

United States Department of Agriculture

Agricultural Marketing Service

Fruit and Vegetable Programs

Fresh Products Branch

# **United States Standards for Grades of Cultivated Ginseng**

Effective January 18, 2007

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#### General

51.1325 General.

#### Grades

51.1326 U.S. Premium.

51.1327 U.S. Select.

51.1328 U.S. Medium.

51.1329 U.S. Standard.

#### Size

51.1330 Size.

#### **External Color**

51.1331 External Color.

#### Wrinkle

51.1332 Wrinkle.

## **Sample Size**

51.1333 Sample Size.

## **Grade Determination**

51.1334 Grade Determination.

#### **Definitions**

51.1335 Similar varietal characteristics.

51.1336 Clean.

51.1337 Well cured.

51.1338 Prong.

51.1339 Whole Root.

51.1340 Fiber.

51.1341 Diameter.

51.1342 Defects.

51.1343 Cull.

51.1344 Origin.

#### General

## §51.1325 General.

The standards apply to cultivated ginseng of similar varietal characteristics, which is clean, well cured, free from external and internal defects, mold, rust and decay. The origin of the ginseng, color and/or wrinkle may be specified with the grade.

#### Grades

## §51.1326 Premium.

"U.S. Premium" consists of ginseng which has a graded value of 90 or more.

## §51.1327 U.S. Select.

"U.S. Select" consists of ginseng which has a graded value of 75 to 89.

## §51.1328 U.S. Medium.

"U.S. Medium" consists of ginseng which has a graded value of 60 to 74.

## §51.1329 U.S. Standard.

"U.S. Standard" consists of ginseng which has a graded value of 0 to 59.

#### Size

**§51.1330** Size. Size is a factor in determining the grade. Size shall be in inches and fractions thereof, in minium diameter, maximum diameter, minimum length, maximum length in the following categories:

Diameter (inches)		Length (inches)		Value
Small	3/16 to 3/8	Short Medium Large	1/4 to 3/4 Larger than 3/4 to 1-1/4 Larger than 1-1/4	60 32 17
Medium	Larger than 3/8 to 5/8	Short Medium Long	Up to 1-3/4 Larger than 1-3/4 to 2-1/2 Larger than 2-1/2	40 31 28
Large	Larger than 5/8 to 7/8	Short Medium Long	Up to 2-1/4 Larger than 2-1/4 to 2-3/4 Larger than 2-3/4	45 38 38
Extra Large	Larger than 7/8	Short Medium Long	Up to 2-1/4 Larger than 2-1/4 to 3 Larger than 3	60 52 42
Fiber/Prong				11
Culls/Foreign	Material			0

## **External Color**

#### §51.1331 External Color.

- (a) "Light" means the color closest to "Light" on Visual Aid GIN. CC-1.
- (b) "Light Medium" means the color closest to "Light Medium" on Visual Aid GIN. CC-1.
- (c) "Medium" means the color closest to "Medium" on Visual Aid GIN. CC-1.
- (d) "Dark Medium" means the color closest to "Dark Medium" on Visual Aid GIN. CC-1.
- (e) "Dark" means the color closest to "Dark" on Visual Aid GIN. CC-1.

#### Wrinkle

#### **§51.1332** Wrinkle.

- (a) "Smooth" means the surface texture closest to "Smooth" on Visual Aid GIN. IDENT-1.
- (b) "Slight Wrinkle" means surface texture closest to "Slight Wrinkle" on Visual Aid GIN. IDENT-1.
- (c) "Wrinkle" means surface texture closest to "Wrinkle" on Visual Aid GIN. IDENT-1.

## Sample and Sample Size

## §51.1333 Sample and Sample Size.

Each sample shall be a minimum composite sample of at least 48 ounces or at least 1350 grams for any lot up to 1000 pounds, and at least an additional 48 ounces or at least 1350 grams for each additional 5000 pounds in the lot.

#### **Grade Determination**

#### §51.1334 Grade Determination.

- (a) Whole Root Score. Separate and/or break prongs and fiber from whole roots, weigh and record. Separate and weigh the culls and foreign material. Sort the balance of the sample into whole root size categories (See §51.1330) and weigh each category. Determine the score for each category by dividing the category value by 450 (if grams) or 16 (if ounces) and multiply the result by the weight of the category. Add the scores for all the categories to determine the Whole Root Score.
- **(b) Deductions.** Weigh the External and Internal Defects and determine each percentage of the sample. Divide the External Defects percentage by 2 (i.e., 6% would be recorded as 3) to determine the External Defects deduction. The Internal Defects percentage is equal to the Internal Defects deduction. Add the External and Internal Defects deductions to determine the Total Root Deductions.
- (c) **Graded Value.** Subtract the Total Root Deductions from 100 and multiply the results by the Whole Root Score to determine the Graded Value. Locate the Graded Value in §§51.1326 to 51.1328 to assign the grade.

#### **Definitions**

#### §51.1335 Similar varietal characteristics.

"Similar varietal characteristics" means the ginseng is the same variety and color.

## §51.1336 Clean.

"Clean" means practically free from dirt or foreign material.

## §51.1337 Well cured.

"Well cured" means well dried and brittle, and does not bend.

#### §51.1338 Prong.

"Prong" means a root or portion of a root growing off the main root.

## **§51.1339** Whole root.

"Whole root" means the main root or upper portion of the main root, and may or may not have prongs and/or fibers attached. Whole roots must have a tapered top or crown.

## §51.1340 Fiber.

"Fiber" means small roots less than 1/8 inch in diameter.

## §51.1341 Diameter.

"Diameter" means the greatest dimension at right angles to a line from the root crown or the point of attachment of the prong to the tip. Diameter shall be the greatest dimension, but not at the point of attachment of the prong.

## §51.1342 Defects.

"Defects" means any mechanical, pathological and/or physiological defect consisting of cuts, external discoloration, internal green or red discoloration, insect, mold, scab or other means that affect the appearance or marketing quality.

## §51.1343 Cull.

"Cull" means any unusable portion.

## §51.1344 Origin.

"Origin" means the area (state and/or country) of production as determined by spectroscopy and photo luminescence or other scientifically approved test.