



**United States
Department of
Agriculture**

**Agricultural
Marketing
Service**

**Fruit and
Vegetable
Programs**

**Fresh
Products
Branch**

United States Standards for Grades of Sweetpotatoes

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United States Standards for Grades of Sweetpotatoes¹

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Grades

§51.1600 U.S. Extra No. 1.

"U.S. Extra No. 1" consists of sweetpotatoes of similar varietal characteristics which are firm, smooth, fairly clean, fairly well shaped, which are free from freezing injury, internal breakdown, Black Rot, other decay or wet breakdown, and free from damage caused by secondary rootlets, sprouts, cuts, bruises, scars, growth cracks, scurf, Pox (Soil Rot), or other diseases, wireworms, weevils, or other insects, or other means. (See §51.1605.)

(a) **Size.** (1) Length shall be not less than 3 inches or more than 9 inches.

(2) Maximum weight shall be not more than 18 ounces.

(3) Maximum diameter shall be not more than 3-1/4 inches.

(4) Minimum diameter, unless otherwise specified, shall be not less than 1-3/4 inches. (See §51.1605.)

§51.1601 U.S. No. 1.

"U.S. No. 1" consists of sweetpotatoes of one type which are firm, fairly smooth, fairly clean,

¹Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug and Cosmetic Act, or with applicable State laws and regulations.

fairly well shaped, which are free from freezing injury, internal breakdown, Black Rot, other decay or wet breakdown, and free from damage caused by secondary rootlets, sprouts, cuts, bruises, scars, growth cracks, scurf, Pox (Soil Rot), or other diseases, wireworms, weevils or other insects, or other means. (See §51.1605.)

(a) **Size.** (1) Maximum diameter shall be not more than 3-1/2 inches.

(2) Maximum weight shall not be more than 20 ounces.

(3) Length, unless otherwise specified, shall be not less than 3 inches or more than 9 inches.

(4) Minimum diameter, unless otherwise specified, shall be not less than 1-3/4 inches. (See §51.1605.)

§51.1602 U.S. No. 1 Petite.

"U.S. No. 1 Petite" consists of sweetpotatoes of one type which are firm, fairly smooth, fairly clean, fairly well shaped, which are free from freezing injury, internal breakdown, Black Rot, other decay or wet breakdown, and free from damage caused by secondary rootlets, sprouts, cuts, bruises, scars, growth cracks, scurf, Pox (Soil Rot), or other diseases, wireworms, weevils or other insects, or other means. (See §51.1605.)

(a) **Size.** (1) Diameter shall be not less than 1-1/2 inches or more than 2-1/4 inches.

(2) Length shall be not less than 3 inches or more than 7 inches. (See §51.1605.)

§51.1603 U.S. Commercial.

"U.S. Commercial" consists of sweetpotatoes which meet all the requirements of the U.S. No. 1 grade except that an increased tolerance for defects is allowed. (See §51.1605.)

§51.1604 U.S. No. 2.

"U.S. No. 2" consists of sweetpotatoes of one type which are firm and which are free from freezing injury, internal breakdown, Black Rot, other decay or wet breakdown, and free from serious damage, caused by dirt or other foreign materials, cuts, bruises, scars, growth cracks, Pox (Soil Rot), or other diseases, wireworms, weevils or other insects, or other means. (See §51.1605.)

(a) **Size.** Unless otherwise specified the minimum diameter shall be not less than 1-1/2 inches and the maximum weight not more than 36 ounces. (See §51.1605.)

Tolerances

§51.1605 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades the following tolerances, by weight, are provided as specified:

(a) **Defects** -- (1) **U.S. Extra No. 1, U.S. No. 1 and U.S. No. 1 Petite grades.** 10 percent of the sweetpotatoes in any lot may fail to meet the requirements of these grades, but not more than one-half of this amount, or 5 percent, shall be allowed for sweetpotatoes which are seriously damaged, including therein not more than 2 percent for sweetpotatoes affected by soft rot or wet breakdown. (See §51.1606);

(2) **U.S. Commercial.** 25 percent of the sweetpotatoes in any lot may fail to meet the requirements of this grade, but not more than one-fifth of this amount, or 5 percent, shall be allowed for sweetpotatoes which are seriously damaged, including therein not more than 2 percent for sweetpotatoes affected by soft rot or wet breakdown. (See §51.1606); and,

(3) **U.S. No. 2.** 10 percent of the sweetpotatoes in any lot may fail to meet the requirements of this grade, including therein not more than 2 percent for sweetpotatoes affected by soft rot or wet breakdown. (See §51.1606.)

(b) **Off-size.** 10 percent of the sweetpotatoes in any lot may fail to meet any specified size, but not more than one-half of this amount, or 5 percent, shall be allowed for sweetpotatoes which are below the minimum diameter and minimum length specified. (See §51.1606.)

Application of Tolerances

§51.1606 Application of tolerances.

The contents of individual packages in the lot are subject to the following limitations: **Provided,** That the averages for the entire lot are within the tolerances specified for the grade.

(a) Packages which contain more than 10 pounds shall have not more than one and one-half times a specified tolerance of 10 percent or more, or not more than double a specified tolerance of less than 10 percent, except that at least one defective and one off-size specimen may be permitted in any package; and,

(b) Packages which contain 10 pounds or less shall have not more than four times the tolerance specified or not more than two defective or off-size specimens in any package, whichever is the larger percentage.

Definitions

§51.1607 Similar varietal characteristics.

"Similar varietal characteristics" means that the sweetpotatoes have the same character of flesh and practically the same skin color. For example, dry type shall not be mixed with semi-moist or moist type.

§51.1608 Firm.

"Firm" means not more than slightly flabby or shriveled.

§51.1609 Smooth.

"Smooth" means that the sweetpotato is free from veining or other defects causing roughness which more than slightly detract from the appearance of the individual sweet potato or the general appearance of the lot.

§51.1610 Fairly clean.

"Fairly clean" means that the individual sweet potato is not caked with dirt and that dirt or other foreign matter does not materially detract from the general appearance of the lot.

§51.1611 Fairly well shaped.

"Fairly well shaped" means that the sweetpotatoes are not so curved, crooked, constricted or otherwise misshapen as to materially detract from the appearance of the individual sweetpotato or the general appearance of the lot.

§51.1612 Damage.

"Damage" means any specific defect defined in this section; 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 individual sweetpotato or the lot as a whole; or which cannot be removed without a loss of more than 5 percent of the total weight of the sweetpotato including peel covering the defective area. The following specific defects shall be considered as damage:

(a) Sprouts when more than 10 percent of the sweetpotatoes in the lot have sprouts over three-fourths inch in length;

(b) Growth cracks when unhealed or which detract materially from the appearance of the individual sweetpotato or general appearance of the lot;

(c) Scurf when more than 15 percent of the surface in the aggregate is affected by solid light

brown discoloration. Speckled types of scurf, or lighter or darker shades of discoloration may be permitted over a greater or lesser area provided no discoloration detracts from the appearance more than the amount of solid light brown discoloration permitted;

(d) Pox (Soil Rot) when materially detracting from the appearance of the individual sweetpotato; and,

(e) Wireworm, grass root or similar injury when any hole in a sweetpotato ranging in size from 6 to 8 ounces, is more than three-fourths inch long, or when the aggregate length of all holes is more than 1-1/4 inches, or correspondingly shorter or longer holes in smaller or larger sweetpotatoes.

§51.1613 Length.

"Length" means the dimension of the sweetpotato, measured in a straight line between points at or near each end of the sweetpotato where it is at least three-eighths inch in diameter.

§51.1614 Diameter.

"Diameter" means the greatest dimension of the sweetpotato, measured at right angles to the longitudinal axis.

§51.1615 One type.

"One type" means that the sweetpotatoes have the same character of flesh, and do not show an extreme range in skin color. For example, dry type shall not be mixed with semi-moist, or moist type, and deep red or purple skin color shall not be mixed with yellow or reddish copper skin color.

§51.1616 Fairly smooth.

"Fairly smooth" means that the sweetpotato is free from veining or other defects causing roughness which materially detract from the appearance of the individual sweetpotato or the general appearance of the lot.

§51.1617 Serious damage.

"Serious damage" means any specific defect defined in this section; 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 edible or shipping quality of the individual sweetpotato or the lot as a whole; or which cannot be removed without a loss of more than 10 percent of the total weight of the sweetpotato including peel covering the defective area. The following specific defects shall be considered as serious damage:

(a) Dirt or other foreign matter when the individual sweetpotato is badly caked with dirt, or when seriously detracting from the appearance of the lot;

(b) Growth cracks when unhealed or when seriously detracting from the appearance of the individual sweetpotato or general appearance of the lot;

(c) Pox (Soil Rot) when seriously detracting from the appearance of the individual sweetpotato; and,

(d) Wireworm, grass root or similar injury when any hole in a sweetpotato ranging in size from 6 to 8 ounces, is more than 1-1/4 inches long, or when the aggregate length of all holes is more than 2 inches, or correspondingly shorter or longer holes in smaller or larger sweetpotatoes.