Slicing Cucumber Grader's Manual
EXTENSION BULLETIN E-1468

GRADING SLICING CUCUMBERS

(Two folder summaries the grading provisions of the Michigan regulation dealing with the grading, packing, and marking of slicing cucumbers and provides practical interpretations of the United States grades for slicing cucumbers.)

REGULATION NO. 528 AS AMENDED
(Under provisions of Act 91, P.A. of 1915)

Summary of provisions relating to grading:
All slicing cucumbers, when prepared for market, offered for sale, or sold, must meet the requirements for one of the U.S. grades established for slicing cucumbers. Lots of slicing cucumbers not graded to conform with such U.S. grades may be marketed as "Unclassified" if not more than 3 percent of such lots are affected by decay and/or serious worm damage. "Unclassified" is not a grade. It is a designation to show that the slicing cucumbers have not been graded in conformance with established U.S. grades.

Provisions of this regulation shall not apply to the sale of slicing cucumbers when made by the grower direct to the consumer.

Copies of the full text of Michigan Regulation No. 528 as Amended, and of the official United States Standards for Slicing Cucumbers, may be obtained from the Food Inspection Division, Michigan Department of Agriculture, Lansing, Michigan 48913.

Packing Requirements

Each container of slicing cucumbers, when prepared for market, offered for sale or sold, must be marked with the name of the variety (if known), the name and address of the packer, the grade or term "Unclassified," and the true net contents. The same information shall be shown on the invoices or shipping papers accompanying bulk shipments.

Containers of slicing cucumbers marked "Unclassified" must be jumble-packed and not place packed, and the shown surface must not be of better quality, color, or size than the remainder of the package or bulk lot.

LIMITS OF DEFECTS IN U.S. SLICING CUCUMBER GRADES

TOLERANCES

For grade requirements other than size: Not over 10 percent, by count, of the cucumbers in any container may fail to meet the requirements of the specified grade, including not over 1 percent for decay. For size requirements: Not over 3 percent of total weight, by count, of the cucumbers in any container may fail to meet the requirements for length and diameter; including not over 5 percent for cucumbers that fail to meet minimum diameter requirements, and not over 3 percent for those that fail to meet maximum diameter requirements.

INDIVIDUAL PACKAGES

Individual packages in any lot may vary from the specified tolerances, provided the averages for the entire lot are within the specified tolerances. For a tolerance of 10 percent or more, individual packages may contain not over one and one-half times the specified tolerance—except that when the package contains 15 specimens or less, individual packages may contain not over double the specified tolerance. For a tolerance of less than 10 percent, individual packages may contain not over double the specified tolerance—provided that at least one defective and one off-size specimen shall be allowed in any one package.

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<tr>
<td>COLOR</td>
<td>Well colored. Not less than 60% of surface must be medium green or darker with at least a light green color extending to the blossom end on one side.</td>
<td>At least 50% well colored and the remainder fairly well colored.</td>
<td>Fairly well colored. Not less than 60% of surface must be medium green or darker, with at least a light green color extending to within 1/4 inch of the blossom end on one side.</td>
<td>Moderately colored. At least 60% of the surface must be a light green color or darker color.</td>
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<td>SHAPE (Also see drawings below)</td>
<td>Well formed. Practically straight and not more than very slightly constricted or more than moderately tapered.</td>
<td>At least 50% well formed and the remainder fairly well formed.</td>
<td>Fairly well formed. May be moderately curved, but not deeply constricted, not extremely tapered or otherwise misshapen.</td>
<td>Not badly deformed. Not so badly curved, constricted, tapered or otherwise misshapen that the appearance is seriously affected.</td>
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<td>SIZE</td>
<td>Not over 2 3/8 inches in diameter and not less than 6 inches long.</td>
<td>Same as U.S. No. 1</td>
<td>U.S. No. 1: Unless otherwise specified, not over 2 3/8 inches in diameter and not less than 6 inches long.</td>
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<td>DECAY, FIRMNESS, FRESHNESS, FREEZING INJURY, OVERGROWN (OVERMATURE)</td>
<td>All grades shall be fresh, firm, free from decay and damage caused by freezing and not overgrown (not overmature).</td>
<td>Same as U.S. No. 1</td>
<td>U.S. No. 1 Large: Not less than 1/2 inches in diameter, and unless otherwise specified, not less than 6 inches long.</td>
<td>U.S. No. 1 Small: Not less than 1 inch or over 2 inches in diameter. No length requirement.</td>
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<td>SUNBURN, DIRT AND FOREIGN MATERIAL, DISEASE, INSECT INJURY, MECHANICAL AND OTHER INJURY, YELLOWING</td>
<td>Must not materially affect appearance, eating or shipping quality.</td>
<td>Same as U.S. Fancy</td>
<td>Same as U.S. Fancy</td>
<td>Must not seriously affect appearance, eating or shipping quality.</td>
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<td>SCARS</td>
<td>Must not total more than 3/8 inch in diameter.</td>
<td>Same as U.S. No. 1</td>
<td>Must not total more than 5/8 inch in diameter.</td>
<td>Must not total more than 1 inch in diameter.</td>
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<td>SUNSCALD</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Must not materially affect appearance, eating or shipping quality.</td>
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<tr>
<td>CUTS</td>
<td>Must not be more than slight.</td>
<td>Same</td>
<td>Same</td>
<td>Same</td>
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**U.S. Grades for Slicing Cucumbers**

- **U.S. Fancy**
- **U.S. Extra No. 1**
- **U.S. No. 1**
- **U.S. No. 2**

"Unclassified" is not a grade, but a designation to show that no definite grade has been applied to the lot.

**Minimum Shapes Permissible in**

**U.S. Fancy Grade**

- **Well Formed**

**Minimum Shapes Permissible in**

**U.S. No. 1 Grade**

- **Fairly Well Formed**

**Minimum Shapes Permissible in**

**U.S. No. 2 Grade**

- **Not Badly Deformed**


"Diameter" means the greatest dimension of the cucumber measured at right angles to the longitudinal axis, exclusive of warts.

**Diameters in Inches for Reference in Sizing**

- 21/8"
- 21/4"
- 2"
- 15/8"

**Diameter for Reference in Checking Defects**

- 3/8"
- 5/8"

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