

§4-41-43 STANDARDS FOR HAWAII-GROWN GINGER ROOTS

This UNOFFICIAL COPY of standards for ginger roots, 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 No. 1 or Hawaii Grade A	Hawaii Commercial	Hawaii Young Ginger
<u>Basic Requirements</u>	<u>Basic Requirements</u>	<u>Basic Requirements</u>
Similar varietal characteristics (1)	Similar varietal characteristics (1)	Similar varietal characteristics (1)
Fairly well matured (9)	Fairly well matured (9)	Immature (2)
Dry (3)	Dry (3)	Dry (3)
Clean (4)	Fairly clean (10)	Fairly clean (10)
Firm (5)	Firm (5)	Firm (5)
Reasonable size (6)		
<u>Free From</u>	<u>Free From</u>	<u>Free From</u>
Soft rot (7) or other decay	Soft rot (7) or other decay	Soft rot (7) or other decay
Wet breakdown (11)	Wet breakdown (11)	Wet breakdown (11)
Wormholes	Wormholes	Wormholes
Sunscald	Sunscald	Sunscald
<u>Free From Injury (8)</u>	<u>Free From Damage (12)</u>	<u>Free From Damage (12)</u>
<u>Caused By</u>	<u>Caused By</u>	<u>Caused By</u>
Cuts, breaks, or tears	Cuts, breaks, or tears	Cuts, breaks, or tears
Insects	Insects	Insects
Rootlets	Rootlets	Rootlets
Disease	Disease	Disease
Skin cracks (14)		
Growth cracks	Growth cracks	Growth cracks
Discolored flesh	Discolored flesh	Discolored flesh
Shriveling	Shriveling	Shriveling
Sprouts	Sprouts	
Mechanical or other means	Mechanical or other means	Mechanical or other means
<u>Size Requirement</u>	<u>Size Requirement</u>	<u>Size Requirement</u>
Not less than 4 ounces	Not less than 2 ounces	None

Tolerances (weight basis)
Defects: Total 10%;
provided not more than
5% damage (12), including
1% soft rot.
Off-size: Not more than
5% below the specified
minimum weight.

Tolerances (weight basis)
Defects: Total 10%;
provided not more than
5% serious damage (13),
including 1% soft rot.
Off-size: Not more than
5% below the specified
minimum weight.

Tolerances (weight basis)
Defects: Total 10%;
provided not more than
5% serious damage (13),
including 1% soft rot.

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

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. Ginger roots shall be classified in accordance with the grading system designated below:

Wholesale Quantities - Hawaii No. 1, Hawaii Commercial or Hawaii Young Ginger, whichever is applicable.

Consumer Packages
and Bulk Displays - Hawaii Grade A, Hawaii Commercial or Hawaii Young Ginger, whichever is applicable.

MINIMUM EXPORT GRADE. Ginger roots for export shall at least meet the requirements of Hawaii Commercial or Hawaii Young Ginger ginger root grade, except that ginger root for processing shall at least meet the requirements of Hawaii Commercial ginger root, except for size, and shall be packed in containers conspicuously marked "For Processing Only - Not For Resale" in upper, lower, or a combination of upper and lower case bold type letters at least one and one-half inches in height. An affidavit stating that the ginger root for processing is not for resale and a relevant bill of lading or sales invoice indicating the volume shipped, name and address of the processor, and date shipped, shall be submitted by the shipper to the department prior to each export shipment of ginger root for processing.

DEFINITIONS.

- (1) "Similar varietal characteristics" means the ginger roots are of the same general type with similar flesh color, flavor, and fiber content.
- (2) "Immature" means the skin of the ginger root has the yellow or brown color characteristic of immature ginger root, and the ginger root has a stem attached.
- (3) "Dry" means the ginger roots are free from external moisture, but dampness due to condensation will be allowed.
- (4) "Clean" means practically free from dirt or other foreign material and there is no caked dirt on the rhizome.

- (5) "Firm" means the ginger root is not shriveled or flabby and is unyielding to moderately heavy pressure.
- (6) "Reasonable size" means all segments of the rhizome shall be at least 7/8 inch wide as measured from the side, except that terminal segments which have no attached buds longer than 3/4 inch may be less than 7/8 inch in width.
- (7) "Soft rot" means any soft, mushy, or leaky condition of the tissue.
- (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 marketing quality of the ginger roots.
- (9) "Fairly well matured" means the skin of the ginger root is tight and more than 1/2 of the surface of the rhizome is of a silvery tan color. The remaining surface of the rhizome may show slight tints of yellow or brown color.
- (10) "Fairly clean" means the ginger roots are reasonably free from dirt or other foreign matter, and there is no caked dirt on the rhizome.
- (11) "Wet Breakdown" means the leaky condition of ginger root tissue which previously had been frozen.
- (12) "Damage" means any of the specific defects 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 ginger root.
- (13) "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 ginger roots.
- (14) "Skin cracks" means shallow cracks of the epidermis, which usually occur on well matured rhizomes and are generally parallel to the longitudinal axis of the segment.
- (15) "Mature" means the skin of the ginger root is tight and more than 3/4 of the surface of the rhizome is of a silvery tan color. The remaining surface of the root may show slight tints of yellow or brown color.

Table 1. Classification of Defects

FACTOR	INJURY	DAMAGE	SERIOUS DAMAGE
<p>Cuts, breaks, or tears</p> <p>Cuts, breaks, or tears</p>	<p>When ragged or more than 1/4 inch deep.</p> <p>Excluding points of mother plant and shoot attachments, when (A) More than 1 defect is present per 4 oz. of rhizome; or (B) More than 3 defects are present per rhizome (excluding inconspicuous tears where roots were attached); or (C) Large, conspicuous, and more than slightly affecting the appearance or marketing quality; or (D) Obviously not at the end of a segment and exceeds an area 1/2 inch in diameter; or (E) Any single tear exceeds 1/4 inch in diameter; or (F) an aggregate of tears exceeds an area 1/2 inch in diameter.</p>	<p>When ragged or more than 3/8 inch deep.</p> <p>Excluding points of mother plant and shoot attachments, when (A) More than 1 defect is present per 2 oz. of rhizome; or (B) More than 15 defects are present per rhizome (excluding inconspicuous tears where roots were attached), or (C) Large, conspicuous, and materially affecting the appearance or marketing quality, or (D) Obviously not at the end of a segment and exceeds an area 3/4 inch in diameter, or (E) Any single tear exceeds 1/2 inch in diameter, or (F) An aggregate of tears exceeds an area 1 inch in diameter.</p>	<p>When very ragged or more than 1/2 inch deep.</p> <p>Excluding points of mother plant and shoot attachments, when: (A) More than 1 defect is present per 1 oz. of rhizome; or (B) More than 25 defects are present per rhizome (excluding inconspicuous tears where roots were attached); or (C) Large, conspicuous, and seriously affecting appearance or marketing quality; or (D) Obviously not at the end of a segment and exceeds an area 1 inch in diameter; or (E) Any single tear exceeds 3/4 inch in diameter; or (F) An aggregate of tears exceeds an area 1-1/2 inches in diameter.</p>
<p>Discolored flesh</p>	<p>When removal of the discolored area causes a loss of more than 3% of the total weight of the rhizome.</p>	<p>When removal of the discolored area causes a loss of more than 5% of the total weight of the rhizome.</p>	<p>When removal of the discolored area results in a loss of more than 10% of the total weight of the rhizome.</p>
<p>Insects</p>	<p>When there is more than one small, shallow feeding depression per 1 oz. of rhizome, or any feeding depression exceeds 1/4 inch in diameter or 1/8 inch in depth.</p>	<p>When there is more than one small, shallow feeding depression per 1/2 oz. of rhizome, or any feeding depression exceeds 3/8 inch in diameter or 3/16 inch in depth.</p>	<p>When there is more than one small, shallow feeding depression per 1/4 ounce of rhizome, or any feeding depression exceeds 1/2 inch in diameter or 3/8 inch in depth.</p>
<p>Rootlets</p>	<p>When more than one short rootlet is present per ounce of rhizome.</p>	<p>When more than 2 short rootlets are present per ounce of rhizome.</p>	<p>When more than 3 short rootlets are present per ounce of rhizome.</p>
<p>Shriveling</p>	<p>When: (A) Occuring in areas not adjacent to cuts, tears, breaks, or bruises; or (B) Areas adjacent to cuts tears, breaks or bruises are more than slightly shriveled.</p>	<p>When: (A) Areas not adjacent to cuts, tears, breaks, or bruises are more than slightly shriveled; or (B) Areas adjacent to cuts, tears, breaks, or bruises are more than materially shriveled.</p>	
<p>Skin cracks</p>	<p>When prominent or numerous and affecting more than 50% of the rhizome surface.</p>		
<p>Sprouts</p>	<p>When any sprout present exceeds 3/8 inches in length.</p>	<p>When any sprout exceeds 3/4 inch in length.</p>	