STANDARDS FOR HAWAI'I-GROWN CUCUMBERS*

This UNOFFICIAL COPY of standards for cucumbers, rewritten for easy interpretation, is based on Chapter 4-41, Hawaii Administrative Rules, Standards for Fresh Fruits and Vegetables. The general provisions of this Chapter, summaries of standards for other fruits and vegetables, and official copies of the complete chapter are available in each county.

<table>
<thead>
<tr>
<th>HAWAII FANCY (GRADE AA)</th>
<th>HAWAII NO. 1 (GRADE A)</th>
<th>HAWAII NO. 2 (GRADE B)</th>
</tr>
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<tr>
<td>Basic Requirements</td>
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</tr>
<tr>
<td>Similar varietal</td>
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<tr>
<td>characteristics (1)</td>
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<td>Clean (2)</td>
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<tr>
<td>Well colored (3)</td>
<td>Fairly well colored (4)</td>
<td>Moderately colored (5)</td>
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<tr>
<td>Well formed (6)</td>
<td>Fairly well formed (7)</td>
<td>Not badly deformed (8)</td>
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<tr>
<td>Not overgrown (9)</td>
<td>Not overgrown (9)</td>
<td>Not badly deformed (8)</td>
</tr>
<tr>
<td>Fresh</td>
<td>Fresh</td>
<td>Fresh</td>
</tr>
<tr>
<td>Firm (10)</td>
<td>Firm (10)</td>
<td>Firm (10)</td>
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</tbody>
</table>

Free From

Decay
Breakdown
Worm holes
Clipped ends
Insect stings
Shrivelling
Pulled ends

From Damage (11)

Caused By
Freezing
Yellowing
Scars
Hollowness
Broken skin
Bruises
Mosaic or other diseases
Insects
Mechanical or other means

Serious From Damage (12)

Caused By
Freezing
Yellowing
Scars
Bruises
Pulled ends
Broken skin
Shrivelling
Mosaic or other diseases
Insects
Mechanical or other means

*Numbers in parentheses following grade terms indicate where such terms are defined under "Definitions."
Size Requirement
Diameter (13) 1-7/8 to 2-1/2 inches and length (14) not less than 6 inches nor more than 11 inches, unless otherwise specified.

Size Requirement
Diameter (13) 1-7/8 to 2-1/2 inches and length (14) not less than 6 inches nor more than 11 inches, unless otherwise specified.

Size Requirement
Diameter (13) not less than 1-1/2 inches and length (14) not less than 5 inches, unless otherwise specified.

EXEMPTION TO SIZE REQUIREMENT: Long type cucumbers, such as the Fertila, Bambina, Evergreen and Longfellow varieties, shall be exempt from all size requirements of the grades.

Tolerances (count basis) Defects: Total 10%; provided not more than 5% serious damage, including 3% worm holes and 1% decay or breakdown.

Off-size: Total 10%; provided not more than 5% below minimum diameter and 5% below minimum length.

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Off-size: Total 10%; provided not more than 5% below minimum diameter and 5% below minimum length.

Tolerances (count basis) Defects: Total 10%; provided not more than 3% worm holes and 1% decay or breakdown.

Off-size: Total 10%; provided not more than 5% below minimum diameter and 5% below minimum length.

OFF-GRADE. "Off-grade" is not a grade within the meaning of these standards, but is a descriptive term applicable to cucumbers which have a market value, and designates a quality lower than the lowest applicable Hawaii, other states or the United States grade for cucumbers.

OPTIONAL SIZE CLASSIFICATION.

Small Diameter not less than 1-1/2 inches. Length 4 to 7 inches.

APPLICATION OF TOLERANCES. Averages for the entire lot, based on examination of representative samples, shall be within the tolerances specified, but the contents of individual containers in any lot may vary from the specified tolerances subject to the following limitations:

When the tolerance specified is more than 5 percent, individual packages in any lot may contain not more than 1-1/2 times the tolerance, provided that at least one specimen which fails to meet the requirements shall be permitted in any container.

When the tolerance specified is 5 percent or less, individual packages in any lot may contain not more than double the tolerance, provided that at least one specimen which fails to meet the requirements shall be permitted in any container.

APPLICABLE GRADE TERMS. Cucumbers shall be classified in accordance with the grading system designated below:
Wholesale Quantities - HAWAII FANCY, HAWAII NO. 1 or HAWAII NO. 2, whichever is applicable.

Consumer Packages and Bulk Displays - HAWAII GRADE AA, HAWAII GRADE A or HAWAII GRADE B, whichever is applicable.

MINIMUM EXPORT GRADE. Cucumbers for export shall at least meet the requirements of Hawaii No. 1 cucumbers.

DEFINITIONS

(1) "Similar varietal characteristics" means the cucumbers are alike as to shape, color and other general characteristics.

(2) "Clean" means the cucumbers are practically free from dirt or other foreign material and no caked dirt is on the cucumbers.

(3) "Well colored" means not less than 3/4 of the surface of the cucumber is of a medium green or darker color, and at least a light green color extends to the blossom end on one side of the cucumber.

(4) "Fairly well colored" means not less than 1/2 of the surface of the cucumber is of medium green or darker color, and at least a light green color extends to the blossom end on one side of the cucumber.

(5) "Moderately colored" means at least 1/3 of the surface of the cucumber is of a light green or darker color.

(6) "Well formed" means the cucumber is practically straight and not more than very slightly constricted or more than moderately tapered or pointed.

(7) "Fairly well formed" means the cucumber may be moderately curved but not deeply constricted, not extremely tapered or pointed, and not otherwise misshapen.

(8) "Badly deformed" means the cucumber is so badly curved, constricted or tapered, or otherwise so badly misshapen, that the appearance is seriously affected or excessive waste is caused in preparation for use.

(9) "Overgrown" means the cucumber has passed slightly beyond the best stage for slicing. Seeds are tough and fibrous, and the pulp in the seed cavity is usually watery or jelly-like.

(10) "Firm" means the cucumber yields only slightly to moderate pressure and is not shrivelled.

(11) "Damage" means any specific defect described in Table 1, Classification of Defects; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or shipping quality of the cucumbers.
(12) "Serious damage" means any specific defect described in Table 1, Classification of Defects; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or shipping quality of the cucumbers.

(13) "Diameter" means the greatest thickness of the cucumber measured at right angle to the longitudinal axis, exclusive of warts.

(14) "Length" is the length of the cucumber, exclusive of stem.

Table 1. Classification of Defects

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>DAMAGE</th>
<th>SERIOUS DAMAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellowness</td>
<td>Any distinct yellow cast is present.</td>
<td>Distinct yellow color present.</td>
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<tr>
<td>Scars</td>
<td>Heavy, rough, dark or sunken and aggregating an area more than 1/2 inch in diameter; or deep; or superficial, light colored, smooth and aggregating an area more than 1-1/2 inches in diameter.</td>
<td>Heavy, rough, dark or sunken and aggregating an area more than 1 inch in diameter; or excessively deep; or superficial, light colored, smooth and aggregating an area more than 2 inches in diameter.</td>
</tr>
<tr>
<td>Hollowness</td>
<td>Transverse area of hollow space exceeds the area of a circle 3/16 inch in diameter.</td>
<td></td>
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<tr>
<td>Pulled ends</td>
<td>Broken flesh outside of stem attachment more than 1/8 inch deep or aggregating an area more than 1/4 inch in diameter.</td>
<td>Broken flesh outside of stem attachment more than 3/16 inch deep or aggregating an area more than 3/8 inch in diameter.</td>
</tr>
<tr>
<td>Bruises</td>
<td></td>
<td>Soft and aggregating an area more than 3/4 inch in diameter.</td>
</tr>
<tr>
<td>Insect stings</td>
<td></td>
<td>Unhealed, or more than 1/4 inch in any dimension, or seriously affecting shape, or more than 3 stings present.</td>
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</tbody>
</table>