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[EQUIPMENT CATALOG](#)

TOMATOES



ILLUSTRATING HEALED RADIAL GROWTH CRACKS



HAIL OR SIMILAR INJURY



SUNKEN DISCOLORED AREAS OCCURRING OVER THE SHOULDERS

FOR IDENTIFICATION ONLY

**TM-1-IDENT
November 1990 (Previously September 1969)**

TOMATOES



CATFACE (SCAR)



**CATFACE
(CHANNEL, OFFSET FROM BLOSSOM END,
EXTENDING INTO TOMATO)**



**CATFACE
(MULTIPLE CHANNELS, OCCURRING AT BLOSSOM END AND SIDES, EXTENDING INTO TOMATO)**

FOR IDENTIFICATION ONLY

TM-2-IDENT
November 1990 (Previously May 1974, Side 1)

TOMATOES



INTERNAL DISCOLORATION (EXTERNAL VIEW)



INTERNAL DISCOLORATION (INTERNAL VIEW
SAME TOMATO)



WORM INJURY

FOR IDENTIFICATION ONLY

TM-2-IDENT-A
November 1990 (Previously May 1974, Side 2)

TOMATOES



SUNKEN DISCOLORED AREAS OCCURRING OVER SHOULDERS (TURNING TO RED FRUIT)



SUNBURN OCCURRING OVER SHOULDERS



EXTERNAL DISCOLORATION (SCUFFING)

At terminal markets describe as to color, percent of surface affected and degree of pitting, if present.

EXAMPLE: FROM 4 TO 12%, average 8% damage including 4% serious damage by light to dark brown discoloration, most of which is sunken, affecting from 15 to 50% of surface.

FOR IDENTIFICATION ONLY

TM-3-IDENT
November 1990 (Previously May 1974)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURE MARKETING SERVICE
FRUIT AND VEGETABLE DIVISION

THE TOMATO IMPORT REGULATIONS, AS DEFINED IN SECTION 980-212, EXEMPT THE FOLLOWING TYPES OF TOMATOES:

- PEAR SHAPED MEANS ELONGATED TYPES, COMMONLY REFERRED TO AS PEAR SHAPED OR PASTE TOMATOES.
INCLUDES SAN MARZANO, RED TOP, AND ROMA VARIETIES.
- CHERRY CERASIFORM TYPES OF TOMATOES COMMONLY REFERRED TO AS "CHERRY TOMATOES"
- HYDROPONIC TOMATOES GROWN IN A SOLUTION WITHOUT SOIL.
- GREENHOUSE GROWN INDOORS.

THE FOLLOWING ILLUSTRATIONS MAY BE USED AS AN AID IN CLASSIFYING CHERRY AND ELONGATED TYPES OF TOMATOES:

CHERRY



ELONGATED



TOMATOES



Illustration of Different Types of Abnormal Coloring



All three tomatoes are affected by Abnormal Coloring, and are scoreable against the “otherwise defective” tolerance.



TOMATOES



All tomatoes are affected by Abnormal Coloring

TM-6-IDENT
Abnormal Coloring
May 1992

TOMATOES

Illustration of Open Cavities in Stem Scars



External View

Scoring Guide:
Use same scoring guidelines
as catfaces.



Internal View (after cutting)

“ZIPPER” TYPE SCARS OF FRESH TOMATOES

Scars are a quality factor and shall be scored on the basis of appearance – whether they materially, seriously or very seriously detract from the appearance of the individual tomato. The U.S. Standards permit scars which are smooth and have no depth and do not aggregate more than a circle $\frac{3}{8}$ inch, $\frac{5}{8}$ inch and 1 inch in diameter for the U.S. No. 1, U.S. No. 2 and U.S. No. 3 grades respectively. The exact cause for this type of scar is not clear, but they are believed to be caused by poor pollination. Zipper type scars may be thin and smooth or wide and rough with a “stitching” appearance.



U.S. NO. 1



U.S. NO. 1

These photographs illustrate the maximum extent the appearance of the individual tomato may be affected and still grade U.S. No. 1. (Assume other side is free from)

“ZIPPER” TYPE SCARS OF FRESH TOMATOES



U.S. NO. 2 – NOT A LIMIT



U.S. NO. 2 – NOT A LIMIT

(Assume other side is free from)

“SOIL SPOT” (GROUND STAIN) FRESH TOMATOES

Soil Spot is a disorder that frequently affects field grown tomatoes following periods of rainy weather. This disorder can vary greatly in both appearance and severity. In early stages Soil Spot usually appears as dark brown to black discolored areas, generally occurring over the blossom half of the tomato. The disorder may occur as raised superficial discolored areas and remain that way throughout the ripening process (See Photo III) or the areas may become very sunken, larger in area and darker colored as in Photo IV. (For Photo's III and IV, see TM-CP-2-A).



PHOTO I (IDENT. ONLY)

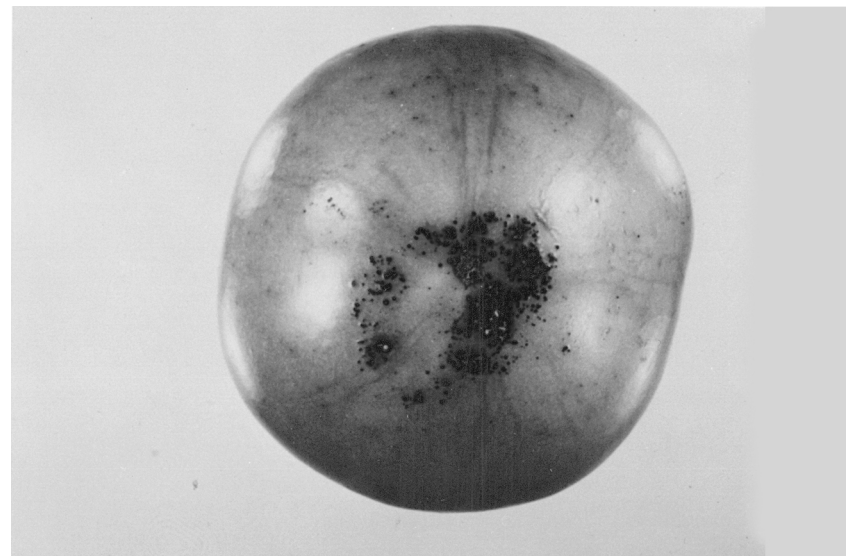


PHOTO II (IDENT. ONLY)

Because of the varying characteristics of this disorder, Soil Spot is a Condition factor.

“SOIL SPOT” (GROUND STAIN) FRESH TOMATOES

Maximum aggregate of Soil Spot allowed in the following U.S. grades based on 2 ½ inch tomato:

	U.S. No. 1	U.S. No. 2	U.S. No. 3
Area Sunken	1/4”	3/8”	5/8”
Area Not Sunken	3/8”	1/2”	3/4”

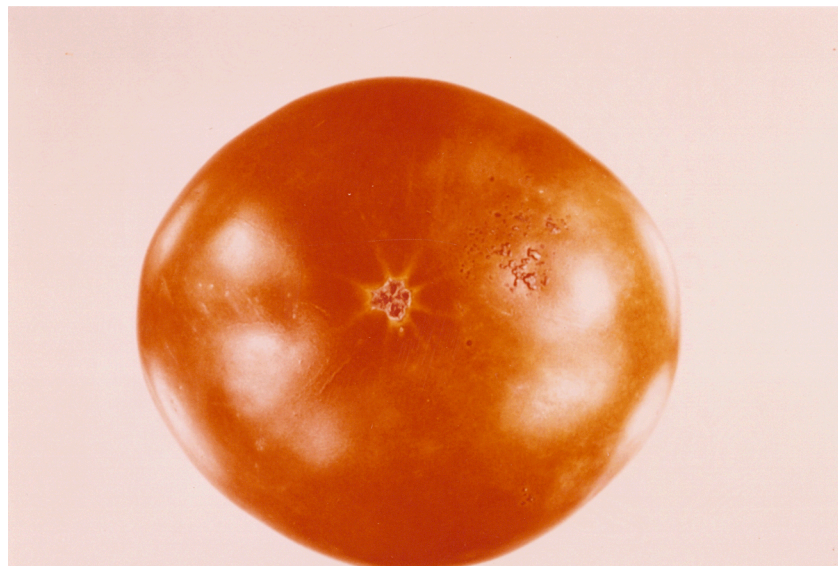


PHOTO III (IDENT. ONLY)

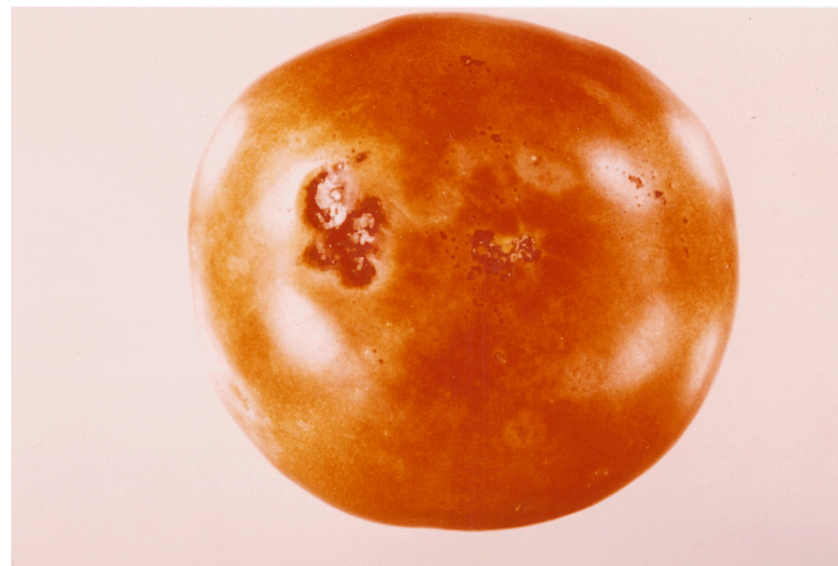
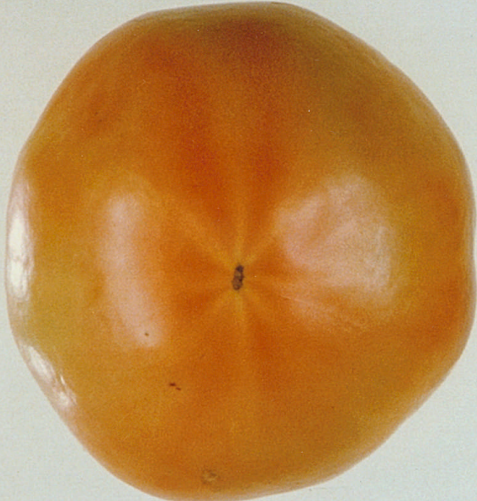


PHOTO IV (IDENT. ONLY)

TOMATOES

Normal Coloring

Abnormal Coloring (Scoreable)



TM-CP-3
MAY 1992

TOMATOES



Tomatoes on Left – Not scoreable (maximum allowed)

Tomatoes on Right – Scoreable as Abnormal Coloring

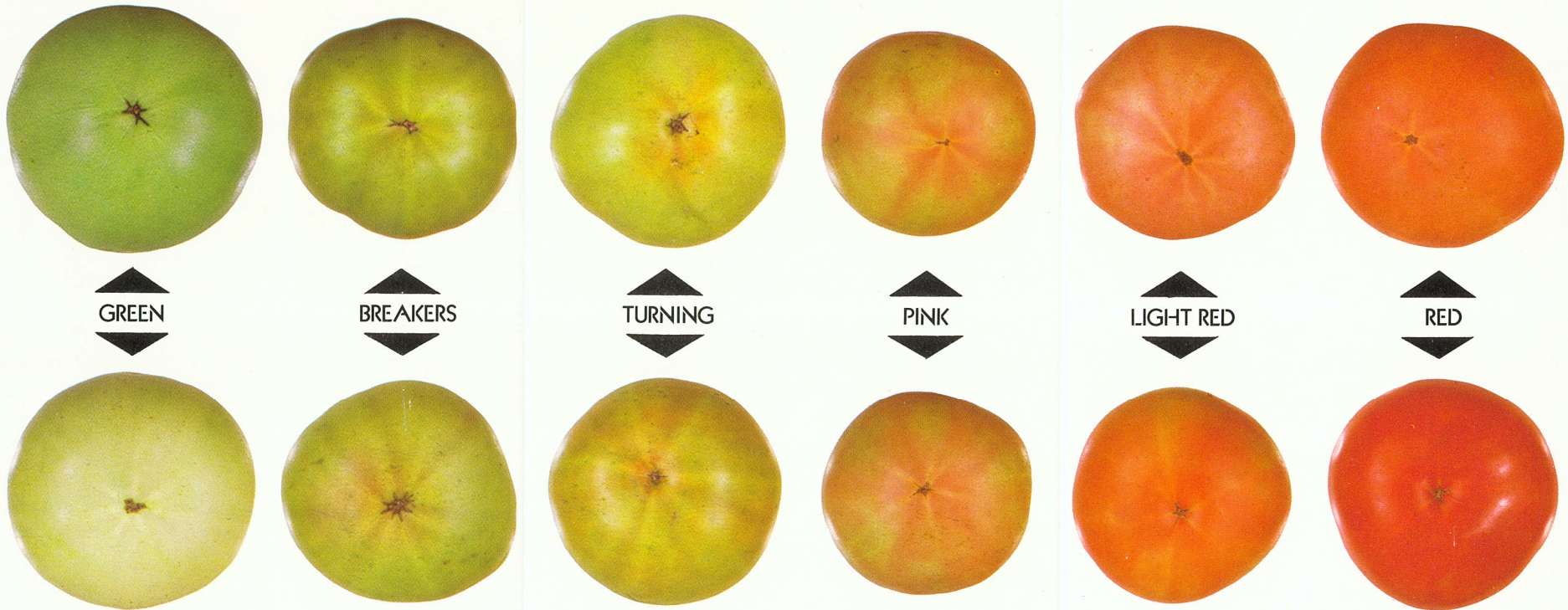
COLOR CLASSIFICATION REQUIREMENTS IN

UNITED STATES STANDARDS FOR GRADES OF FRESH

TOMATOES

United Fresh Fruit and Vegetable Association
in cooperation with
U. S. Department of Agriculture
Agricultural Marketing Service
Fruit and Vegetable Division

U.S.D.A. Visual Aid TM-L-1; February '75
The John Henry Company
P.O. Box 17099, Lansing, Mich. 48901-7099



(1) "Green" means that the surface of the tomato is completely green in color. The shade of green color may vary from light to dark;

(2) "Breakers" means that there is a definite break in color from green to tannish-yellow, pink or red on not more than 10 percent of the surface;

(3) "Turning" means that more than 10 percent but not more than 30 percent of the surface, in the aggregate, shows a definite change in color from green to tannish-yellow, pink, red, or a combination thereof;

(4) "Pink" means that more than 30 percent but not more than 60 percent of the surface, in the aggregate, shows pink or red color;

(5) "Light red" means that more than 60 percent of the surface, in the aggregate, shows pinkish-red or red; *Provided*, That not more than 90 percent of the surface is red color; and,

(6) "Red" means that more than 90 percent of the surface, in the aggregate, shows red color.

The above photographs are only guides illustrating the shade and percentage of surface color specified for each of the color terms. These photographs do not necessarily depict absolute limits of minimum or maximum shades and/or percentage of color required for each term.