Hawaii Department of Agriculture Quality Assurance Division Commodities Branch

December 12, 2005

STANDARDS FOR HAWAII-GROWN PAPAYAS

This <u>UNOFFICIAL COPY</u> of standards for papayas, 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.

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

Hawaii Fancy or Hawaii Grade AA	Hawaii No. 1 or Hawaii Grade A	Hawaii No. 2 or Hawaii Grade B
Basic Requirements Solo type (20) Similar varietal characteristics (18) Mature (13) Not overripe (15) Clean (3) Well trimmed (24) Well formed (23) Smooth (19) Uniform in size (22)	Basic Requirements Solo type (20) Similar varietal characteristics (18) Mature (13) Not overripe (15) Clean (3) Well trimmed (24) Fairly well formed (8) Fairly smooth (7) Uniform in size (22)	Basic Requirements Solo type (20) Similar varietal characteristics (18) Mature (13) Not overripe (15) Fairly clean (6) Well trimmed (24) Not badly misshapen (14) Not excessively rough (5)
Free From Decay Breakdown Internal hard lumps (12) Soft bruise Scalding (16) Cuts or punctures Catfaces (2) Brown spot (1)	Free From Decay Breakdown Internal hard lumps (12) Soft bruise Scalding (16)	Free From Decay Breakdown Internal hard lumps (12) Soft bruise Scalding (16)
Free From Injury (11) Caused By Scars Surface bruise Disease Insects Mechanical or other means	Free From Damage (4) Caused By Scars Surface bruise Disease Insects Mechanical or other means Catfaces Brown spot Cuts or punctures	Free From Serious Damage (17) Caused By Scars Surface bruise Disease Insects Mechanical or other means Catfaces Brown spot Cuts or punctures

Size Requirement
16 ounces minimum,
unless otherwise
specified

Size Requirement 14 to 32 ounces, unless otherwise specified. Size Requirement None

TOLERANCES (COUNT BASIS)

For defects, not more than 10% of the papayas in any lot may fail to meet requirements of this grade, provided not more than 5%, shall be allowed for papayas with defects causing damage, including not more than 1% affected by decay or breakdown.

TOLERANCES (COUNT BASIS)

For defects, not more than 10% of the papayas in any lot may fail to meet requirements of this grade, provided not more than 5%, shall be allowed for papayas with defects causing serious damage, including not more than 1% affected by decay or breakdown.

For defects, not more than 10% of the papayas in any lot may fail to meet requirements of this grade, provided not more than 1 % affected by decay or breakdown.

TOLERANCES (COUNT BASIS)

For uniformity of size, not more than 10% of the containers in any lot may fail to meet uniform in size requirements; and For offsize, not more than 10% of the papayas in any lot may vary from the size specified.

OFFGRADE. "OFFGRADE" is not a grade within the meaning of these standards, but is a descriptive term applicable to papayas which have a market value, and designates a quality lower than the lowest applicable Hawaii grade for papayas.

OPTIONAL SIZE CLASSIFICATION. The size of papayas in any container or lot may be specified in connection with the grade, based on the following size classifications:

 Small
 10-13 oz.

 Medium
 13-16 oz.

 Large
 16-32 oz.

 Extra Large
 over 32 oz.

APPLICABLE GRADE TERMS. Papayas shall be classified in accordance with the grading system designated below whichever is applicable:

Wholesale Quantities:

Hawaii Fancy, Hawaii No. 1, or Hawaii No. 2

Consumer Package and Bulk Display:

Hawaii Grade AA, Hawaii Grade A, or Hawaii Grade B

OPTIONAL INTERNAL QUALITY REQUIREMENT. "Good internal quality" may be specified in connection with the grade.

MINIMUM EXPORT GRADE. Papayas for export shall meet the requirements of Hawaii No. 1 papayas, provided papayas of shapes other than pyriform and of weights less than 14 ounces and which are hard and green with no yellow color, that are packed in containers clearly marked "Immature" in letters not less than one-half inch in height, with each papaya individually stamped or labeled in a uniform manner with the term "Immature", may be exported.

DEFINITIONS.

- (1) "Brown spot" means the disease characterized by superficial spots which are brownish green to brownish slate in color, irregular to round in shape, and frequently with a corky pimple near the center.
- (2) "Catfaces" means structural deformities of the fruit characterized by a scar, usually sunken, which extends downward from the stem on one side of the fruit and causes slight to serious malformation of the fruit.
- (3) "Clean" means practically free from dirt, dust, spray residue, staining, other foreign material, and latex.
- (4) "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 marketing quality of the fruit.
- (5) "Excessively rough" means the surface of the papaya is so lumpy as to seriously detract from the appearance, or more than 3/4 of the surface is distinctly pebbled, or creases or depressions are so deep as to seriously affect the appearance of the fruit.
- (6) "Fairly clean" means practically free from dirt, dust, staining, spray residue, and other foreign material, except that 10 percent of the surface of the fruit may be coated with a light layer of latex or 5 percent of the surface may be coated with caked latex.
- (7) "Fairly smooth" means not more than 1/3 of the fruit surface is pebbled and the pebbled surface is not excessively rough; grooves or creases are not so deep or so wide as to materially affect the appearance of the fruit; and sharp or deep depressions do not affect an aggregate area more than 1 inch in diameter.
- (8) "Fairly well formed" means the fruit may be moderately lopsided, flattened, elongated, or otherwise lacking in symmetry, but the fruit shall not be sufficiently misshapen to materially detract from the appearance.
- (9) "Good internal quality" means that the fruits contain not less than $11.5\ \%$ soluble solids.
 - (10) "Immature" means that the fruit is hard and green with no yellow color.
- (11) "Injury" means any specific defect described in "Table 1. Classification of Defects;" any defect or any combination of defects which appreciably detracts from the appearance, or the edible or marketing quality of the fruit.
- (12) "Internal hard lumps" means the hard, lumpy masses in the flesh of the fruit.
- (13) "Mature" means at least a portion of the lower or blossom-end half of the papaya shows a definite tinge of yellow.
- (14) "Not badly misshapen" means the fruit is not so badly deformed that the appearance is seriously affected.
 - (15) "Overripe" means dead ripe, soft, and past commercial utility.
- (16) "Scalding" means the injury resulting from exposure to hot water, vapor heat, or direct sunlight.

- (17) "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 marketing quality of the fruit.
- (18) "Similar varietal characteristics" means the papayas are alike as to shape, size, flesh color and other general characteristics.
- (19) "Smooth" means there is no appreciable pebbling or other roughness on the surface of the fruit; the fruit is not more than slightly grooved, ridged, or creased; and sharp or deep depressions do not affect an aggregate area more than 3/8 inch in diameter.
- (20) "Solo type" means the papaya is of the solo type characterized by its shape and small size, usually under two pounds and pyriform in shape.
- (21) "Soluble solids" means the sucrose value, as determined by a hand refractometer, of the combined juice extracted from a sample of papaya selected at random.
- (22) "Uniform in size" means the difference in weight between the heaviest and lightest papaya in a wholesale container is not more than 8 ounces.
- (23) "Well formed" means the fruit is very symmetrical and not flattened, lopsided, or elongated, and no part is disproportionately large or small.
- (24) "Well trimmed" means the stem is firmly attached to the fruit and broken off fairly smoothly at the point of abscission or cut off at approximately right angles to the longitudinal axis at a point not more than 1/4 inch beyond the shoulder of the fruit.

Table 1. Classification of Defects

FACTOR	INJURY	DAMAGE	SERIOUS DAMAGE
Brown spot		Affecting appearance to a greater extent than the allowance for damage by scars.	Affecting appearance to a greater extent than the allowance for serious damage by scars.
Catfaces		More than l inch in length or when depressed or rough.	Extending more than 1/2 the length of fruit, or excessively deep, wide, or rough.
Scars	Deep, or scaly, cracked, or not smooth and aggregating an area more than 1/2 inch in diameter, or smooth and aggregating an area more than 1 inch in diameter.	Deep and aggregating an area more than 3/4 inch in diameter, or scaly, cracked, or not smooth and aggregating an area more than 5% of the fruit surface, or smooth and aggregating an area more than 10% of the fruit surface.	Deep and aggregating an area more than 5% of fruit surface, or scaly, cracked, or not smooth and aggregating an area more than 10% of the fruit surface, or smooth and aggregating an area more than 20% of the fruit surface.