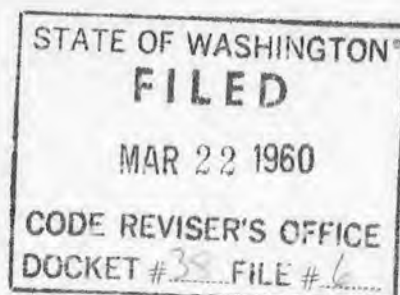


STATE OF WASHINGTON
DEPARTMENT OF AGRICULTURE
Walter J. Robinson, Director

DIVISION OF HORTICULTURE
J. I. Griner, Supervisor

ORDER No. 186.



WASHINGTON STANDARDS FOR ONIONS. (These grades are to be used as standard and guidance for packing and shipping onions but carry no obligatory marking requirements.)

U. S. No. 1 shall consist of onions of similar varietal characteristics which are mature, fairly firm, fairly well shaped, free from doubles, splits, bottlenecks, scallions, and from damage caused by seedstems, tops, roots, sunscald, sunburn, sprouting, freezing, peeling, dirt, foreign matter, disease, insects, or mechanical or other means. UNLESS OTHERWISE SPECIFIED, the minimum size shall be $1\frac{1}{2}$ inches in diameter and in the case of yellow, brown and red onions, 40 per cent or more, and in the case of white onions, 30 per cent or more, by weight, of the onions in any lot shall be 2 inches or larger in diameter*.

In order to allow for variations other than size, incident to proper grading and handling, not more than 10 per cent, by weight, of the onions in any container may be damaged by peeling and not more than 5 per cent, may be below the remaining requirements of this grade, but not more than two-fifths of this tolerance, or 2 per cent, may be allowed for onions which are affected by decay. In addition, not more than 5 per cent, by weight, may be below the minimum size specified and not more than 15 per cent may be above any specified maximum size. No part of any tolerance shall be allowed to reduce the percentage of onions which shall be 2 inches or larger in diameter or any other specified size or larger, but individual containers may have not more than 15 per cent less than the percentage specified, provided that the entire lot averages within the percentage specified.

U. S. Commercial shall consist of onions of similar varietal characteristics which are mature, not soft or spongy, not badly misshapen, free from doubles, splits, bottlenecks, scallions, and from damage caused by seedstems, tops, roots, sunscald, sunburn, sprouting, freezing, dirt, foreign matter, disease, insects, or mechanical or other means. UNLESS OTHERWISE SPECIFIED, the minimum size shall be $1\frac{1}{2}$ inches in diameter.

In order to allow for variations other than size incident to proper grading and handling, not more than 5 per cent, by weight, of the onions in any container may be below the requirements of this grade but not more than two-fifths of this tolerance or 2 per cent, may be allowed for onions which are affected by decay. In addition, not more than 5 per cent, by weight, may be below the size specified and not more than 15 per cent may be above any specified maximum size.

Unclassified shall consist of onions which are not graded in conformity with any of the foregoing grades.

Definitions of Terms

As used in these grades:

"Mature" means dry and well cured. Mid-season onions which are not customarily held in storage shall be considered mature when harvested in accordance with good commercial practice at a stage which will not result in the onions becoming soft or spongy.

"Fairly firm" means that the onion may yield slightly to moderate pressure but is not appreciably soft or spongy.

"Fairly well shaped" means having the shape characteristic of the variety but slightly off-type, slightly elongated or slightly misshapen onions shall be admitted to U. S. No. 1 Grade.

"Badly misshapen" means that the onion is so elongated or misshapen that its appearance is seriously affected.

"Doubles" and "Splits" are onions which have developed more than one distinct bulb. All such onions which are either distinctly misshapen or which show a splitting of the dry outer scales shall be excluded from U. S. No. 1.

"Bottlenecks" are onions with abnormally thick necks.

"Scallions" are onions which have thick necks and relatively small and poorly developed bulbs.

"Damage" means any injury from the causes mentioned which materially affects the appearance of the lot or the edible or shipping quality of the individual onions. Any one of the following defects shall be considered as "Damage".

(a) Sunscald which affects the shipping or market quality. Slight dry scald which is not readily apparent without peeling the onion shall not be considered as damage.

(b) "Peeled" onions when more than one-half of the thin papery skin is missing, leaving the larger portion of the fleshy outer scale unprotected. Such onions are sometimes referred to as "Bald" or "Skinned" onions or "Peelers".

(c) Onions which have one or more of the fleshy scales cracked. Such onions are undesirable because of the possibility of decay organisms entering the injured tissues. Cracking of the thin paper skins shall not be regarded as damage.

(d) Any lot of onions which is materially stained. A lot of onions shall be considered as materially stained when there are enough stained onions to distinctly detract from the appearance of the lot. In this connection the number of stained onions permitted will depend upon the natural color of the onions and upon the degree of staining on individual onions. In a lot of yellow, brown or red onions, 20 per cent may be not more than appreciably stained before the lot is considered damaged but when the onions are badly stained not more than 5 per cent shall be permitted. In a lot of white onions 15 per cent may be not more than appreciably stained, but not over 5 per cent may be badly stained. These percentages are given as a guide in determining whether or not a lot is out of grade on account of "Damage by dirt" and they shall be in addition to the 5 per cent tolerance allowed for other defects.

(e) "Damage by tops". In considering this factor, the appearance of the lot of onions as a whole should be considered. While all onions should be trimmed to less than 2 inches there are often some that have been cut with tops a little longer. However, any lot of onions having more than 20 per cent of onions with tops over 2 inches in length shall be considered as damaged. This percentage is given only as a guide and it may be reduced if the tops are very long. For example, not more than 10 per cent of onions may have tops longer than 5 inches.

*Any lot of onions quoted as being of size smaller than $1\frac{1}{2}$ inches minimum such as "U. S. No. 1, $1\frac{1}{4}$ inches minimum", is not required to meet the percentage which shall be 2 inches or larger as specified in the U. S. No. 1 Grade.

Note:- The tolerances for the standards are on a container basis. However, individual packages in any lot may vary from the specified tolerances as stated below, provided the averages for the entire lot, based on sample inspection, are within the tolerances specified. For a tolerance of 10 per cent or more, individual packages in any lot may contain not more than one and one-half times the tolerance specified.

For a tolerance of less than 10 per cent, individual packages in any lot may contain not more than double the tolerance specified, provided at least one specimen which does not meet the requirements shall be allowed in any one package.

Walter J. Robinson, Director of Agriculture.

Signed at Olympia, Washington
September 1, 1935

J. I. Griner, Supervisor of Horticulture