THE VISUAL AIDS ON THE FOLLOWING PAGES ARE FOR REFERENCE ONLY AND NOT INTENDED FOR OFFICIAL USE.

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.
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.
C-10
APPRECIABLY STAINED
MARCH 1990 (previously undated)
BADLY STAINED
MARCH 1990 (previously undated)
SHAPE ON ONIONS

SCORE AS DAMAGE

SCORE AS DAMAGE

SCORE AS DAMAGE

Ons-CP-3
Shape
April 1990
(Previously October 1971, Side I)
SHAPE ON ONIONS

LOWER LIMIT
FAIRLY WELL SHAPED

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)

ONS-CP-10A
JULY 1999
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

Not scorable. Does not penetrate any fleshy scale (runs parallel).

Scorable (damage). Penetrates one fleshy scale.

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
Purple Blotch

FOR IDENTIFICATION ONLY

ONIONS

ONS-IDENT-1
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)
BERMUDA TYPE ONIONS NOT U.S. NO. 1 ACCOUNT OF SHAPE.
A. U.S. NO. 1 FOR SHAPE
B. U.S. COMMERCIAL FOR SHAPE

Onions, Photo No. 8
April 1990 (Previously No. 8, no date)
DIFFERENT VIEW OF THE SAME ONIONS
BERMUDA TYPE ONIONS U.S. NO. 1. ILLUSTRATING SHAPE.

Onions, Photo No. 9
April 1990 (Previously No. 9, no date)
SHAPE ON ONIONS

ONION ON EXTREME LEFT IS CONSIDERED FLAT. ONIONS NOT FLATTER THAN OTHER FIVE ARE CONSIDERED GLOBE SHAPE.
GRANEX-GRANO TYPE ONIONS. SHAPES PERMITTED IN U.S. NO. 1 GRADE FOR GRANEX-GRANO ONIONS.

Onions, Photo No. 13
April 1990 (Previously No. 13, no date)
ONIONS SLIDE 1 – LOOSE SKIN
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 10 -- BOTTLENECK
ONIONS SLIDE 11 – NEW ROOT GROWTH
ONIONS SLIDE 12 -- PEELER
ONIONS SLIDE 14 -- DOUBLE
ONIONS SLIDE 15 -- SPLIT
ONIONS SLIDE 16 -- SPLIT
ONIONS SLIDE 17 – MISSHAPEN OR SPLIT
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 28 -- 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