



**United States
Department of
Agriculture**

**Agricultural
Marketing
Service**

**Fruit and
Vegetable
Programs**

**Fresh
Products
Branch**

United States Standards for Grades of Blueberries

Effective March 20, 1995
(Reprinted - January 1997)

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General

§51.3475 General.

(a) These standards apply only to selected and hybrid varieties of the highbush (*Vaccinium australe* Small and *Vaccinium corymbosum* L.) and rabbiteye (*Vaccinium ashei* Reade) blueberries produced under cultivation, but not to other species of the genus *Vaccinium* nor to the true huckleberries of the genus *Gaylussacia*.

(b) Because of the size differences between varieties and the difference in size preference in various markets, there are no size requirements in the grade. Therefore, size will not be determined unless specifically requested by the applicant. If requested, size may be specified as provided in §51.3477.

Grade

§51.3476 U.S. No. 1.

"U.S. No. 1" consists of blueberries which meet the following requirements:

(a) Basic Requirements:

(1) Similar varietal characteristics;

(2) Clean;

(3) Well colored;

(4) Not overripe;

(5) Not crushed, split, or leaking; and,

(6) Not wet.

(b) Free From:

(1) Attached stems;

- (2) Mold;
- (3) Decay;
- (4) Insects or when there is visible evidence of the presence of insects;
- (5) Mummified berries; and,
- (6) Clusters.
- (c) Free From Damage Caused By:
 - (1) Shriveling;
 - (2) Broken skins;
 - (3) Scars;
 - (4) Green berries; and,
 - (5) Other means.
- (d) Tolerances as specified in §51.3478 (a) and (b) and applied pursuant to §51.3479.

Size Classifications

§51.3477 Size classifications.

The following size classifications may be used in specifying size of blueberries:

- (a) **Extra large.** Less than 90 berries per cup¹;
- (b) **Large.** 90 to 129 berries per cup¹;
- (c) **Medium.** 130 to 189 berries per cup¹; and,
- (d) **Small.** 190 to 250 berries per cup¹.
- (e) For tolerances see §51.3478.

Tolerances

§51.3478 Tolerances.

In order to allow for variations incident to proper grading and handling, based on sample inspection, the following tolerances, by count, shall be allowed:

- (a) **For defects at shipping point².** Ten percent for blueberries which have attached stems. Additionally, not more than 8 percent of the blueberries may be below the remaining requirements of the grade: **Provided**, that included in this amount not more than 4 percent shall be allowed for defects causing serious damage, including in this latter amount not more than 1 percent for blueberries which are affected by mold or decay.
- (b) **For defects en route or at destination.** Ten percent for blueberries which have attached stems. Additionally, not more than 12 percent of the blueberries may be below the remaining requirements of the grade: **Provided**, that included in this amount not more than the following percentages shall be allowed for defects listed:
 - (1) 8 percent for blueberries which fail to meet the requirements for this grade because of permanent defects; or,
 - (2) 6 percent for blueberries which are seriously damaged, including therein not more than 4 percent for blueberries which are seriously damaged by permanent defects and not more than 2 percent for blueberries which are affected by mold or decay.

¹Cup equals 237 ml, 1/2 pint, or 2 gills.

²Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

(c) **Off-size.** When size is designated according to one or more of the size classifications in 51.3477, not more than 10 percent of the samples in any lot or one sample, whichever is the greater number, may fail to meet the range in count specified.

Application of Tolerances

51.3479 Application of tolerances.

Individual samples are subject to the following limitations: **Provided**, that the averages for the entire lot are within the tolerances specified for the grade:

(a) For a tolerance of 10 percent or more, individual samples may contain not more than one and one-half times the tolerance specified.

(b) For a tolerance of less than 10 percent, individual samples may contain not more than double the tolerance specified.

Definitions

§51.3480 Similar varietal characteristics.

"Similar varietal characteristics" means that the berries are similar in color and shape.

§51.3481 Clean.

"Clean" means that the individual berry is practically free from dirt, frass, or other foreign material.

§51.3482 Well colored.

"Well colored" means that more than one-half of the surface of the individual berry is blue, bluish-purple, purple, bluish-red, or bluish-black.

§51.3483 Overripe.

"Overripe" means that the individual berry is dead ripe, the flesh is soft and mushy, and past commercial utility.

§51.3484 Damage.

"Damage" means any specific defect described 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 marketing quality of the blueberries. The following specific defects shall be considered as damage:

(a) Wet berries when the individual berry is wet from juice from crushed, leaking, or decayed berries, but not due to condensation;

(b) Clusters when there are three or more joined capstems with at least one berry attached;

(c) Shriveling when the wrinkling is readily noticeable;

(d) Broken skins when not well healed or when well healed and readily noticeable, except for an allowable area within a 1/8 inch (3.2 mm) circle centered at the stem scar;

(e) Scars when affecting more than 20 percent of the surface of the individual berry; and,

(f) Green berries when one-half or more of the berry is green.

§51.3485 Serious damage.

"Serious damage" means any specific defect described 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 the edible or marketing quality of the blueberries. The following specific defects shall be considered as serious damage:

(a) Decay;

(b) Moldy berries;

(c) Overripe berries;

- (d) Crushed, split, or leaking berries;
- (e) Mummified berries when the individual berry is dried up, withered or shrunken;
- (f) Insects or when there is any visible evidence of the presence of insects, including but not limited to an insect, the insect larva, feeding, webbing or frass;
- (g) Broken skins when not well healed; and,
- (h) Scars when affecting more than 50 percent of the surface of the individual berry.