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TO PURCHASE OFFICIAL VISUAL AIDS PLEASE CONTACT THE SPECIALTY CROPS INSPECTION DIVISION’S EQUIPMENT AND FORMS DEPOT

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EQUIPMENT CATALOG
It is often necessary to remove the **dry** outer scales to properly judge whether an onion is damaged or seriously damaged by watery fleshy scales. The following two photos of the same onion illustrate this point.

Presence of **dry** brown outer scale gives impression that onion is damaged by discolored watersoaked fleshy scales.  

Removal of **dry** brown outer scale shows onion to be damaged.
THESE PICTURES ILLUSTRATE CHARACTERISTICS OF DORMANT AND GROWING ONIONS

The onion on the left has a completely white heart, characteristic of a dormant onion, while the onion on the right has a yellow, growing onion.

A thin slice (1/16 to 1/8 inch) was removed from the bottom of each of two onions. The vascular bundles are not noticeable in the dormant onion on the left, but enlarged vascular bundles are evident in the onion on the right, indicating that growth has started.

Cut Onions Showing Dormancy & New Growth
March 1990 (previously undated)
C-10

APPRECIABLY STAINED
MARCH 1990 (previously undated)
SHAPE ON ONIONS

ONS-CP-3-A
Shape
April 1990 (Previously October 1971, Side II)
STAINING

APPRECIABLY STAINED
(onions with appearance affected to a lesser degree would not be considered appreciably stained)
Examples of Damage by Dry Sunken Areas on Northern (Other than) Onions

Condition: Until October 31 of the year of production; imports year round. Quality: November 1 until the end of the crop year.

Onions not covered by outer papery scales, score as damage when exceeding the equivalent of a circle 1/2 inch in dia. (shown below).

Onions covered by outer papery scales, score as damage when exceeding the equivalent of a circle 3/4 inches in dia. (not shown).

Scoring guide based on an onion 2-3/4 inches in dia. (shown below).

There is some staining mixed in.

Circles show location of dry sunken areas.

USDA Visual Aid ONS-CP-12 Jan 2017
Examples of Serious Damage by Dry Sunken Areas on Northern (Other Than) Onions

Condition: Until October 31 of the year of production; imports year round. Quality: November 1 until the end of the crop year.

Serious damage: When extending deeper than 1 fleshy scale, or a circle equal to 1 inch or larger in dia. (shown below).

Scoring guide based on an onion 2-3/4 inches in dia. (shown below).

If any lesser amount, this onion would not be seriously damaged

Circles show location of dry sunken areas.
USDA Visual Aid ONS-CP-13 Jan 2017
Not Scorable by Dry Sunken Areas on Northern (Other Than) Onions
Based on 2-3/4 inch diameter onions (shown below).

Dry Sunken Areas mixed with Staining (above photos). Not enough Dry Sunken Areas to score, but combination of defects materially detracts. Go with predominating defect (in this case Staining).

Slightly Stained (not a Dry Sunken Area)
Not Scorable

Not enough Dry Sunken Areas
Not scorable

USDA Visual Aid ONS-CP-14 Jan 2017
Internal Sprouts on Onions

Condition factor.
Damage: When penetrating one fleshy scale.
Serious Damage: When penetrating more than two fleshy scales.

USDA Visual Aid ONS-CP-15 July 2018
ONIONS

Purple Blotch

FOR IDENTIFICATION ONLY

ONIONS-IDENT-1
MAY 1992
ONIONS

Purple Blotch              Not Purple Blotch

FOR IDENTIFICATION ONLY

ONS-IDENT-2
MAY 1992
ONIONS WITH EXCESSIVELY LONG ROOTS (SHOWN ABOVE) WHEN IN SUFFICIENT QUANTITY TO MATERIALLY AFFECT THE APPEARANCE OF THE LOT, ARE NOT PERMITTED IN U.S. NO. 1 GRADE.

Onions, Photo No. 1
April 1990 (Previously No. 1, no date)
ONION SEEDSTEMS. THE OUTER SPECIMENS ARE LENGTHWISE SECTIONS SHOWING DAMAGE CAUSED BY SEEDSTEMS.

Onions, Photo No. 3
April 1990 (Previously No. 3, no date)
SHAPE ON ONIONS

ONIONS A, B AND D ARE U.S. COMMERCIAL
ONION C IS U.S. NO. 1

Onions, Photo No. 4
April 1990 (Previously No. 4, no date)
ONIONS OF THESE SHAPES SHALL BE ALLOWED IN U.S. NO. 1 GRADE FOR NORTHERN GROWN ONIONS.

Onions, Photo No. 5
April 1990 (Previously No. 5, no date)
A. U.S. NO. 1 FOR SHAPE
B. U.S. COMMERCIAL FOR SHAPE

Onions, Photo No. 8
April 1990 (Previously No. 8, no date)
SHAPE ON ONIONS

Onions, Photo No. 10
April 1990 (Previously No. 10, no date)

ONION ON EXTREME LEFT IS CONSIDERED FLAT. ONIONS NOT FLATTER THAN OTHER FIVE ARE CONSIDERED GLOBE SHAPE.
Cracking of outer, thin, papery scales not considered damaged unless present to extent as to materially affect appearance of lot.

One or more cracked, fleshy scales considered damaged.

Onions, Photo No. 14
April 1990 (Previously No. 14, no date)
NORTHERN GROWN ONIONS
Illustrating “Bottlenecks” or “Thick-necked” Onions

Not “Bottlenecks” – U.S. No. 1

“Bottlenecks” – Not U.S. No. 1 but meet requirements of U.S. No. 2

Onions, Photo No. 15
April 1990 (Previously No. 15, no date)
ONIONS SLIDE 1 – LOOSE SKIN
ONIONS SLIDE 2 – EXCESSIVE TOPS
ONIONS SLIDE 3 – DRY ROOTS
ONIONS SLIDE 4 – VISIBLE SPROUTS
ONIONS SLIDE 5 – CONCEALED SPROUTS
ONIONS SLIDE 6 – CONCEALED SPROUTS CUT
ONIONS SLIDE 7 – INSECT INJURY
ONIONS SLIDE 8 – INSECT INJURY
ONIONS SLIDE 9 – DISSIMILAR VARIETAL
ONIONS SLIDE 10 -- BOTTLENECK
ONIONS SLIDE 11 – NEW ROOT GROWTH
ONIONS SLIDE 12 -- PEEPER
ONIONS SLIDE 13 – CLOSELY TRIMMED
ONIONS SLIDE 15 -- SPLIT
ONIONS SLIDE 16 -- SPLIT
ONIONS SLIDE 17 – MISSHAPEN OR SPLIT
ONIONS SLIDE 18 – CRACKED PAPERY SCALES
ONIONS SLIDE 19 -- SUNBURN
ONIONS SLIDE 20 -- SUNSCALD
ONIONS SLIDE 21 – BLACK SURFACE MOLD
ONIONS SLIDE 22 – BLACK MOLD BETWEEN SCALES
ONIONS SLIDE 23 -- DIRT
ONIONS SLIDE 24 -- SEEDSTEM
ONIONS SLIDE 25 -- SEEDSTEM
ONIONS SLIDE 26 -- CUT
ONIONS SLIDE 27 -- CUT
ONIONS SLIDE 29 – WATERY OR TRANSLUCENT SCALES
ONIONS SLIDE 30 – WATERY SCALES
ONIONS SLIDE 31 – TRANSLUCENT AND WATERY SCALES
ONIONS SLIDE 32 -- CUT
ONIONS SLIDE 33 – SLIGHTLY STAINED
ONIONS SLIDE 34 – APPRECIABLY STAINED
ONIONS SLIDE 35 – BADLY STAINED
ONIONS SLIDE 36 – DECAY IN NECK
ONIONS SLIDE 37 – FUSARIUM BULB ROT
ONIONS SLIDE 38 – FUSARIUM BULB ROT CUT
ONIONS SLIDE 39 – BLUE MOLD ROT
ONIONS SLIDE 133