



**United States
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Agriculture**

**Agricultural
Marketing
Service**

**Fruit and
Vegetable
Division**

**Fresh
Products
Branch**

United States Standards for Grades of Bunched Spinach

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United States Standards for Grades of Bunched Spinach

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§51.2891 General.

(a) Compliance with the provisions of these standards shall not excuse failure to comply with provisions of applicable Federal or State laws.

(b) These standards are applicable to spinach of goosefoot (*Chenopodiaceae*) family which is bunched separately and packed separately in containers as either leaves or plants.

§51.2892 Grades.

(a) "U.S. No. 1" consists of bunched spinach which meet the following requirements:

(1) Basic requirements:

(i) Similar varietal characteristics;

(ii) Same form;

(iii) Well grown;

(iv) Fairly clean;

(v) Well trimmed; and,

(vi) Fresh.

(2) Free from: Decay.

(3) Free from damage by:

(i) Coarse stalks;

(ii) Seedstems;

(iii) Flower buds;

(iv) Discoloration;

(v) Wilting;

(vi) Foreign material;

(vii) Insects;

(viii) Freezing; and,

(ix) Mechanical or other means.

(4) Tolerances. (See §51.2894)

(b) "U.S. No. 2" consists of bunched spinach which meet the following requirements:

(1) Basic requirements:

(i) Similar varietal characteristics;

(ii) Same form;

(iii) Well grown;

(iv) Reasonably clean;

- (v) Fairly well trimmed; and,
- (vi) Fresh.
- (2) Free from: Decay.
- (3) Free from serious damage by:
 - (i) Coarse stalks;
 - (ii) Seedstems;
 - (iii) Flower buds;
 - (iv) Discoloration;
 - (v) Wilting;
 - (vi) Foreign material;
 - (vii) Insects;
 - (viii) Freezing; and,
 - (ix) Mechanical or other means.
- (4) Tolerances. (See §51.2894)

§51.2893 Size.

Size may be specified in connection with grade in terms of number of bunches per container, or with minimum and/or maximum size of bunches in inches or pounds and/or fractions thereof.

§51.2894 Tolerances.

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

(a) **Defects -- (1) U.S. No. 1.** 12 percent for bunches in any lot which fail to meet the requirements of this grade: Provided, that included in this amount not more than 6 percent shall be allowed for defects causing serious damage; and, Provided, further, that included in this latter amount not more than 3 percent for bunches that are affected by decay.

(2) **U.S. No. 2.** 12 percent for bunches in any lot which fail to meet the requirements of the specified grade: Provided, that included in this amount not more than 3 percent for bunches which are affected by decay.

(b) **Size.** 10 percent in any lot for bunches which are smaller than a specified minimum size and 15 percent which are larger than a specified maximum size.

§51.2895 Application of tolerances.

The contents of individual containers in a lot shall be the sample and, based on sample inspection, are subject to the following limitations:

(a) For a tolerance of 10 percent or more, individual packages in any lot may contain not more than one and one-half times the tolerance specified, except that when the package contains 13 bunches or less, individual packages may contain not more than double the tolerance specified; Provided, that the averages for the entire lot are within the tolerances specified for the grade.

(b) For a tolerance of less than 10 percent, individual packages in any lot may contain not more than double the tolerance specified. Provided, that at least one bunch which does not meet the requirements shall be allowed in any one package, And provided further, that the averages for the entire lot are within the tolerances specified for the grade.

§51.2896 Definitions.

- (a) "Similar varietal characteristics" means that the spinach shall be of one type, such as crinkly leaf type or flat leaf type. No mixture of types shall be permitted which materially affects the appearance of the bunch.
- (b) "Same form" means bunches and containers shall contain either plants or leaves with no more than a 15 percent by weight mixture of the other in either the bunch or the container.
- (c) "Well grown" means not stunted or poorly developed.
- (d) "Fairly clean" means generally free from dirt, sand or other adhering foreign matter and the appearance of the bunch is not materially affected.
- (e) "Reasonably clean" means mostly free from dirt, sand or other adhering foreign matter and that the appearance of the bunch is not seriously affected.
- (f) "Well trimmed" means for plants that the roots are no longer than one inch below the common point of attachment of the leafstems, and for leaves that not more than 15 percent of the leaves in the bunch have leafstems longer than the length of the attached leaf.
- (g) "Fairly well trimmed" means for plants that roots are no longer than two inches below the common point of attachment of the leafstems, and for leaves that not more than 15 percent of the leaves in the bunch have leafstems longer than one and one-half times the length of the attached leaf.
- (h) "Fresh" means not more than slightly wilted.
- (i) "Damage" means any specific defect described in this section or an equally objectionable variation of any one of these defects, or any other defect or any combination of defects which materially detracts from the appearance or edible or marketing quality. The following specific defects shall be considered as damage:
 - (1) Seedstems when more than one-fourth the length of the longest leaf in the bunch.
 - (2) Flower buds when mostly opening in the bunch.
 - (3) Insects when scattered or concentrated or when insect feeding materially affects the appearance of the bunch.
 - (4) Discoloration when affecting an aggregate area of more than 10 percent of the total surface area of the leaves in the bunch.
 - (5) Mechanical damage when more than 25 percent of the leaves in the bunch are crushed, torn or broken.
- (j) "Serious damage" means any specific defect described in this section or an equally objectionable variation of any one of these defects, or any other defects or any combination of defects which seriously detracts from the appearance or the edible or marketing quality. The following specific defects shall be considered as serious damage.
 - (1) Seedstems when more than one-half the length of the longest leaf in the bunch.
 - (2) Flower buds when generally open in the bunch.
 - (3) Insects when very concentrated or when the insect feeding seriously affects the appearance of the bunch.
 - (4) Discoloration when affecting an aggregate area of more than 25 percent of the total surface area of the leaves in the bunch.
 - (5) Mechanical damage when more than 50 percent of the leaves in the bunch are crushed, torn or broken.