

§ 4-41-48

STANDARDS FOR HAWAII-GROWN MANGOES*

This UNOFFICIAL COPY of standards for mangoes, 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>
Single variety	Single variety	Single variety
Mature (1)	Mature (1)	Mature (1)
Not overripe (2)	Not overripe (2)	Not overripe (2)
Clean (3)	Clean (3)	Clean (3)
Well trimmed (4)	Well trimmed (4)	Well trimmed (4)
Well formed (5)	Fairly well formed (6)	Not badly misshapen (7)
Smooth (8)	Smooth (8)	Smooth (8)
Small seeded (9)	Small seeded (9)	Small seeded (9)
<u>Free From</u>	<u>Free From</u>	<u>Free From</u>
Anthraxnose or other decay	Anthraxnose or other decay	Decay (except anthracnose)
Wormholes	Wormholes	Wormholes
Insect stings (10)	Insect stings (10)	Insect stings (10)
Freezing injury	Freezing injury	Freezing injury
Bruises (11)	Bruises (11)	Bruises (11)
Cuts	Cuts	Cuts
Punctures	Punctures	Punctures
Cracks	Cracks	
<u>Free From Injury (12)</u>	<u>Free From Injury (12)</u>	<u>Free From Injury (12)</u>
<u>Caused By</u>	<u>Caused By</u>	<u>Caused By</u>
Fibre	Fibre	Fibre
Discoloration		<u>Free From Serious Damage (14)</u>
Russeting	<u>Free From Damage (13)</u>	<u>Caused By</u>
Scars	<u>Caused By</u>	Discoloration
Disease	Discoloration	Russeting
Insects	Russeting	Scars
Mechanical or other means	Scars	Disease
	Disease	Insects
	Insects	Anthraxnose
	Mechanical or other means	Cracks
		Mechanical or other means

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

Size Requirement

A numerical count or minimum diameter (15) or size classification shall be used to describe the size of mangoes in any container.

When the numerical count is specified, the diameter of the largest mango in any container shall not exceed the diameter of the smallest mango by more than 1/2 inch when most of the mangoes are 3 inches or larger in diameter, nor by more than 3/8 inch in diameter when most of the mangoes are less than 3 inches in diameter.

Size classifications which may be used to specify size in connection with the grade are as follows:

Small	Under 2-1/2 inches in diameter
Medium	2-1/2 to 3 inches in diameter
Large	Over 3 inches in diameter

Tolerances (count basis)

Defects: Total 10%;
provided not more than
5% damage and anthrac-
nose, including 1%
decay other than
anthracnose.

Off-size: Total 10%.

Tolerances (count basis)

Defects: Total 10%;
provided not more than
5% serious damage and
anthracnose, including
1% decay other than
anthracnose.

Off-size: Total 10%.

Tolerances (count basis)

Defects: Total 10%;
provided not more than
1% decay other than
anthracnose.

Off-size: Total 10%.

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

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. Mangoes 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. Mangoes for export shall at least meet the requirements of Hawaii No. 1 mangoes.

DEFINITIONS.

- (1) "Mature" means the mango has reached the stage of growth which insures a proper completion of the ripening process.
- (2) "Overripe" means dead ripe, very soft and past commercial utility.
- (3) "Clean" means practically free from dirt, dust, spray residue or other foreign matter and the amount of sap on the fruit is not excessive.
- (4) "Well trimmed" means the stem is neatly and smoothly cut or broken off at a point not more than 1/2 inch beyond the shoulder of the fruit.
- (5) "Well formed" means the mango has a shape typical of the variety and is symmetrical and without irregularities in shape.
- (6) "Fairly well formed" means the mango may be slightly abnormal in shape, but not to an extent whereby its appearance is materially affected.
- (7) "Badly misshapen" means the mango is seriously irregular or abnormal in shape.
- (8) "Smooth" means there are no ridges, grooves or other irregularities of the skin of the fruit. Rough scars or cracks shall not be considered a factor of smoothness.
- (9) "Small seeded" means the weight of the seed in any fruit does not exceed 25 percent of the total weight of the fruit.
- (10) "Insect stings" means punctures made by insects that can be identified as such with the naked eye without cutting the fruit.
- (11) "Bruises" means bruising injury other than those incident to proper handling and packing.
- (12) "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 mangoes.
- (13) "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 mangoes.
- (14) "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 mangoes.

(15) "Diameter" means the distance across the smallest round opening through which the mango will pass without pressure.

Table 1. Classification of Defects

FACTOR	INJURY	DAMAGE	SERIOUS DAMAGE
Fibre	Flesh of fruit fibrous in areas not immediately adjacent to the seed; or fibres normally present in areas immediately adjacent to the seed are so long as to appreciably affect palatability.		
Discoloration	Aggregating an area more than 3/8 inch in diameter.	Aggregating an area more than 2-1/2 percent of the surface.	Affecting more than 1/3 of the surface.
Russetting or scars	Light colored, smooth and aggregating an area more than 3/8 inch in diameter; rough scaly, dark or prominent and aggregating an area more than 1/8 inch in diameter; or affected area is sunken.	Light colored, smooth and aggregating an area more than 10 percent of the surface; rough, scaly, dark or sunken and aggregating an area more than 1/2 inch in diameter; or so deep as to materially affect appearance.	Rough, scaly, dark or prominent and aggregating an area more than 1-1/2 inches in diameter; or so deep as to seriously affect appearance.
Anthracnose			Any single spot more than 1/8 inch in diameter; or when affected areas aggregate more than 1/2 inch in diameter.
Cracks			Unhealed; not shallow; or affecting an aggregate area more than 1 inch in diameter.