat)	
	t	%
National production	407,602	
Exports	63,452	
Imports – total	230,000	100,0
Imports EU countries (27)	161,766	70
Imports NON-EU	68,406	30
Spain	75,652	33
Netherlands	52,444	23
New Zealand	30,676	13
Australia	12,752	6
Italy	10,961	5
Poland	8,046	3
Argentina	8,011	3
South Africa	6,663	3
France	6,472	3
Chile	4,587	2
United Kingdom	3,005	1
Per capita consumption	6.8 kg	

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Statistics from FAO-Stat

Germany is slightly more importing than producing. About 70 % are imported from EU member states such as Spain, the Netherlands, Italy, Poland, France and the UK. In spring/summer time, the market is supplied by New Zealand, Australia, Argentina, South Africa and Chile.



Statistics

Inspection at Import (Non EU) to Germany Fruit and Vegetables (of which onions – figures in brackets)					
year	application	waiver	conformity	rejection	
2007	124,845 t (29,524 t)	10,658 t (1,194 t)	109,148 t (25,809 t)	5,039 t (2,221 t)	4.4 % (7.9 %)
2008	138,446 t (41,831 t)	15,464 t (3,423 t)	119,836 t (37,170 t)	3,146 t (1,238 t)	2.5 % (3,2 %)
2009 (Jan-June)	83,522 t (32,409 t)	21,591 t (6,150 t)	59,829 t (25,352 t)	2,102 t (907 t)	3.4 % 3.5 %
main defects: rots, mould, visible shoots, labelling					

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Statistics from BLE import inspection

The import inspection is restricted to non-EU countries. In spring/summer time, the market is supplied by New Zealand, Australia, Argentina, South Africa and Chile.

In general the quality is good. However, onions are the products with the highest quota of rejections of the BLE.

The main defects are related to rotting, mould, visible shoots, labelling.

The quality defects are mainly due to bad conditions during transport. In 2010 we were faced with problems due to onions not sufficiently dried before loading. Those onions travelled in refrigerated containers. 24 containers had to be rejected because of rotting and mould on the edible part. The better conditions for travelling are containers with two ventilators to keep the onions dry.

The importer has the right to do whatever possible to bring the lot into conformity. During the re-grading, re-packing and/or re-labelling process, the rejected lot remains under the supervision of the customs authority and the BLE inspection service. After a second inspection the conformity of the produce can be stated in many cases and thus the custom clearance is possible.

Definition of produce



This standard applies to onions of varieties (cultivars) grown from *Allium cepa* L. [Cepa group] to be supplied to the consumer in the natural state, green onions with full leaves and onions for industrial processing being excluded.

BLE 25-002, 109

5

Photos: 25-002, 25-109

Definition of produce

Interpretation: The UNECE standard does not specify the different commercial types of onions. In general it is possible to differentiate the brown, white and red types. In addition there are commercial types as Oso sweet type being less stringent than the normal onions.

Anyway, the standard does not include the shallots. For this product a new, separate UNECE standard is in preparation.

Definition of produce



green onions with full leaves

not covered by the standard



shallots *Allium cepa* L. Aggregatum-group

6

Photos:

Definition of produce

The standard does not include neither the green onions with full leaves nor the shallots.

For shallots a new, separate UNECE standard is in preparation.

Minimum requirements



not intact

BLE 25-022, 024, P4118576

7

Photos: 25-022, 25-024, P4118576

Minimum requirements: „intact“

Interpretation: The onions must not have any damage or injury. The skin must be intact. Unhealed injuries or mechanical damage exposing the edible of the produce are not allowed.

“Not intact” produce is allowed within the quality tolerance of the classes I (1 %) and II (10 %).

Minimum requirements



not sound

BLE 25-107, 108

8

Photos: 25-107, 25-108

Minimum requirements: „sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded“

Interpretation: The onions must be free of any bacterial or fungal disease, physiological disorder or serious deterioration which appreciably affects their appearance, edibility and keeping quality. Onions showing rotting or mould, even if the signs are very slight are excluded.

“Not sound” produce affecting the edible part is allowed – by agreement of the inspection services – not more than 2 % within the 10 % tolerance of class II.

Minimum requirements



not sound

BLE 25-031, 127, 161

9

Photos: 25-031, 25-127, 25-161

Minimum requirements: „sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded“

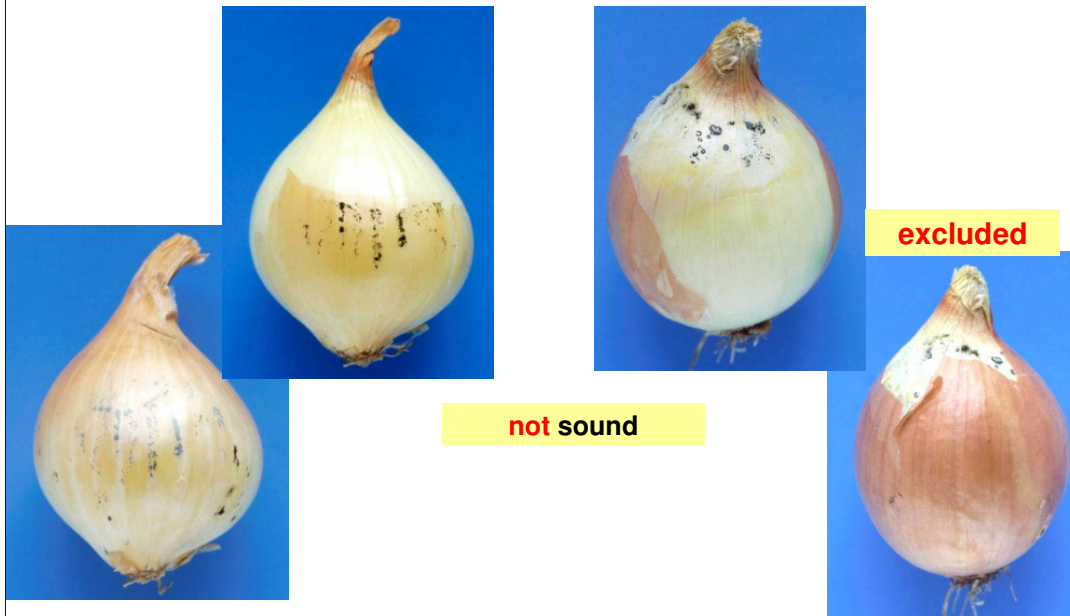
Interpretation: The onions must be free of any bacterial or fungal disease, physiological disorder or serious deterioration which appreciably affects their appearance, edibility and keeping quality. Onions showing rotting or mould, even if the signs are very slight are excluded.

Care must be taken to detect the diseases and disorders that are not visible from the outside. Eventually the bulbs are firm although internally affected. Therefore, it is necessary to cut a number of bulbs during inspection.

“Not sound” produce is allowed within the tolerance of class II (10 %) – in case spores are restricted to the dry outer skins.

“Not sound” produce affecting the edible part is allowed – by agreement of the inspection services – not more than 2 % within the 10 % tolerance of class II.

Minimum requirements



Photos: 25-033, 25-034, 25-035, 25-036

Minimum requirements: „sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded“

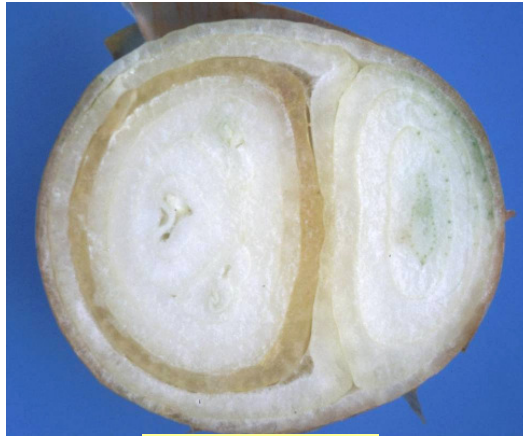
Interpretation: The onions must be free of any bacterial or fungal disease, physiological disorder or serious deterioration which appreciably affects their appearance, edibility and keeping quality. Onions showing rotting or mould, even if the signs are very slight are excluded.

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“Not sound” produce is allowed within the tolerance of class II (10 %) – in case spores are restricted to the dry outer skins.

“Not sound” produce affecting the edible part is allowed – by agreement of the inspection services – not more than 2 % within the 10 % tolerance of class II.

Minimum requirements



not sound

BLE 25-037

11

Photos: 25-037

Minimum requirements: „sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded“

Interpretation: The onions must be free of any bacterial or fungal disease, physiological disorder or serious deterioration which appreciably affects their appearance, edibility and keeping quality. Onions showing rotting or mould, even if the signs are very slight are excluded.

Care must be taken to detect the diseases and disorders that are not visible from the outside. Eventually the bulbs are firm although internally affected. Therefore, it is necessary to cut a number of bulbs during inspection.

“Not sound” produce is allowed – by agreement of the inspection services – not more than 2 % within the 10 % tolerance of class II.

Minimum requirements



not sound

BLE 25-038-040

12

Photos: 25-038, 25-039, 25-040

Minimum requirements: „sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded“

Interpretation: The onions must be free of any bacterial or fungal disease, physiological disorder or serious deterioration which appreciably affects their appearance, edibility and keeping quality. Onions showing rotting or mould, even if the signs are very slight are excluded.

The onions on the photo show bacterial disease (*Erwinia*). Care must be taken to detect the diseases and disorders that are not visible from the outside. In a more progressive state the onions have lost their firmness and the first fleshy ring is smelling sour. Therefore, it is necessary to cut a number of bulbs during inspection.

“Not sound” produce is allowed – by agreement of the inspection services – not more than 2 % within the 10 % tolerance of class II.

Minimum requirements



**not clean,
practically free of any visible foreign matter**

BLE 25-046

13

Photos: 25-046

Minimum requirements: „clean, practically free of any visible foreign matter“

Interpretation: The sweet peppers must be free of any visible soil, dust, chemical residue or other foreign matter. Extensive soiling, any traces of inorganic deposits or sooty mould left from aphid infestation are not allowed. Any deposits of a blue, green or other unusual colour indicating the presence of pesticide residues are not allowed.

The photo exceeds the limit for "practically free".

“Not clean” produce exceeding the “limit for practically free of visible foreign matter” is allowed within the quality tolerance of class II (10 %).

Minimum requirements



not free from damage due to frost

BLE 25-047, 048

14

Photos: 25-047, 25-048

Minimum requirements: „free of damage due to frost“

Interpretation: Damage caused by frost mainly happens during storage or transport and is not allowed. Freezing damage is expressed once the produce is transferred to ambient temperatures. If the unfreezing takes place too quickly, the onions show the defects: collapsing flesh, epidermis disconnected to the flesh.

“Not sound” produce is allowed – by agreement of the inspection services
– not more than 2 % within the 10 % tolerance of class II.

Minimum requirements



sufficiently dry for the intended use (in the case of onions for pickling [storing], at least the first two outer skins and the stem must be fully dried)

Photos: 25-049, 25-050

Minimum requirements: „sufficiently dry for the intended use (in case of onions for pickling, at least the first two outer skins and the stem must be fully dried“ [remark: the word pickling should be replaced by storing]

Interpretation: The onions not intended for storing can be traded shortly after harvest, with less than two outer skins not being fully dried.

Minimum requirements



not practically free from damage caused by pests

BLE 25-124, 125

16

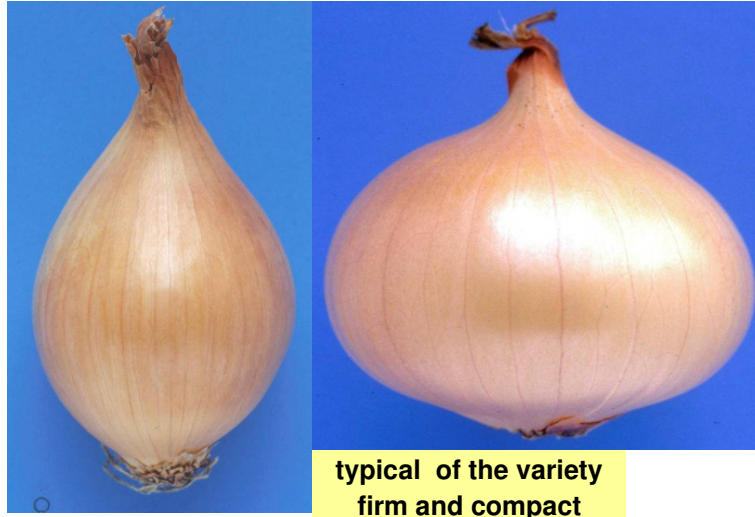
Photos: 25-124, 25-125

Minimum requirements: „practically free from damage caused by pests“

Interpretation: The presence of pests can detract from the commercial presentation and acceptance of the onions. Therefore, the acceptable limit would be the odd insect, mite or other pest in the package or sample; any colonies would lead to the rejection of the produce.

“Not free from pests”, produce exceeding the “limit for practically free from pests” is allowed within the quality tolerance of the class II (10 %), provided the edibility is not affected.

Class I



BLE 25-056, 057

17

Photos: 25-056, 25-057

Class I: "Onions in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

The bulbs must be firm and compact."

Interpretation: To evaluate a shape defect, the shape must be compared to the typical shape of the variety and/or commercial type concerned.

Produce showing defects in shape exceeding the limits specified are allowed within the 10 % quality tolerances only.

Class I



unsprouted (free from externally visible shoots)

BLE 25-061

18

Photos: 25-061

Class I: "Onions in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

The bulbs must be unsprouted (free from externally visible shoots)."

Interpretation: To evaluate this defect, the bulbs must be cut. Produce showing internal sprouting must not have lost their firmness.

Onions showing internal sprouting and being less firm, are allowed within the 10 % tolerance only.

Class I



**practically free of root tufts;
however, for onions harvested before complete maturity, root tufts are allowed.**

Photos: 25-050, 25-065

Class I: "Onions in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

The bulbs must be practically free of root tufts; however, for onions harvested before complete maturity, root tufts are allowed)."

Interpretation: In this context the BLE allows secondary root growth as shown on the photo on the right. This secondary root growth may happen if the storage conditions are not dry enough. As soon as the produce is dried again, these secondary roots dry out.

Onions showing root tufts exceeding the limits shown are allowed within the 10 % tolerance only.

Class I



**slight defect in shape
(but free from swelling caused by abnormal vegetative development)**

BLE 25-059

20

Photos: 25-059

Class I: "Onions in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package: a slight defect in shape (but the bulbs must be free from swelling caused by abnormal vegetative development)."

Interpretation: To evaluate a shape defect, the shape must be compared to the typical shape of the variety and/or commercial type concerned.

Onions showing defects in shape exceeding the limits shown are allowed within the 10 % tolerance only.

Class I



light staining which does not affect the last dried skin protecting the flesh, provided it does not cover more than 1/5 of the bulb's surface

BLE 25-066, 067, 133

21

Photos: 25-066, 25-067, 25-133

Class I: "Onions in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package: light staining which does not affect the last dried skin protecting the flesh, provided it does not cover more than one fifth of the bulb's surface."

Interpretation: The skin below the outer skin is normally not affected. During a re-packing process, the produce mostly the outer skin affected by staining falls off and the remaining produce is clean and in accordance with the class I requirements

Onions showing light staining exceeding the limits shown are allowed within the 10 % tolerance only.

Class I



superficial cracks in, and partial absence of the outer skins,
provided the flesh is protected

BLE 25-068, 069, 070

22

Photos: 25-068, 25-069, 25-070

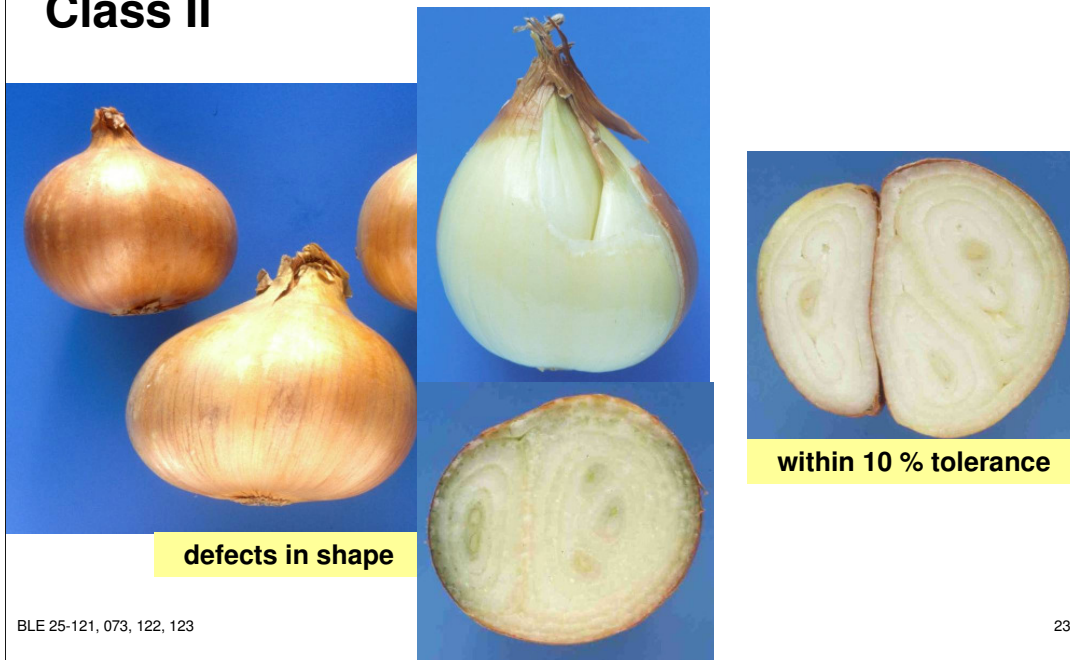
Class I: "Onions in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package: superficial cracks in, and partial absence of the outer skins, provided the flesh is protected."

Interpretation: The cracks and missing parts of the outer skin should not expose the edible part.

Onions showing defects in shape exceeding the limits shown are allowed within the 10 % tolerance only.

Class II



Photos: 25-121, 25-073, 25-122, 25-123

Class II: "This class includes onions that do not qualify for inclusion in Class I, but satisfy the minimum requirements specified above. The bulbs must be reasonably firm. "The following defects may be allowed, provided the onions retain their essential characteristics as regards the quality, the keeping quality and presentation: defects in shape."

Interpretation: To evaluate a shape defect, the shape must be compared to the typical shape of the variety and/or commercial type concerned.

The right photo shows a bulb where the outer skins have been removed, the bulb is covered with dry outer skins, thus the edibility of this onion is affected.

Onions showing defects in shape exceeding the limits shown are allowed within the 10 % tolerance only. In case the edibility is affected through the dry skins within the edible part, the tolerance is restricted – by silent agreement of the inspection services – to 2 % of the 10 % tolerance.

Class II



early evidence of
externally visible shoot growth
max. 10 % by unit of presentation



externally visible shoot
or cut shoot

within 10 % tolerance
provided the bulb is
reasonably firm

24

Photos: 25-174, 25-075, 25-076

Class II: "This class includes onions that do not qualify for inclusion in Class I, but satisfy the minimum requirements specified above. The bulbs must be reasonably firm. "The following defects may be allowed, provided the onions retain their essential characteristics as regards the quality, the keeping quality and presentation: early evidence of externally visible shoot growth (no more than 10 per cent by number or weight by unit of presentation)."

Interpretation: The early evidence of sprouting is restricted to shoots not exceeding the onion by 1 cm in length.

Onions with shoots removed or shoots longer than 1 cm are allowed within the 10 % tolerance provided the bulbs are reasonably firm.

Remark: The standard text allows the externally visible shoots in no more than 10 % by unit of presentation. In addition 10 % tolerance can be granted. Thus a maximum of 20 % of bulbs showing externally visible shoots are allowed.

Class II



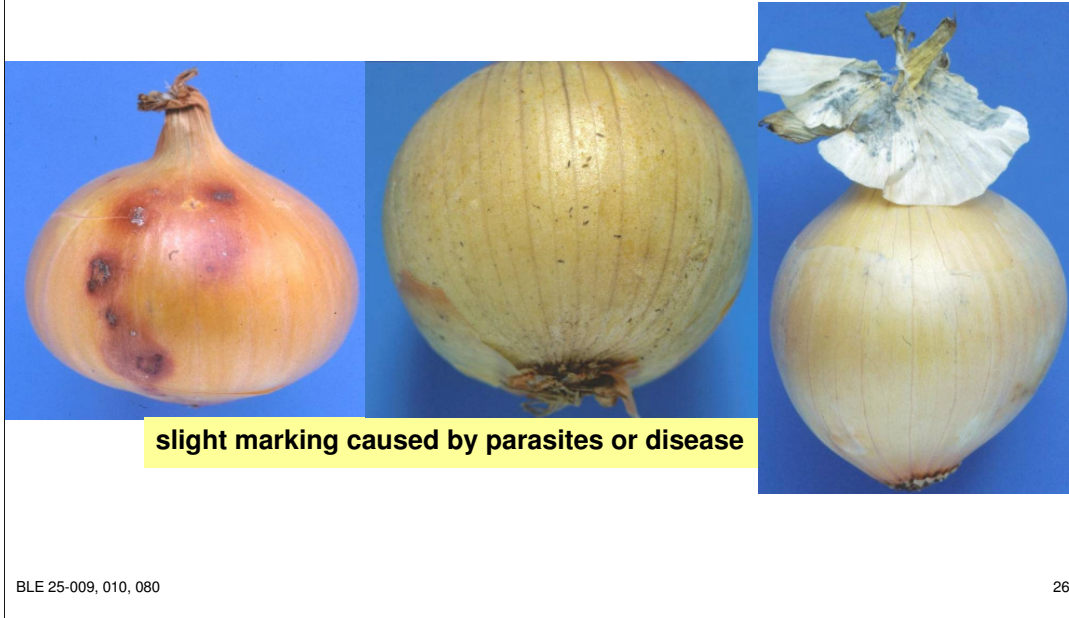
Photos: 25-077, 25-078

Class II: "This class includes onions that do not qualify for inclusion in Class I, but satisfy the minimum requirements specified above. The bulbs must be reasonably firm. "The following defects may be allowed, provided the onions retain their essential characteristics as regards the quality, the keeping quality and presentation: early evidence of externally visible shoot growth (no more than 10 per cent by number or weight by unit of presentation)."

Interpretation: The early evidence of sprouting is restricted to shoots not exceeding the onion by 1 cm in length.

Onions with shoots removed or shoots longer than 1 cm are allowed within the 10 % tolerance provided the bulbs are reasonably firm. If the firmness is a problem, no tolerance is granted.

Class II



Photos: 25-009, 25-010, 25-080

Class II: "This class includes onions that do not qualify for inclusion in Class I, but satisfy the minimum requirements specified above. The bulbs must be reasonably firm. "The following defects may be allowed, provided the onions retain their essential characteristics as regards the quality, the keeping quality and presentation: slight marking caused by parasites or disease."

Interpretation: These slight markings caused by parasites or disease should be restricted to the outer skins.

Onions showing markings exceeding the limits shown are allowed within the 10 % tolerance only.

Onions showing markings on the edible part are excluded.

Class II



slight healed bruising

BLE 25-168, 169

27

Photos: 25-168, 25-169

Class II: "This class includes onions that do not qualify for inclusion in Class I, but satisfy the minimum requirements specified above. The bulbs must be reasonably firm. "The following defects may be allowed, provided the onions retain their essential characteristics as regards the quality, the keeping quality and presentation: slight healed bruising."

Interpretation: Slight bruising should not affect more than the first fleshy ring.

Onions showing bruising exceeding the limits shown are allowed within the 10 % tolerance only.

Class II



> 1/2 the surface
within 10 % tolerance

stains which do not affect the last dried skin protecting the flesh,
provided they do not cover more than 1/2 the bulb's surface

BLE 25-86, 087, 134

28

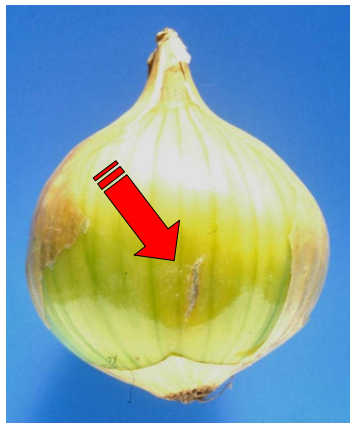
Photos: 25-086, 25-087, 25-134

Class II: "This class includes onions that do not qualify for inclusion in Class I, but satisfy the minimum requirements specified above. The bulbs must be reasonably firm. "The following defects may be allowed, provided the onions retain their essential characteristics as regards the quality, the keeping quality and presentation: stains which do not affect the last dried skin protecting the flesh, provided they do not cover more than half the bulb's surface."

Interpretation: The skin below the outer skin is normally not affected. During a re-packing process, the produce mostly the outer skin affected by staining falls off and the remaining produce is clean and in accordance with the class I requirements

Onions showing light staining exceeding the limits shown are allowed within the 10 % tolerance only.

Class II



cracks in the outer skins and partial absence of over a maximum of 1/3 of the bulb's surface, provided the flesh is not damaged

Photos: 25-089, 25-090, 25-126

Class II: "This class includes onions that do not qualify for inclusion in Class I, but satisfy the minimum requirements specified above. The bulbs must be reasonably firm. "The following defects may be allowed, provided the onions retain their essential characteristics as regards the quality, the keeping quality and presentation: cracks in the outer skins and partial absence of over a maximum of one third of the bulb's surface, provided the flesh is not damaged."

Interpretation: The cracks and missing parts of the outer skin should not expose more than 1/3 of the edible part.

Onions showing cracks in or partial absence of the outer skin exceeding the limits are allowed within the 10 % tolerance only.

Presentation



BLE 25-094, 095, 096, 146

30

Photos: 25-094, 25-095, 25-096, 25-166

Presentation: "Onions may be presented:

- **arranged in layers**
- **loose in a package (including bulk bins)**
- **transported in bulk**
- **in strings:**
 - **either of a certain number of bulbs, in which case the strings must contain at least six onions (with fully dried stems)**
 - **or of a certain net weight.**

For stringed onions, the characteristics of the strings in any one package (number of bulbs or net weight) must be uniform."

Presentation



However, sales packages, of a net weight not exceeding 3 kg, may contain mixtures of onions of different colours, provided that they are uniform in quality, and, for each colour concerned, in origin, variety and size.

BLE 25-100

31

Photos: 25-100

Presentation- Uniformity: "However, sales packages, of a net weight not exceeding three kilogrammes, may contain mixtures of onions of different colours, provided that they are uniform in quality, and, for each colour concerned, in origin, variety and size."

Interpretation: In this mixed package the onions are of distinctly different colour, but all colours from the same origin (herkunft: Holland – which means origin: Netherlands).

Marking



- Packer and/or dispatcher (physical address)
- Country of origin
- Class
- Size
- Net weight

BLE 25-143

32

Photos: 25-143

Marking (Labelling): "Each package must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

- packer and/or dispatcher/shipper
- nature of produce if the contents are not visible from the outside
- country of origin
- class
- size
- net weight

Interpretation: In the example given, the address of the packer or dispatcher is not fully given on the label. If the physical address would be given on another note attached to the package or box this would be accepted. Internet addresses or phone numbers are accepted only in combination with the physical address.