Hawaii Department of Agriculture Marketing and Consumer Services Division Commodities Branch

84-41-36

## STANDARDS FOR HAWAII-GROWN CARROTS\*

This UNOFFICIAL COPY of standards for carrots, 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.

## HAWAII NO. 1 (GRADE A)

# HAWAII NO. 2 (GRADE B)

## Basic Requirements

Similar varietal characteristics (1)

Firm (2)

Fairly clean (3)

Fairly well colored (4) Fairly well formed (5)

Fairly smooth (6) Well trimmed (7)

Free From Soft rot

## Free From Damage (8) Caused By

Freezing Growth cracks Sunburn Pithiness Woodiness

Internal discoloration

Oil spray

Dry rot or other diseases

Nematodes Insects

Mechanical or other means

#### Size Requirement

Diameter (12) I to 3 inches, length not less than 5 inches, unless otherwise specified.

Basic Requirements

Similar varietal characteristics (1)

Firm (2)

Not badly misshapen (9) Not excessively rough (10)

Well trimmed (7)

Free From

Soft rot

Free From Serious Damage (11) Caused By

Freezing Growth cracks Sunburn Pithiness Woodiness

Internal discoloration

Oil spray

Dry rot or other diseases

Nematodes Insects Dirt

Mechanical or other means

## Size Requirement

Diameter (12) 1 to 3 inches, length not less than 4 inches, unless otherwise specified.

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

Tolerances (weight basis)

Defects: Total 10%; provided not more than 5% serious damage, including 2% soft rot.

Off-size: Not more than 10% over the specified maximum diameter and not more than a total of 5% below the specified minimum diameter and minimum length.

Tolerances (weight basis)

Defects: Total 10%; provided not more than 2% soft rot.

Off-size: Not more than 10% over the specified maximum diameter and not more than a total of 5% below the specified minimum diameter and minimum length.

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

## OPTIONAL SIZE CLASSIFICATION.

I. The size of carrots in any lot may be specified according to the size classifications designated below, in accordance with the facts:

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

II. When any of the above size designations are not used, it is permissible to specify size in terms of minimum or maximum diameter, or both minimum and maximum diameter.

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

Wholesale Quantities - HAWAII NO. 1 or HAWAII NO. 2, whichever is applicable.

Consumer Packages

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

MINIMUM EXPORT GRADE. Carrots for export shall meet the requirements of HAWAII NO. 1 carrots.

#### DEFINITIONS.

- (1) "Similar varietal characteristics" means the carrots are of the same general type. For example, carrots with a short, blunt growth like the Oxheart variety, shall not be mixed with long or half-long carrots like the Imperator or Danvers varieties.
  - (2) "Firm" means the carrot is not soft, flabby or shrivelled.
- (3) "Fairly clean" means the individual carrots are reasonably free from dirt, stain or other foreign matter and the general appearance of the carrots in the lot is not more than slightly affected by these causes. Carrots caked with dirt are not fairly clean.
- (4) "Fairly well colored" means the carrot has an orange, orange red, or orange scarlet color, but not a pale orange or distinct yellow color.
- (5) "Fairly well formed" means the carrot is not so forked or misshapen as to materially affect its appearance or cause a loss of more than 3 percent, by weight, in the ordinary preparation for use. Carrot roots which are more than slightly smaller below a second growth or a point where a second growth has been cut off are not fairly well formed.
- (6) "Fairly smooth" means the carrot is not so rough or ridged as to cause a loss of more than 3 percent, by weight, in the ordinary preparation for use, or covered with secondary rootlets to an extent which materially affects its appearance.
- (7) "Well trimmed" means the tops shall be entirely removed, except that where the shoulder of the carrot extends above the base of the top, tops shall be cut back to not more than 1/4 inch in length, but that no portion of the crown shall be cut off.
- (8) "Damage" means any defect, or any combination of defects, which materially detracts from the appearance, or edible or shipping quality of the carrots, or which causes a loss of more than 3 percent, by weight, in the ordinary preparation for use. The following defects shall be considered as damage:
  - (a) Growth cracks, when unhealed or when not shallow or smooth.
  - (b) Sunburn, when causing a loss of more than 3 percent, by weight, in the ordinary preparation for use. Superficial light green color at the stem end which does not materially affect the appearance of the root shall be permitted.
- (9) "Badly misshapen" means the carrot is so forked or misshapen as to seriously affect its appearance or cause a loss of more than 10 percent, by weight, in the ordinary preparation for use.
- (10) "Serious damage" means any defect, or combination of defects, which seriously detracts from the appearance, or the edible or shipping quality of the carrots, or which causes a loss of more than 10 percent, by weight, in the ordinary preparation for use. Carrots which have an oily or kerosene flavor or odor are seriously damaged.
- (11) "Diameter" means the greatest dimension of the root taken at a right angle to the longitudinal axis.