

§ 4-41-61

STANDARDS FOR HAWAII-GROWN TANGERINES *

This UNOFFICIAL COPY of standards for tangerines, 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.

<u>HAWAII FANCY (GRADE AA)</u>	<u>HAWAII NO. 1 (GRADE A)</u>	<u>HAWAII NO. 2 (GRADE B)</u>
<u>Basic Requirements</u>	<u>Basic Requirements</u>	<u>Basic Requirements</u>
Mature (1)	Mature (1)	Mature (1)
Firm (2)	Firm (2)	Fairly firm (3)
Clean (4)	Clean (4)	Clean (4)
Well formed (5)	Well formed (5)	Fairly well formed (6)
Well trimmed (7)	Well trimmed (7)	Well trimmed (7)
<u>Free From</u>	<u>Free From</u>	<u>Free From</u>
Soft bruise	Soft bruise	Soft bruise
Fruit fly sting	Fruit fly sting	Fruit fly sting
Wormhole	Wormhole	Wormhole
Bird pecks	Bird pecks	Bird pecks
Unhealed skin break	Unhealed skin break	Unhealed skin break
Pulled stem	Pulled stem	Pulled stem
Sprouted seeds	Sprouted seeds	Sprouted seeds
Decay	Decay	Decay
Ammoniation		
Creasing		
Dryness or mushy condition	<u>Free From Damage (9)</u>	<u>Free From Damage (10)</u>
Green spots or oil spots	<u>Caused By</u>	<u>Caused By</u>
Pitting	Discoloration	Discoloration
Scales	Scars	Scars
Sprayburn	Disease	Disease
Sunburn	Insects	Insects
Buckskin	Ammoniation	Ammoniation
Scab	Creasing	Creasing
	Dryness or mushy condition	Dryness or mushy condition
	Green spots or oil spots	Green spots or oil spots
	Pitting	Pitting
<u>Free From Injury (8)</u>	Scales	Scales
<u>Caused By</u>	Sprayburn	Sprayburn
Discoloration	Sunburn	Sunburn
Scars	Buckskin	Buckskin
Disease	Melanose	Melanose
Insects	Scab	Scab
Mechanical or other means	Mechanical or other means	Mechanical or other means

*Numbers in parenthesis following grade terms indicate where such terms are defined under "Definitions."

Soluble Solids (11) and Acid (12) Requirements
Lot average not less than 10% soluble solids and 0.5% acid.

Soluble Solids (11) and Acid (12) Requirements
Lot average not less than 9% soluble solids and 0.5% acid.

Soluble Solids (11) and Acid (12) Requirements
Lot average not less than 8% soluble solids and 0.5% acid.

Size Requirement
Not less than 2-3/4 inches in diameter (13), unless otherwise specified.

Size Requirement
Not less than 2-1/4 inches in diameter (13), unless otherwise specified.

Size Requirement
Not less than 2 inches in diameter (13), unless otherwise specified.

Tolerances (count basis)
Defects: Total 10%; provided not more than 5% damage, including 1% decay.
Off-size: Not more than 5% below the specified minimum diameter.

Tolerances (count basis)
Defects: Total 10%; provided not more than 5% serious damage, including 1% decay.
Off-size: Not more than 5% below the specified minimum diameter.

Tolerances (count basis)
Defects: Total 10%; provided not more than 1% decay.
Off-size: Not more than 5% below the specified minimum diameter.

HAWAII NO. 1 BRONZE (GRADE A BRONZE). The requirements for this grade are the same as for Hawaii No. 1 (Grade A), except for discoloration. In this grade, at least 90 percent, by count, of the tangerines shall show more than 10 percent surface discoloration. The discoloration meant here does not include dark, rough or deep scars; green spots; caked melanose or ammoniation; pitting; or similar defects. The tolerances for this grade are also the same as for Hawaii No. 1 (Grade A).

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

APPLICATION OF TOLERANCES. Averages for the entire lot, based on examination of representative samples, shall be within the tolerance 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. Tangerines 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 Display - HAWAII GRADE AA, HAWAII GRADE A or HAWAII GRADE B,
whichever is applicable.

DEFINITIONS.

- (1) "Mature" means the tangerine has reached the stage of development which will insure proper completion of the ripening process.
- (2) "Firm" means the flesh is not soft, the fruit is not puffy, and the skin is fairly tightly attached to the flesh of all segments of the fruit.
- (3) "Fairly firm" means the flesh is not soft and the fruit is no more than slightly puffy.
- (4) "Clean" means free from dirt or other foreign material.
- (5) "Well formed" means the fruit has the characteristic tangerine shape.
- (6) "Fairly well formed" means the fruit has a shape fairly typical of the variety and is not so misshapen as to seriously affect its appearance or edible quality.
- (7) "Well trimmed" means the button is attached and is shorter than 1/8 inch.
- (8) "Injury" 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 appreciably detracts from the appearance, or the edible or shipping quality of the tangerine.
- (9) "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 tangerine.
- (10) "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 tangerine.
- (11) "Soluble solids" means the refractometric sucrose value of the juice obtained in accordance with the refractometric method for sugar and sugar products.
- (12) "Acid" means grams of acid calculated as anhydrous citric acid per 100 ml. of juice, as determined by titration with sodium hydroxide solution using phenolphthalein as the indicator.
- (13) "Diameter" means the greatest dimension measured at right angles to a line from the stem to the blossom end of the fruit.

Table 1. Classification of Defects

FACTOR	INJURY	DAMAGE	SERIOUS DAMAGE
Discoloration	More than 3% of the surface affected.	More than 10% of the surface affected.	More than 20% of the surface affected.
Scars	Dark or rough scars; fairly light in color, slightly rough or of slight depth and aggregating an area more than 1/4 inch in diameter; or light colored, fairly smooth with no depth and aggregating more than 3% of the surface.	Dark or rough and aggregating an area more than 1/4 inch in diameter; fairly light in color, slightly rough or of slight depth and aggregating an area more than 1/2 inch in diameter; or light colored, fairly smooth with no depth and aggregating more than 10% of the surface.	Dark, rough or deep and aggregating an area more than 3/8 inch in diameter; fairly light in color, slightly rough or of slight depth and aggregating an area more than 3/4 inch in diameter; or light colored, fairly smooth with no depth and aggregating more than 20% of the surface.
Ammoniation		Not occurring as speck-type similar to melanose, provided no ammoniation is permitted which detracts from the appearance to a greater extent than the discoloration or scars allowed in the grade.	Scars are cracked; dark and aggregating an area more than 1/2 inch in diameter; or light colored and aggregating an area more than 1 inch in diameter.
Creasing		Materially affecting appearance or shipping quality.	Skin seriously weakened.
Dryness or mushy condition		All segments affected to a depth of more than 1/8 inch at the stem end or the equivalent amount of affected flesh occurs in other portions of the fruit.	All segments affected to a depth of more than 1/4 inch at the stem end or the equivalent amount of affected flesh occurs in other portions of the fruit.

Green spots or oil spots		Affecting appearance to a greater extent than the discoloration or scars allowed in the grade.	Affecting appearance to a greater extent than the discoloration or scars allowed in the grade.
Pitting		Affecting appearance to a greater extent than the amount of scars allowed in the grade.	Affecting appearance to a greater extent than the amount of scars allowed in the grade.
Scales		More than 6 scales present.	More than 12 scales present.
Sprayburn or Sunburn		Skin hardened, or affecting appearance to a greater extent than the amount of scars allowed in the grade.	Skin hardened, or affecting appearance to a greater extent than the amount of scars allowed in the grade.
Buckskin		Affecting appearance to a greater extent than the discoloration or scars allowed in the grade.	Affecting appearance to a greater extent than the discoloration or scars allowed in the grade.
Melanose		Not small, smooth speck-type; or any speck-type affecting appearance to a greater extent than the discoloration or scars allowed in the grade.	Badly caked and aggregating an area more than 1/2 inch in diameter; or affecting appearance to a greater extent than the discoloration or scars allowed in the grade.