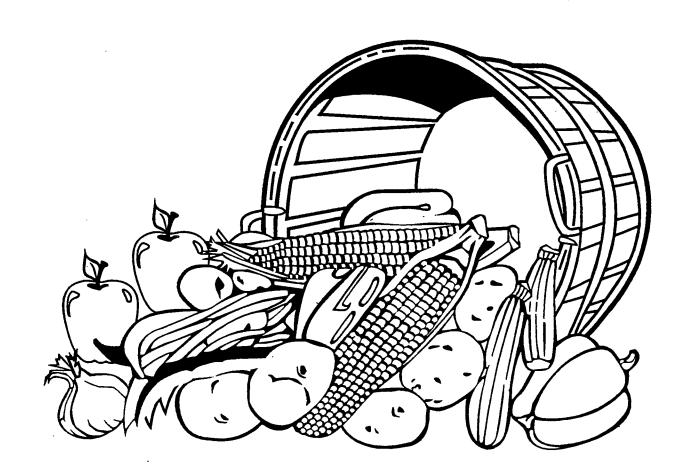


Agricultural Marketing Service

Fruit and Vegetable Division

# **Sweet Corn**

Shipping Point and Market Inspection Instructions



		:
		•
		s
		•
		•
		•
	•	
		\$≈
		u
Art Market Control of the Control of		
		•

# Shipping Point and Market Inspection Instructions for Sweet Corn

These inspection instructions are specifically developed and designed by the Fresh Products Branch to assist officially licensed inspectors in the interpretation and application of the U.S. Standards for Grades of Sweet Corn, 7 CFR Section 51.835.

These instructions do not establish any substantial rule not legally authorized by the official grade standards. This publication supersedes any previously issued inspection instructions.

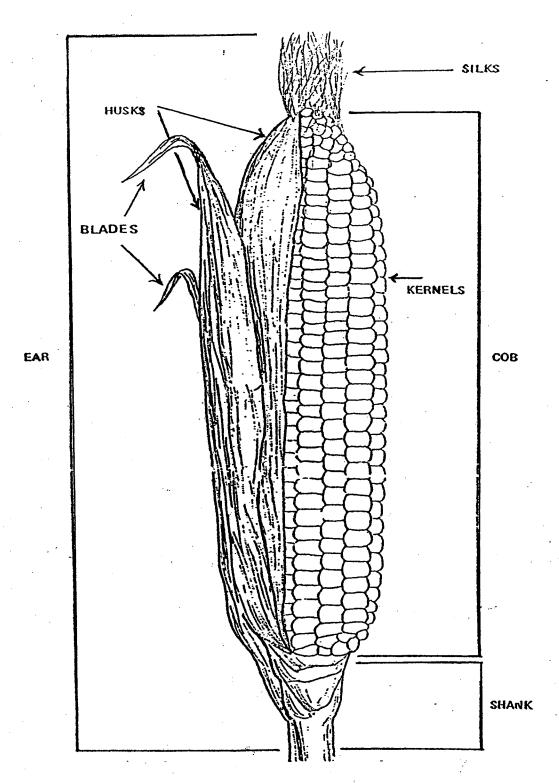
Any portion of these instructions beginning with a section number such as §51.—— and followed by **bold** print are sections or portions of sections copied directly from U.S. standards.

Refer to General Inspection Instructions for additional information pertaining to date, inspection point, carrier, condition of carrier, lading, etc. not covered in these instructions. (Reference to "General Inspection Instructions" in all Fresh Products Branch publications refers to any one or all of the following -- General Shipping Point Inspection Instructions, General Market Inspection Instructions, or Fresh Fruit and Vegetable Certificate Writing Handbooks.)

**June 1994** 

This replaces instructions dated January 1974

This publication may be duplicated without authorization from USDA.



BLADE - flat expanded part of the husk.

COB - that portion of ear that contains kernels.

EAR - the entire portion consisting of shank, cob, husks, and silks.

**HUSKS** - that portion of the ear that acts as a protective covering for the kernels.

**KERNELS** - the portion of the cob that is used for human consumption.

**SHANK** - the extended portion attaching the cob to the stalk and holding the husks in a protective position.

SILKS - thread-like emissions on the tip end of the cob.

# **Table of Contents**

	Section Page (s
	Generali
	Corn Illustrationii
(1)	Sampling
(2)	Tolerances2
(3)	Application of Tolerances2 - 3
(4)	Count4 - 5
(5)	Products Inspected5 - 6Commodity5Containers6Distinguishing Marks6State of Origin6Quantity Inspected6
(6)	Condition of Pack7
(7)	Temperature of Product7
(8)	Size8 Reporting Size8
(9)	Quality and Condition8 - 21Trimming9Clipping10Development (Shape of Ears)12Filling of Cobs12

### Revised, February 2007, HU-152-14(a), Page iv, Sweet Corn, Shipping Point and Market Inspection Instructions, June 1994

iv

	Covering	14	
	Maturity	16	
*	Freshness of Husk	16	
	Other Defects	17 - 21	
	Worms and Insects	17	
	Auxiliary Ears	18	***
	Smut	18	
	Mechanical	19	•
	Bird Injury, Damage, or Serious Damage	19	
	Indented Kernels	20	
	Discoloration	20	
	Rust	20	
	Rust Decay	21	
(10)	Grade	21	
(11)	Remarks	22	

Appendix I - U.S. Standards for Grades of Sweet Corn

Appendix II - Notesheet and Certificate Examples

# (1) Sampling

### **Representative Sampling**

Representative sampling is just as important as correct interpretation of defects and other factors. Accurate determination of these factors is possible only if the samples examined are truly representative of the entire lot or accessible portion. All portions of a lot or load should receive the same attention in sampling regardless of the difficulty involved in reaching the less accessible layers or parts of a load.

### Size of Sample

The tolerances in the U.S. Standards for Grades of Sweet Corn are determined on the basis of count. At least twenty-five (25) ears shall be examined from containers that contain 25 ears or more. Whenever a load and/or lot is out of grade because of defects exceeding the package tolerance, the entire contents of those packages shall be examined. However, the entire contents shall be examined in packages that contain less than 25 ears, regardless of quality or condition of the load and/or lot. For example: Sweet corn in consumer type tray packages, which are often packed within master containers, the individual consumer tray (whether it contains 2 ears or 6 ears, etc.) would be the sample and recorded separately on the notesheet.

In packages with 25 ears or more, the sample size may or may not be the total contents of the package. If the sample size is not the entire contents of the package, be sure to keep a separate column on the notesheet for "the number of ears in each package" and "the number of ears in each sample."

When the sample sizes are not uniform, the percentages shall be determined for each sample. To determine the average percentage for the lot, all percentages must be totaled and divided by the number of samples examined.

### **Number of Samples**

Due to potential variations in size, quality, condition, or all of these, no definite rule can be provided as to a required number of samples. It is the inspector's responsibility to examine enough samples to ensure an accurate picture of the entire load and/or lot. However, for loads and/or lots containing less than 100 containers, a minimum of three samples shall be inspected. (Be sure to take a

sufficient number of samples from various parts of the load and/or lot of consumer packages.)

### (2) Tolerances

§51.840 Tolerances...In order to allow for variations incident to proper grading and handling, the following tolerances, by count, are provided as specified:

- (a) For defects. 10 percent in any lot for ears of corn, which fail to meet the requirements of the grade, including therein not more than 2 percent for decay.
- (b) For off-size. 5 percent in any lot for ears of corn which fail to meet the requirements as to length of cob.

Total Defects, 10% including decay 2%

Off-size 5%

# (3) Application of Tolerances

§51.842 Application of tolerances...The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations: Provided, That the averages for the entire lot are within the tolerances specified:

- (a) For packages which contain 10 specimens or more and a tolerance of 10 percent or more is provided, individual packages in any lot may contain not more than one and one-half times the tolerance specified. For packages which contain 10 specimens or more and a tolerance of less than 10 percent is provided, individual packages may contain not more than double the tolerance specified except that at least one defective and one off-size specimen may be permitted in any package; and,
- (b) For packages which contain less than 10 specimens, individual packages in any lot may contain not more than double the tolerance specified, except that at least one defective and one off-size specimen may be permitted in any package: Provided, That for packages which contain 5 specimens or less, individual packages in any lot are not restricted as to the percentage of defects: And provided further, That not more than one specimen which is affected by decay or otherwise seriously damaged and one off-size specimen may be permitted in any package.

For packages with 10 specimens or more:

Total Defects  $10\% \times 1-1/2 = 15\%$  including decay  $2\% \times 2 = 4\%$  Off-size  $5\% \times 2 = 10\%$ 

**Except** that at least one defective and one off-size specimen may be permitted in any package.

### For packages with 6 to 9 specimens:

Double the tolerance specified

**Except** that at least one defective and one off-size specimen may be permitted in any package.

### For packages with 5 specimens or less:

### Not restricted to percentage of defects

**Except** that not more than one specimen which is affected by decay or otherwise seriously damaged and one off-size specimen may be permitted in any package.

In the above section from the standards there are a few terms that are frequently mentioned. Packages, individual packages and specimen(s) are defined as follows:

Specimen(s) means ear(s) of corn.

<u>Individual packages</u> mean **one** of the smallest containers that constitute the load and/or lot. The containers may be cartons, crates, sacks or in the case of consumer type packages within master containers, the consumer package (i.e., film wrapped trays) would be the "individual package."

<u>Packages</u> mean **all** of the individual packages that constitute the load and/or lot. The containers may be cartons, crates, sacks or consumer packages (i.e., film wrapped trays) that are within master containers.

# (4) Count

§51.841 Requirement as to count...The number of ears of corn in any package may be specified by count or in terms of dozens or half dozens. Variation from the number specified shall be permitted as follows: Provided, That the average for the lot is not less than the number specified nor more than two ears greater than the number specified:

Specified number per package:	Variation permitted in individual packages:
1 - 10	0
11 - 25	2 ears under count, 2 ears over count.
26 - 60 ears	3 ears under count 5 ears over count.
more than 60 ears	4 ears under count, 6 ears over count.

If count is marked on the container, in terms of number of ears or in terms of dozens or half dozens, the inspector must determine whether the markings are correct. If count is not marked on the container, no mention should be made of this fact, unless requested to do so by the applicant.

To determine whether the markings are correct, the inspector must count the entire contents of the package and record it on the notesheet. An appropriate column heading would be "number of ears per package." This may be different from the "number of ears per sample." Make sure a sufficient number of samples have been examined to accurately determine whether the requirement as to count for each load and/or lot has been met. The number of ears marked on the container will determine which line to use in the table above. For example, if the container is marked "1 dozen," go to the "specified number per package" column and use the "11 - 25" line, giving a variation of "2 ears under count and 2 ears over count" per individual package.

There are no tolerances for the number of packages that do not meet this specification. Therefore, if any container in a lot does not meet the variation permitted in individual packages, the lot fails to meet the requirements as to count.

Additionally, the average of all the packages in a load and/or lot must average at least the number specified but not more than two ears greater than the number specified. In the example used above, the average must be at least 1 dozen (12 ears per package) but not more than 14 ears per package to meet the requirements as to count.

If the packages meet all the requirements stated above, report on the certificate "Meets marked count" in the "OTHER" section on the market certificates and "Description of Product" on the shipping point certificate. However, if the packages fail to meet variations permitted in individual packages or fails to meet the average, then report a range and an average. For example: (Packages marked "1 dozen"), "Count ranges from 8 to 14, average 10 ears per carton, fails to meet marked count." Finally, if count is not marked on the container, but requested by the applicant, simply give a range and average, and under "REMARKS" state that count was determined and reported at applicant's request.

# (5) Products Inspected

The following information shall be given:

- Commodity
- Type of Container
- Distinguishing Marks
- State or Country of Origin
- Quantity Inspected

### Commodity

--

"Sweet CORN" shall be used to describe this commodity in the "PRODUCT" heading. Type, such as "yellow kernels," "white kernels," or "mixed colored kernels" may be used in conjunction with "Sweet CORN" or may be reported in the "Lot ID" section on market notesheets and certificates.

The Inspection Service does not certify variety. When variety is in question, the inspector should inform interested parties that only type may be certified. It may also be pointed out that when type is a factor in a load and/or lot of sweet corn, such as white kernels of corn in a lot of yellow kernels of corn, or ears of field corn in the sweet corn lot, it will be considered a defect. As a guide, corn showing a mixture of white and yellow kernels on the same ear should be scored as a quality defect if the appearance is more than slightly affected to the extent that more than 12 white kernels appear on a 6 inch cob of yellow corn or the same for yellow kernels on a white variety and greater or lesser amounts on larger or smaller ears.

6

Some varieties show a mixture of white and yellow kernels on the same cob. If the entire lot is of this type then it should be reported as "mixed colored kernels." Full yellow or white ears are a defect of this lot. In order to distinguish between field corn and sweet corn the inspector may have to taste the kernels. If the kernels have a "sweet" taste it is probably sweet corn. Field corn may have dented kernels, and the taste is generally starchy. The silks of field corn are generally a darker brown and the texture of the silks is coarser than the silks of sweet corn. The defect shall be reported as "dissimilar varietal characteristics."

\*\*\*

### Containers

Sweet Com is most commonly packed in wirebound crates, cartons, sacks, or film wrapped consumer packages within master containers. The type of container shall always be reported under this heading.

### Distinguishing Marks

The brand, variety, size, count, point of origin and other important information appearing on the container should be reported on the notesheet in the "Brands/Marks" section. Only the brand name and other pertinent information should appear in this section on the certificate. If the containers bear no brand it shall be stated "No Brand." See the General Inspection Instructions for more specific instructions.

### State or Country of Origin

The inspector should not make a positive statement on his/her own authority, but when container markings list the State or country of origin, it should be quoted in the appropriate space on notesheets and certificates. This policy is necessary because some firms may use one mark on the same product packed in two or three States. The inspector can certify only to the marks and has no means of knowing what State or country the sweet corn is grown. If packages are not marked or the sweet corn is in bulk, refer to the General inspection Instructions.

### **Quantity Inspected**

The number of containers shall always be reported. The count of large lots certified in a warehouse or on a platform may be reported on the authority of someone other than the inspector. However, it is advisable in such instances for the inspector to make a rough check to determine that a substantial number of the containers reported in the lot are present.

Small lots (100 containers or less) that can be counted with accuracy shall be reported on the inspector's authority as "inspector's count."

# (6) Condition of Pack

When sweet corn is packed in sacks or film wrapped trays, the "pack" heading should be crossed out. When sweet corn is packed in crates or cartons, the following terms shall be used to describe pack on the notesheet:

Very Tight: This means that the pack is too tight and too much bulge resulting in bruising of the ears in layers next to the cover or bottom.

**Tight:** This is the desirable condition of pack and means that the package is filled sufficiently to prevent any movement of the product within the package and it has the proper bulge without causing bruised kernels.

Fairly Tight: This means that the ears are in contact with the lid and practically no movement of the ears within the package, but no bulge is present.

**Slack:** This term is used when the package is not full and there is free movement of the product within the package. This term should be qualified in terms of inches or half inches below the lid.

If crushed ice is in or on the container, it should be mentioned on the notesheet. Finally, when requested to certify as to specified or marked net weight on both stationary lot sampling or on-line sampling, the procedures as described in the General Inspection Instructions must be followed.

# (7) Temperature of Product

At shipping point, temperatures are not normally determined or reported. However, due to the importance of pulp temperature of fresh fruits and vegetables, in transit or at destination, it is essential that the inspector accurately read and report the temperature or range in temperatures on each lot. Pulp temperature should be reported regardless of the location of the product, whether in the carrier, warehouse, or stacked on the platform. A minimum of three temperatures should be recorded on the notesheet. More temperatures shall be taken if the lot is abnormally cold, heated, or there is a specific request for temperature.

Refer to the General Inspection Instructions for information not covered in this section.

# (8) Size

The **U.S. Fancy** grade requires each cob to be at least 6 inches in length. Clipped ears **cannot** grade U.S. Fancy.

The **U.S. Fancy Husked** and the **U.S. No. 1** grades require, unless otherwise specified, the length of each cob, clipped or unclipped, shall be not less than 5 inches.

The U.S. No. 1 Husked and the U.S. No. 2 grades require, unless otherwise specified, the length of each cob, clipped or unclipped, shall be not less than 4 inches.

The U.S. Fancy Husked, U.S. No. 1, U.S. No. 1 Husked, and U.S. No. 2 grades permit clipped ears and unclipped ears in the same package, provided each cob meets the minimum specified length.

### **Reporting Size**

When reporting size, the length of the cob shall be reported to the **nearest half inch**. The length of the cob means the overall length from the tip to the shank end of the cob. Measurement of the ear should include the cob only and not the shank. (See illustration, page ii.)

When reporting size and there is a wide range in the length of cobs in a load and/or lot, the range shall be followed by a "mostly" range, and a positive statement shall be made as to undersize. (For tolerances and application of tolerances see those sections.)

**Example:** Size: Cobs clipped. Generally 5 to 7 inches, mostly 5½ to 6 inches in length. Average 2% undersize. (Refer to the certificate examples in Appendix II for reporting procedures.)

# (9) Quality and Condition

Statements pertaining to freshness, maturity, trimming, the amount and kind of quality defects, and the amount of decay is shown under the appropriate headings. Those factors noted with one asterisk (\*) shall be reported as **CONDITION** factors on market certificates. Those factors noted with two asterisks (\*\*) may be considered as **QUALITY** or **CONDITION**, depending on the circumstances. Factors with no asterisk are considered as quality only.

In order to determine whether an ear of corn has any defects affecting the kernels, it may be necessary to remove part or all of the husk.

The requirements for the U.S. Fancy and the U.S. Fancy Husked grades are the same, except as to the amount of covering, clipping, trimming, and length of cob. This is also true for the U.S. No. 1 and U.S. No. 1 Husked grades.

### **Trimming**

Trimming pertains to the appearance of the ear as it relates to the loose husks, silks and/or length of shank. Also, keep in mind this is one of the differences between the Husked grades and the non-Husked grades.

§51.843 Definitions..."Well trimmed" means that the ears are practically free from loose husks and that the shank shall be not more than 6 inches (152.4 mm) in length and not extend more than one inch (25.4 mm) beyond the point of attachment of the outside husk.

§51.843 Definitions..."Fairly well trimmed" means that the appearance of the individual ear of corn is not seriously affected by loose husks and that the shank shall not be more than 6 inches (152.4 mm) in length and not extend more than 2 inches (50.8 mm) beyond the point of attachment of the outside husk.

§51.843 Definitions..."Properly trimmed" means that the ear is not damaged by loose husks and silks and that the shank shall not extend more than 1 inch (25.4 mm) from the cob, when present.

The U.S. Fancy and U.S. No. 1 grades require that the ears be well trimmed. The U.S. No. 2 grade requires that the ears be fairly well trimmed. If the ears do not meet the requirements of well trimmed, but meet the requirements of fairly well trimmed, they are considered fairly well trimmed. Fairly well trimmed is a defect of the U.S. Fancy and U.S. No. 1 grades and scored against the total tolerance for either grade. If the ears do not meet the requirements of fairly well trimmed, they are poorly trimmed. Poorly trimmed ears are considered serious damage and scored against the U.S. Fancy, U.S. No. 1, and U.S. No. 2 grades.

The U.S. Fancy Husked and U.S. No. 1 Husked grades require that the ears be properly trimmed. If the ears do not meet the requirements of properly trimmed they are **poorly trimmed**. Poorly trimmed ears are considered defects and will be scored against the total tolerance for either grade. They are **not** scored as serious damage against the U.S. Fancy Husked or the U.S. No. 1 Husked grades.

### Clipping

Clipping generally refers to the practice of removing worm injury, by cutting or snipping off the end of the ear. The U.S. Fancy grade states "ears shall not be clipped." Therefore, any clipped ears found in a load and/or lot of U.S. Fancy sweet corn shall be considered a defect and scored against the total tolerance for the grade.

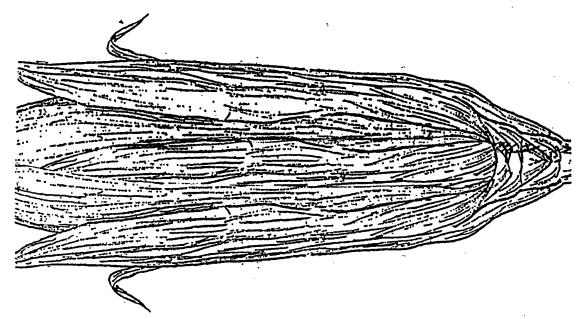
§51.843 Definitions..."Properly clipped" means that the tip end of the cob, or the tip end of the cob and husk have been neatly removed approximately at a right angle to the longitudinal axis.

§51.843 Definitions..."Well clipped" means that one or both ends of the cob, or one or both ends of the cob and husk have been neatly removed approximately at a right angle to the longitudinal axis.

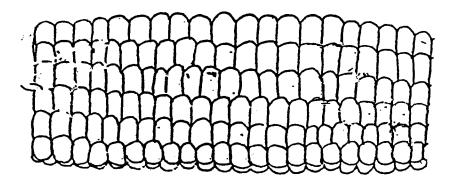
The U.S. No. 1 and U.S. No. 2 grades allow the ears to be clipped, but each clipped ear shall be **properly clipped**. Properly clipped means that the **tip end** of the cob, or the tip end of the cob and husk may be removed. Therefore, if both ends or the shank end is clipped it is not properly clipped. Ears that are not properly clipped shall be considered **poorly clipped**, a defect scored against the total tolerance for the grade.

The U.S. Fancy Husked and the U.S. No. 1 Husked grades allow the ears to be clipped, but each clipped ear must be **well clipped**. Well clipped means that one or **both ends** of the cob, or both ends of the cob or husk may be removed. Therefore, both ends of the cob may be clipped and not be considered a defect. However, if the ear has a jagged cut or not cut approximately at a right angle, it shall be considered not well clipped. Ears that are not well clipped shall be considered **poorly clipped**, a defect scored against the total tolerance for either grade.

(See illustrations on following page.)



PROPERLY CLIPPED



WELL CLIPPED

### **Development (Shape of Ears)**

§51.843 Definitions..."Well developed" means that the ears are fairly straight and are not stunted. Nubbins are not well developed ears.

§51.843 Definitions..."Fairly well developed" means that the ears are not stunted to the extent that the appearance is seriously affected.

The U.S. Fancy, U.S. Fancy Husked, U.S. No. 1, and U.S. No. 1 Husked grades require that the ears be **well developed**. This means that the ears must be fairly straight and not stunted. Therefore, ears which are badly bent, crooked, irregular shaped, stunted, or otherwise ill formed are scored as defects against the total tolerances for the grade. This defect shall be reported as **not well developed**.

Sometimes ears have one or more undeveloped secondary cobs attached at the base and usually enclosed in the outer layers of husks. Often these small cobs have little or no effect on the shape of the entire ear. They come off easily with the husks, and are not scored. However, unhusked ears that show bulging or on which the secondary cobs cause spreading of the husk so as to expose the kernels on the main cob shall be scored as not well developed.

The U.S. No. 2 grade requires ears to be **fairly well developed**, which means that they are not stunted to the extent that the appearance is seriously affected. Ears that are not fairly well developed shall be reported as **poorly developed**. Poorly developed ears are considered serious damage against all grades.

### Filling of Cobs

Use the following terms to describe filling of cobs:

Well filled: This is not a requirement of any grade, but when used means that the edible quality or appearance of an <u>unclipped</u> ear is not affected to a greater extent than that of an ear 6 inches in length which has ¾ inch at the tip end with poorly developed kernels or open spaces. When the ear has been <u>clipped</u> there shall be no poorly developed or open spaces.

§51.843 Definitions..."Fairly well filled" means that the rows of kernels show fairly uniform development, and that the appearance and quality of the edible portion of the ear are not materially affected by poorly developed rows. When the ear has not been clipped, not more than one-fourth of the length of the cob may have poorly developed or missing kernels at the tip. When the ear has been clipped, it shall have practically no poorly developed kernels at the tip of the cob. Missing or poorly developed kernels on other parts of the ear

Revised, December 1995, HU-129-4(a)
Page 13, Sweet Com, Shipping Point and
Market Inspection Instructions, June 1994

shall not aggregate more than one square inch (6.5 cm<sup>2</sup>) on a cob 6 inches (152.4 mm) in length, and a proportionally greater area shall be permitted on a longer cob and a proportionally lesser area on a shorter cob.

§51.843 Definitions..."Moderately filled" means that the rows of kernels show fairly uniform development, and that the appearance and quality of the edible portion of the ear are not seriously affected by poorly developed rows. When the ear has not been clipped, more than one-fourth but less than one-third of the length of the cob has poorly developed or missing kernels at the tip. When the ear has been clipped it shall have not more than a slight amount of poorly developed kernels at the tip of the cob. Missing or poorly developed kernels on other parts of the ear shall not aggregate more than one and one-fourth square inches (10.1 cm²) on a cob 6 inches (152.4 mm) in length, and a proportionally greater area shall be permitted on a longer cob and a proportionally lesser area on a shorter cob.

§51.843 Definitions..."Poorly filled" means, on unclipped ears, that the edible quality or appearance is affected to a greater extent than that of an ear 6 inches (152.4 mm) in length which has one-third of the cob at the tip end and aggregate area 1½ inches square (14.5 cm²) on other portions of the ear with undeveloped kernels or open spaces; and means, on clipped ears, that the edible quality or appearance is affected to a greater extent than that of an ear 6 inches (152.4 mm) in length which has one inch (25.4 mm) at the tip end and an aggregate area 1½ inches square (14.5 cm²) on other portions of the ear with undeveloped kernels or open spaces.

The U.S. Fancy, U.S. Fancy Husked, U.S. No. 1, and U.S. No. 1 Husked grades require that the cobs be fairly well filled with plump and milky kernels. The U.S. No. 2 grade requires that the cobs be at least moderately filled with plump and milky kernels.

Ears that do not meet the requirements of fairly well filled, but meet the requirements of moderately filled will be considered defects of the U.S. Fancy, U.S. Fancy Husked, U.S. No. 1, and U.S. No. 1 Husked grades and reported as "not fairly well filled." They are scored against the total tolerance for the grade being applied. Ears that do not meet the requirements of moderately filled are reported as poorly filled. Poorly filled ears are considered serious damage against all grades.

The definitions of fairly well filled and moderately filled have separate guidelines for the following: ears which are not clipped and have poorly developed or missing kernels at the tip: ears that are clipped and have poorly developed or missing kernels at the tip; and, missing or poorly developed kernels on other parts of the ear.

Ears that are not clipped having missing or poorly developed kernels both at the tip of the cob, and on other parts of the cob shall have not more than what is allowable on either portion of the cob. **For example**: on an unclipped cob 6 inches in length, in order to meet the requirements of fairly well filled, could have not more

than 1½ inches at the tip of the cob with poorly developed or missing kernels; OR, not more than 1 square inch on other parts; OR, a combination on the tip and other portions of the ear which do not exceed the maximum permitted by any of the guidelines. If the cob has a combination of 1½ inches of poorly developed or missing kernels at the tip of the cob, AND any amount on other parts of the cob the ear would be considered "not fairly well filled." Also, if a cob 6 inches in length has 1 square inch of poorly developed or missing kernels on the center portion of the cob (and/or the shank end), AND any amount on the tip end of the cob the ear would be considered "not fairly well filled." (The same applies for moderately filled, except for the allowable amounts on the tip and other portions.)

(See illustrations on following page.)

### Covering

The U.S. Fancy grade requires that the cobs be well covered. The U.S. No. 1 and U.S. No. 2 grades require the cobs be fairly well covered. The U.S. Fancy Husked and the U.S. No. 1 Husked grades require the cob to be husked.

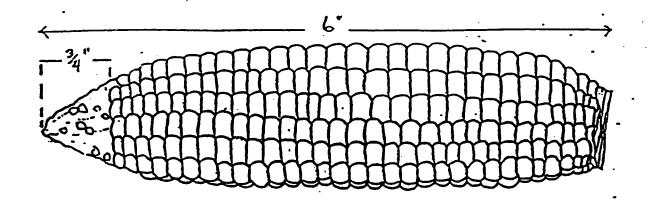
§51.843 Definitions..."Well covered" means that the husk enclosing the ear is tight and undisturbed, except that a slight opening may have been made at the tip: *Provided,* That the disturbed part has been properly replaced so that the appearance of the ear is not more than slightly affected.

§51.843 Definitions..."Fairly well covered" means that the husk enclosing the ear is fairly tight and undisturbed except that an opening may have been made at the tip: *Provided*, That the disturbed part has been properly replaced so that the appearance of the ear is not materially affected.

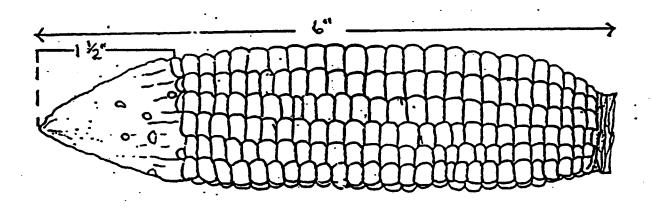
§51.843 Definitions..."Husked" means that on the full length of the cob the equivalent of at least 3 rows of kernels are exposed up to the entire cob.

As a guide, if more than 1 inch by 1 inch square at the tip of the cob is exposed, it is considered "not well covered" and scored against the total tolerance for the U.S. Fancy grade. If more than 1 inch by 1½ inches at the tip of the cob is exposed, it is considered "not fairly well covered" and scored as a defect against the total tolerance for the U.S. No. 1 and U.S. No. 2 grades.

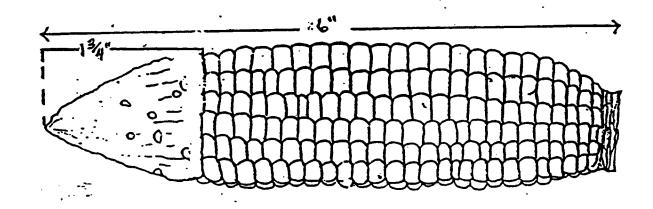
If an ear of U.S. Fancy Husked and U.S. No. 1 Husked does not have at least the equivalent of 3 rows of kernels exposed for the full length of the cob, up to the entire cob being exposed, it shall be considered "not husked." This shall be scored as a defect against the total tolerance of either husked grade.



WELL FILLED



FAIRLY WELL FILLED



MODERATELY FILLED

### Maturity (\*\*)

The maturity or age of kernels should be determined by pressing the kernels, about 1/3 the distance from the shank end to the tip of the cob, with sufficient force with the thumb nail to break the kernel(s). By observing the consistency of the kernel(s), the following definitions will assist you in determining the maturity of the ear.

§51.843 Definitions..."Plump and milky" means that the kernels are well developed and the contents have a milky, creamy, or clear jelly-like consistency.

Immature means that the kernels are small, watery, or lack plumpness and are of very little value for eating purposes. Score this defect as serious damage in all grades, and as a quality factor en route or at destination when the entire cob is affected. If it is only a few kernels or a portion thereof, use the definitions of filling of the cobs for the appropriate grades to determine if the cob is to be scored. [See section on Filling of Cobs.]

Overmature means that the kernels are tough and contain very little juice; the contents are mealy, of a thick creamy or starchy consistency; or are too hard or tough for table use. Score this defect as serious damage in all grades, and as a condition factor en route or at destination when the entire cob is affected. If it is only a few kernels or a portion thereof, use the definitions of filling of the cobs for the appropriate grades to determine if the cob is to be scored. [See section of Filling of Cobs.]

### Freshness of Husk (\*)

§51.843 Definitions..."Fresh" means that the husks have fairly good green color and are not badly wilted.

There are two requirements in the definition of "fresh," (1) husks must **not be badly** wilted and (2) husks have fairly good green color. Husks may be badly wilted and still have fairly good green color; also, husks may be yellow in color and not be badly wilted. Therefore, it is necessary to report freshness and color separately on the notesheet. However, if the ear is either badly wilted or not fairly good green color, it will be considered a defect and scored against the total tolerance for the grade. (Both requirements must be met.)

Terms used to describe color are as follows: good green, dark green, green, and light green (considered fairly good green color); turning yellow, yellow, turning brown, and brown (considered NOT fairly good green color and scored as a defect).

Terms used to describe the stages of wilting are as follows: fresh, slightly wilted, and wilted (considered not badly wilted); badly wilted (considered a defect).

Badly wilted means that most of the husks on an ear lack succulence, are weak and limp. The husks may be dry and papery.

### **Other Defects**

### Worms and Insects (★★)

§51.843 Definitions..."Insect or worm injury" means that insect or worm frass is present, or there is visible evidence of insect or worm injury.

§51.843 Definitions..."Damage" by worm injury on unclipped ears when extending more than  $1\frac{1}{2}$  inches (38.1 mm) from the tip on an ear 6 inches (152.4 mm) in length (proportionately greater or lesser amounts permitted on longer or shorter ears, respectively), or when affecting the kernels on other parts of the ear or any worm injury on clipped ears.

§51.843 Definitions... "Serious damage" by worm injury on unclipped ears when extending more than 2 inches (50.8 mm) from the tip on an ear 6 inches (152.4 mm) in length (proportionately greater or lesser amounts permitted on longer or shorter ears, respectively), or when affecting more than 4 kernels on other parts of the cob, or any worm injury on clipped ears extending more than one-fourth inch (6.4 mm) from the tip.

Worms, Insects and Insect or Worm Injury. Ears of sweet corn may be attacked by several types of insects or worms. Generally the worms and/or insects attack the tip end of the ear and burrow through the silks to the tip of the cob. It is generally at the tip of the cob where they will begin to feed on the kernels. Insect or worm injury pertains to the feeding, frass or other visible evidence left behind by the worm and/or insect, but not the insect itself. The practice of clipping the cobs concerns the removal of worm or insect injury. Scoring the presence of worms, insects and/or worm or insect injury will depend upon the grade being applied to the load and/or lot of sweet corn.

In the **U.S. Fancy** and **U.S. Fancy Husked** grades the standards states "free from worms and free from insect or worm injury." Therefore, <u>any worms or insects</u> present must be scored as a defect against these grades. Also, all ears showing <u>any amount</u> of insect or wormy injury must be scored as a defect against the total tolerance for the grades.

The **U.S. No. 1** and **U.S. No. 1 Husked** grades do not have any specific guidelines in the standards as to how to score the presence of worms and/or insects. Therefore, they will not be scored, but may be reported on the certificate as not affecting grade, reported at applicant's request. Even though the presence of worms and/or insects is not to be scored, a separate column should be kept on the notesheet in the event that the applicant requests this factor to be reported.

The U.S. No. 1 and U.S. No. 1 Husked grades require that the ears be "free from damage by worms or other insects." This means that on <u>unclipped</u> ears when the injury extends more than 1½ inches from the tip on an ear 6 inches in length (proportionally greater or lesser amounts permitted on longer or shorter ears, respectively) it shall be damaged. If the injury affects kernels on other parts of the ear, or any worm injury on <u>clipped</u> ears shall be considered damaged. Any worm or insect injury of lesser amounts than above and/or the presence of worms and/or insects may be reported on the certificate as "not affecting grade, reported at applicant's request."

The **U.S. No. 2** grade does not have any specific guidelines in the standards as to how to score the presence of worms and/or insects. Therefore, they will not be scored, but may be reported on the certificate as not affecting grade, reported at applicant's request. Even though the presence of worms and/or insects is not to be scored, a separate column should be kept on the notesheet in the event that the applicant requests this factor to be reported.

The U.S. No. 2 grade requires that the ears be "free from serious damage by worms or other insects." This means that on <u>unclipped</u> ears when the injury extends more than 2 inches from the tip on an ear 6 inches in length (proportionally greater or lesser amounts permitted on longer or shorter ears, respectively) it shall be seriously damaged. If the injury affects more than 4 kernels on other parts of the ear, or any worm injury on <u>clipped</u> ears extending more ½ inch from the tip shall be considered seriously damaged. Any worm or insect injury of lesser amounts than above and/or the presence of worms and/or insects may be reported on the certificate as "not affecting grade, reported at applicant's request."

En route or at destination, if the worms or insects are live, or there is evidence of fresh frass, which occurred during transit, treat as a condition factor. If the worms or insects are dead, and the worm or insect injury is old, treat as a quality factor. If both live and dead worms or insects are present, treat as a condition factor.

### **Auxiliary Ears**

\*\*\*\*

Auxiliary ears are scored under the general definitions for injury, damage, and serious damage. Serious damage must seriously detract from the appearance and have multiple auxiliary ears before being scored as such. Visual aid, COR-1-IDENT, has been developed to help identify this quality defect.

\*\*\*

### Smut

Smut usually appears at the tip of the ear as white galls, which turn brown to black and affect the kernels with a dust-like fungus. All visible stages of this disease shall be considered a defect and scored as serious damage in all grades.

### Mechanical

Mechanical refers to the crushing or breaking of kernels due to the harvesting or packaging of the ears of corn. En route or at destination, if the kernels are crushed and/or broken and appear dry and discolored, score and report them as a quality defect. However, if the kernels are freshly crushed and/or broken, with the milky substance leaking from the kernels, it shall be scored and reported as a condition defect. The following table gives the number of kernels allowed before scoring as injury, damage, or serious damage.

§51.844 Classification of defects.

# Number of affected kernels allowed for the following defects: Mechanical, Bird<sup>1</sup>, Disease, and Indented Kernels.

Length of cob	Injury	Damage	Serious Damage
3 inches (76.2 mm) to 6 inches (152.4 mm)	4	6	8
more than 6 inches (152.4 mm) to 10 inches (254.0 mm)	8	12	16
more than 10 inches (254.0 mm) to 13 inches (330.2 mm)	12	18	24

<sup>1</sup> In scoring <u>injury</u>, if more than the number of kernels allowed above are discolored or punctured or if the husks have been penetrated in more than 1 place; <u>damage</u>, if more than the number of kernels allowed above are discolored or punctured or if the husks have been penetrated in more than 2 places; <u>serious damage</u>, if more than the number of kernels allowed above are discolored or punctured or if the husks have been penetrated in more than 3 places.

### Bird Injury, Damage, or Serious Damage

Birds sometimes congregate on corn fields and inflict extensive damage to ears of corn. Most of the damage occurs at the tip of the cob. The bird-pecked kernels are usually dry, discolored and detract from the appearance of the cob.

Use the table in the standards or see the **mechanical** section for scoring injury, damage, or serious damage caused by birds.

### Indented Kernels (\*)

Indented means any depression that is below the natural curvature of the kernel excluding those kernels on the tip of the cob covered under the definition of fairly well filled.

The cause of kernels indenting has not been determined. However, several have thought it to be a sign of overmaturity. Sometimes indented kernels may be associated with overmaturity when the ears are tough and dry. If ears of corn that have indented kernels are also overmature, then score the ear as overmature. If ears are not overmature, but have indented kernels, then use the table in the standards or see the **mechanical** section for scoring as injury, damage, or serious damage.

### Discoloration (\*\*)

Discoloration means that which affects the husks or blades due to frost, sprayburn or other similar types of discoloration.

§51.843 Definitions..."Injury by discoloration" discoloration caused by frost or sprayburn, or similar types of discoloration when affecting an aggregate area of more than 3 square inches (58.1 cm<sup>2</sup>) on the husk, or when exceeding an aggregate area of 25 percent of the surface of all blades.

§51.843 Definitions..."Damage" discoloration caused by frost or sprayburn, or similar types of discoloration when affecting an aggregate area of more than 5 square inches (161.3  $\text{cm}^2$ ) on the husk, or when exceeding an aggregate area of 50 percent of the surface of all blades.

Score as <u>serious damage</u> when the discoloration seriously detracts from the appearance of the ear.

If the discoloration is of a type that may increase or occur during transit, treat as a **condition** factor en route or at destination.

### Rust (\*)

Rust usually appears as oval to elongated small blisters or pimples, which are of a cinnamon brown color affecting the husk. When the blisters or pimples rupture they release red or black spores, which causes the rust to affect the husks of ears of sweet corn several layers deep.

The U.S. Fancy, U.S. Fancy Husked, U.S. No. 1 and U.S. No. 1 Husked grades require that the ears of sweet corn be free from **injury** caused by rust.

§51.843 Definitions..."Injury by rust" rust when the aggregate area on the husk exceeds one square inch (6.5 cm<sup>2</sup>), or when the rust extends deeper than 2 layers of husks.

Score as damage when materially detracting from the appearance, and as serious damage against the U.S. No. 2 grade when it seriously detracts from the appearance.

### Decay (\*)

Decay in corn usually occurs as a tannish to dark brown color of affected portions of husks or kernels. It is usually accompanied by a thick and slightly sticky slime. The tolerance for decay is 2%.

The portion of the ear most susceptible to decay is the silk. They may become slimy or moldy under certain conditions. Ears having decayed silks shall be scored against the 2% tolerance for decay.

In judging ears which have abnormal appearing silks, be very careful not to confuse a wet condition with decay. Silks become watersoaked in hydrocooling and from load icing. The brown, dead portions often have a soft, mushy texture. Silks should be considered as affected by decay only when they are definitely slimy or moldy and will disintegrate when pressed between the thumb and forefingers.

Silks that are moldy or slick and slimy should **not** be scored as defects, unless accompanied by decay. However, if an applicant requests a percentage of moldy and/or slick or slimy silks, report it as "not affecting grade, report at applicant's request."

## (10) Grade

Under this heading a statement shall be made showing whether or not the lot(s) inspected meet the requirements of the grade being applied. Other specifications for which the application was based and/or percentage of U.S. No. 1 quality shall also be reported here.

# (11) Remarks

Under this heading any explanatory or qualifying statements that are necessary to complete the certificate should be made. They may include one or more of the following:

- Restrictions to load, size, or weight.
- Information supplied by the applicant such as, carrier number, lot number, designations, etc.
- Cross reference to another certificate number such as in re-inspections, appeals, etc.
- Contract specifications.
- Factors not affecting grade reported at applicant's request.

# Appendix I

U.S. Standards



	·					
				4. T		
						•
						*
	. <del>.</del>					·
						•
•						
			•			
· ·						
					si.	
				•		
		a .				
						r <sub>w</sub>
	•					
						* <sub>w</sub>
÷						_
,						<del>-</del> .,
,						
				•		
				4 *		



Agricultural Marketing Service

# United States Standards for Grades of Sweet Corn

Effective February 12, 1992



This publication may be duplicated without authorization from USDA.

# United States Standards for Grades of Sweet Corn<sup>1</sup> 7 CFR 51

### Grades

DOC.	
51.835	U.S. Fancy.
51.836	U.S. Fancy, Husked.
51.837	U.S. No. 1.

51.838 U.S. No. 1, Husked.

51.839 U.S. No. 2.

**Tolerances** 

51.840 Tolerances.

Count

51.841 Requirement as to count.

**Application of Tolerances** 

51.842 Application of tolerances.

**Definitions** 

51.843 Definitions.

**Classification of Defects** 

51.844 Classification of defects.

**Metric Conversion Table** 

51.845 Metric conversion table.

Authority: Secs. 203, 205, 60 Stat 1087 as amended, 1090 as amended; 7 U.S.C. 1622, 1624, unless otherwise noted.

### Grades

### § 51.835 U.S. Fancy.

"U.S. Fancy" consists of ears of sweet corn which meet the following requirements:

- (a) Basic Requirements:
  - (1) Similar varietal characteristics;
  - (2) Well trimmed; and,
  - (3) Well developed.
- (b) Free From:
  - (1) Smut;
  - (2) Worms;
  - (3) Insect or worm injury; and,
  - (4) Decay.
- (c) Free From Injury Caused By:
  - (1) Rust;
  - (2) Discoloration;
  - (3) Birds;
  - (4) Mechanical;
  - (5) Disease; and,
  - (6) Other means. (See § 51.843)
- 1 Compliance 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.

- (d) Cobs shall be fairly well filled with plump and milky kernels and well covered with fresh husks.
  - (e) Ears shall not be clipped.
- (f) The length of each cob shall be not less than 6 inches (152.4 mm).
  - (g) For tolerances see § 51.840.

### § 51.836 U.S. Fancy, Husked.

"U.S. Fancy, Husked" consists of husked ears of sweet corn which meet the requirements of the U.S. Fancy grade except those pertaining to amount of covering, trimming, clipping and length of cob. Sweet corn of this grade shall be:

- (a) Husked (any remaining husk must be fresh).
- (b) Properly trimmed.
- (c) Each ear may be clipped but each clipped ear must be well clipped.
- (d) The length of each cob clipped or unclipped, shall be not less than 5 inches (127.0 mm), unless otherwise specified.
  - (e) For tolerances see § 51.840.

### § 51.837 U.S. No. 1.

"U.S. No. 1" consists of ears of sweet corn which meet the following requirements:

- (a) Basic Requirements:
  - (1) Similar varietal characteristics;
  - (2) Well trimmed; and,
  - (3) Well developed.
- (b) Free From:
  - (1) Smut; and,
  - (2) Decay.
- (c) Free From Injury Caused By:
  - (1) Rust.
- (d) Free From Damage Caused By:
  - (1) Discoloration;
  - (2) Birds;
  - (3) Worms;
  - (4) Other insects;
  - (5) Disease;
  - (6) Mechanical; and,
  - (7) Other means. (See § 51.843)
- (e) Cobs shall be fairly well filled with plump and milky kernels and fairly well covered with fresh husks.
- (f) Each ear may be clipped, but each clipped ear shall be properly clipped.

- (g) The length of each cob, clipped or unclipped, shall be not less than 5 inches (127.0 mm), unless otherwise specified.
  - (h) For tolerances see § 51.840.

### § 51.838 U.S. No. 1, Husked.

"U.S. No. 1, Husked" consists of husked ears of sweet corn which meet the requirements of the U.S. No. 1 grade except those pertaining to amount of covering, trimming, clipping and length of cob. Sweet corn of this grade shall be:

- (a) Husked (any remaining husk must be fresh).
- (b) Properly trimmed.
- (c) Each ear may be clipped but each clipped ear must be well clipped.
- (d) The length of each cob clipped or unclipped, shall be not less than 4 inches (101.6 mm), unless otherwise specified.
  - (e) For tolerances see § 51.840.

### § 51.839 U.S. No. 2.

"U.S. No. 2" consists of ears of sweet corn which meet the following requirements:

- (a) Basic Requirements:
  - (1) Similar varietal characteristics;
  - (2) Fairly well trimmed; and,
  - (3) Fairly well developed.
- (b) Free from:
  - (1) Smut; and,
  - (2) Decay.
- (c) Free From Serious Damage Caused By:
  - (1) Birds;
  - (2) Worms;
  - (3) Other insects:
  - (4) Disease;
  - (5) Mechanical; and,
  - (6) Other means. (See § 51.843)
- (d) Cobs shall be at least moderately filled with plump and milky kernels and fairly well covered with fresh husks.
- (e) Each ear may be clipped, but each clipped ear shall be properly clipped.
- (f) The length of each cob, clipped or unclipped shall be not less than 4 inches (101.6 mm), unless otherwise specified.
  - (g) For tolerances see § 51.840.

### **Tolerances**

### § 51.840 Tolerances.

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

- (a) For defects. 10 percent in any lot for ears of corn which fail to meet the requirements of the grade, including therein not more than 2 percent for decay.
- (b) For off-size. 5 percent in any lot for ears of corn which fail to meet the requirements as to length of cob.

### Count

### § 51.841 Requirement as to count.

The number of ears of corn in any package may be specified by count or in terms of dozens or half dozens. Variation from the number specified shall be permitted as follows: *Provided*, That the average for the lot is not less than the number specified nor more than two ears greater than the number specified:

Specified number per package:	Variation permitted in individual packages:		
1 - 10 ears	0.		
11 - 25 ears	2 ears under count, 2 ears over count.		
26 - 60 ears	3 ears under count, 5 ears over count.		
More than 60 ears	4 ears under count, 6 ears over count.		

### Application of Tolerances

### § 51.842 Application of tolerances.

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

- (a) For packages which contain 10 specimens or more and a tolerance of 10 percent or more is provided, individual packages in any lot may contain not more than one and onehalf times the tolerance specified. For packages which contain 10 specimens or more and a tolerance of less than 10 percent is provided, individual packages may contain not more than double the tolerance specified except that at least one defective and one off-size specimen may be permitted in any package; and,
- (b) For packages which contain less than 10 specimens, individual packages in any lot may contain not more than double the tolerance specified, except that at least one defective and one off-size specimen may be permitted in any package: *Provided*, That for packages which contain 5 specimens or less, individual packages in any lot are not restricted as to the percentage of defects: *And provided further*, That not more than one specimen which is affected by decay or otherwise seriously damaged and one off-size specimen may be permitted in any package.

### **Definitions**

### § 51.843 Definitions.

(a) Similar varietal characteristics means that the ears in any package have similar kernel color and character of growth. Ears of field corn and sweet corn, or ears having

white color kernels, yellow color kernels and mixed color kernels of corn, shall not be mixed.

- (b) Well trimmed means that the ears are practically free from loose husks and that the shank shall be not more than 6 inches (152.4 mm) in length and not extend more than one inch (25.4 mm) beyond the point of attachment of the outside husk.
- (c) Well developed means than the ears are fairly straight and are not stunted. Nubbins are not well developed ears.
- (d) Insect or worm injury means that insect or worm frass is present, or there is visible evidence of insect or worm injury.
- (e) *Injury* means any defect listed in §51.844 or any defect which more than slightly affects the appearance, or the edible or shipping quality of the ear. Any one of the following defects, or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as injury:
- (1) Rust when the aggregate area on the husk exceeds one square inch (6.5 cm<sup>2</sup>) or when the rust extends deeper than 2 layers of husks; and
- (2) Discoloration caused by frost or sprayburn, or similar types of discoloration when affecting an aggregate area of more than 3 square inches (58.1 cm<sup>2</sup>) on the husk, or when exceeding an aggregate area of 25 percent of the surface of all blades.
- (f) Fairly well filled means that the rows of kernels show fairly uniform development, and that the appearance and quality of the edible portion of the ear are not materially affected by poorly developed rows. When the ear has not been clipped, not more than one-fourth of the length of the cob may have poorly developed or missing kernels at the tip. When the ear has been clipped, it shall have practically no poorly developed kernels at the tip of the cob. Missing or poorly developed kernels on other parts of the ear shall not aggregate more than one square inch (6.5 cm<sup>2</sup>) on a cob 6 inches (152.4 mm) in length, and a proportionally greater area shall be permitted on a longer cob and a proportionally lesser area on a shorter cob.
- (g) Phump and milky means that the kernels are well developed and the contents have a milky, creamy, or clear jelly-like consistency.
- (h) Well covered means that the husk enclosing the ear is tight and undisturbed, except that a slight opening may have been made at the tip: Provided, That the disturbed part has been properly replaced so that the appearance of the ear is not more than slightly affected.
- (i) Fresh means that the husks have fairly good green color and are not badly wilted.
- (j) *Husked* means that on the full length of the cob the equivalent of at least 3 rows of kernels are exposed up to the entire cob.
- (k) Well clipped means that one or both ends of the cob, or one or both ends of the cob and husk have been neatly removed approximately at a right angle to the longitudinal axis.

- (1) Properly trimmed means that the ear is not damaged by loose husks and silks and that the shank shall not extend more than 1 inch (25.4 mm) from the cob, when present.
- (m) Damage means any defect listed in §51.844 or any defect which materially affects the appearance, or the edible or shipping quality of the ear. Any one of the following defects, or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:
- (1) Discoloration caused by frost or sprayburn, or similar types of discoloration when affecting an aggregate area of more than 5 square inches (161.3 cm²) on the husk, or when exceeding an aggregate area of 50 percent of the surface of all blades; and,
- (2) Worm injury on unclipped ears when extending more than 1½ inches (38.1 mm) from the tip on an ear 6 inches (152.4 mm) in length (proportionately greater or lesser amounts permitted on longer or shorter ears, respectively), or when affecting the kernels on other parts of the ear or any worm injury on clipped ears.
- (n) Fairly well covered means that the husk enclosing the ear is fairly tight and undisturbed except that an opening may have been made at the tip: Provided, That the disturbed part has been properly replaced so that the appearance of the ear is not materially affected.
- (o) Properly clipped means that the tip end of the cob, or the tip end of the cob and husk have been neatly removed approximately at a right angle to the longitudinal axis.
- (p) Fairly well trimmed means that the appearance of the individual ear of corn is not seriously affected by loose husks and that the shank shall not be more than 6 inches (152.4 mm) in length and not extend more than 2 inches (50.8 mm) beyond the point of attachment of the outside husk.
- (q) Fairly well developed means that the ears are not stunted to the extent that the appearance is seriously affected.
- (r) Serious damage means any defect listed in §51.844 or any defect which seriously affects the appearance, or the edible or shipping quality of the ear. The following defects or combinations of defects, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as serious damage:
- (1) Worm injury on unclipped ears when extending more than 2 inches (50.8 mm) from the tip on an ear 6 inches (152.4 mm) in length (proportionately greater or lesser amounts permitted on longer or shorter ears, respectively), or when affecting more than 4 kernels on other parts of the cob, or any worm injury on clipped ears extending more than one-fourth inch (6.4 mm) from the tip.
- (s) Moderately filled means that the rows of kernels show fairly uniform development, and that the appearance and quality of the edible portion of the ear are not seriously affected by poorly developed rows. When the ear has not

been clipped, more than one-fourth but less than one-third of the length of the cob has poorly developed or missing kernels at the tip. When the ear has been clipped it shall have not more than a slight amount of poorly developed kernels at the tip of the cob. Missing or poorly developed kernels on other parts of the ear shall not aggregate more than one and one-fourth square inches (10.1 cm<sup>2</sup>) on a cob 6 inches (152.4 mm) in length, and a proportionally greater area shall be permitted on a longer cob and a proportionally lesser area on a shorter cob.

(t) Poorly filled means, on unclipped ears, that the edible quality or appearance is affected to a greater extent than that of an ear 6 inches (152.4 mm) in length which has one-third of the cob at the tip end and an aggregate area 1½ inches square (14.5 cm²) on other portions of the ear with undeveloped kernels or open spaces; and means, on clipped ears, that the edible quality or appearance is affected to a greater extent than that of an ear 6 inches (152.4 mm) in length which has one inch (25.4 mm) at the tip end and an aggregate area 1½ inches square (14.5 cm²) on other portions of the ear with undeveloped kernels or open spaces.

# Classification of Defects § 51.844 Classification of defects.

Number of affected kernels allowed for the following defects:

Mechanical, Bird<sup>1</sup>, Disease, and Indented Kernels.

Mechanical, Diru-, Disease, and Indented Pethers			
Length of Cob	Injury	Damage	Serious Damage
3 inches (76.2 mm) to 6 inches (152.4 mm)	4	6	8
more than 6 inches (152.4 mm) to 10 inches (254.0)	8	12	16
more than 10 inches (254.0 mm) to 13 inches (330.2 mm)	12	18	24

<sup>1</sup> In scoring <u>injury</u>, if more than the number of kernels allowed above are discolored or punctured or if the husks have been penetrated in more than 1 place; <u>damage</u>, if more than the number of kernels allowed above are discolored or punctured or if the husks have been penetrated in more than 2 places; <u>serious damage</u>, if more than the number of kernels allowed above are discolored or punctured or if the husks have been penetrated in more than 3 places.

# Metric Conversion Table § 51.845 Metric conversion table.

		Square	Square
Inches	Millimeters (mm)	Inches (in <sup>2</sup> )	Centimeters (cm <sup>2</sup> )
1/4	6.4	1	6.5
1	25.4	1¼	10.1
1½	38.1	1½	14.5
2	50.8	3	58.1
3	76.2	5	161.3
4	101.6		
5	127.0		
6	152.4		
7	177.8		
8	203.2		
9	228.6		
10	254.0		
11	279.4		
12	304.8		
- 13	330.2		

## Appendix II

Certificate & Notesheet Examples



•		
	·	

# Shipping Point Notesheets and Certificates

·	
	.~~
	*.*
	•
	<del>-</del> .

## Revised, June 1996, HU-131-6(a) Appendix II, Page i, Sweet Com, Shipping Point and Market Inspection Instructions, June 1994

OCHTEC STARTE		O	м., 7 (о	3	4 i 4 9 i 3	11	019:	010	A =					-	DOTA ICULIT VUIT A	WAL.		<b>SETIM</b>	G 961	NACE
CONT.L	NON TELE		70	3	113°		110:	010	4	FE	DEI	RAI	L-\$	STA	TE	IN	SP	EC	TIC	N NOTESHEET
AFUC	un: †	LAN	TAT	ion	PR	EC	00LER	INC	ISTATE C	An	11/	IA.	G	4		u.			_	
PORT:	TION A	PPLi	CAN	r's	W	AR	EHou	7 52	Ho				GA		T	THE	ED;	P.	D.	# 5005 AMPLE # 1
COMPE	interior i	$L_{L_{a}}$	<i>it</i> =	<b>L</b> as	PEC	TIO	<b>∞</b>	1117			-	-			1	EKIT	RCATI	E NO:	Ex	AMPLE # 1
Product S	WE	ĔΤ	COT	27	Ye	lloi	TYPE	4 (17)	HIP BR	AN	*	1. D	93	us/	tEL	2 - 1	72	asi	uu	of U.S.A.
D	ist	r. bu	ted	بط.	<u>H</u>	u C	н H.	BUAN	KH, In	C.	,3	So	me	w	464	! <u>E</u>	F	<u>.</u>		
			100	ال ال	ોહદ	Bo	<u>ፈላ</u> ው (	LATE	<u>s</u>							·				
																				<del></del>
				LUDING		DEFECT				1	SE BNL	Σ 144	<u>x</u>		W V	<u> </u>		18	14	CNT:
44					RESTRI	CTIVE	ADDITIONAL TOLERANCES	DESCR	MPTION OF	6	"	_	_	in P.		Cops	ł	+6	Ch	FEE \$
(fonut)				ŧ		••••								7	Sof	ပ		rent	fo f	EXPENSES A
	Crecus	*	r. / a	*				MOSTLY	OTHER	321	7	<b>9</b> .		铝	7116	2	لد	lops	V.	1
SAUPLE SIZE	IOTAL DEFECTS	DALLACE / SERVED	SER. DW. / <del>W SER. DW</del>	DECAT / SOFTWEN						JANDERSIZE	בי מילאן פנונגעי	SECRECAS.		(3:45;9V	Freshness of	Filling of	PAC	Development of Eng	Coveringof	TOTAL \$  REMARKS
25	2	a	2	0				ом		0	11/2	3		44		- 4	_	æ	WC	
as	2	2	2	0				Smut	wems	-	to			44	7	-		2		1 1
as	2	2	2	0				Moem		_	91/2			49	7		/	1	v	11.5 FANCH
25	3	2	2	0				HAIN'S HORNS		0	0			51	7	7	<b>\</b>	<b>V</b>	1	arade at
25	3	0	0	0				Worms	injury	0	8	L		47	1	/	<u> </u>	-	-	grade at applicant's
25			1.	0				Smut		0	to	<u> </u>		43		/	•	/	1	request.
a5	2	2	2	0				OM		0	9	<u> </u>	-	48	~	~	✓	-	~	
25	3	2	0	0				19144	WORMS	0	-	-		48	1	1	1	/	1	
25	3	2	0	D				isjwy	WORMS		-	-	⊢	49	1	<b>✓</b>	<b>K</b>	1	/	
250	23	17	13	0			-	om		0	-		-	50	2	-	۲	1	-	
230	19%	19%	5%					<del> </del>		-	-		1	$\vdash$		-	-		┢	
-	4			( <del>-</del>				-		$\vdash$		-		<del> -</del>		-				<del> </del>
												<del>                                     </del>					Г			t
																				T
														$\Box$						
			ļ					ļ		_	_	L	1	_			_	_	1_	
	ļ	<u> </u>	ļ	<u> </u>	-		- -	<del>                                     </del>	ļ	<del> </del>	-	$\vdash$	1_	_	1		_	1	<u> </u>	<b>_</b>
<del> </del>				<b> </b>	-	_			1	-	-	1-	+-	-	_	-	-	-	-	<del> </del>
OM.	=	UV	ern	NA-	Tu	3-8	<del> </del>	}	-	+-	$\vdash$	-	+-	-	-	+	$\vdash$	╀	+-	<del></del>
<del> </del>	-		<del>                                     </del>				<del>                                     </del>	<del> </del>	<del> </del>	+	+	+	<del> </del>	+	+	-	+	+	+	<del> </del>
	-	-	-	-	-	-				-	+-	$\vdash$	+	+	$\vdash$	<del> </del>	+	+	+	<del> </del>
		<del>                                     </del>			1	<del>                                     </del>	1-1-		<del>                                     </del>	$\dagger$	+	1	+	1	1	1	+	$\dagger$	+	<del> </del>
_			1		1		1-1-			1	1	$\vdash$	1	1	+	1	1	1	T	<del> </del>
<u> </u>	ECTO		GNAT	ÚRŒ:		Ja	ne.	Pac					•	O.	T.	7/	3/	93		PAGE   OF

	į	FEDER	AL-STATE	INSPECT	ION CERT	IFICATE	LJ S	UBLOT	
	0.0 Y Y +	lour M	In AP		udde as primi L	cie evidence in el	l cours of the		
					Ary parter : Sk partirate :	he (Lasyangly) = or participate in a	hall delecty of any auch action	rake, tempe, aka nik in menjaci da a naj aribana	large of
HETED 017	0.03913	10:0	10 1		(100)				
CANT:	<b>~</b>		- markim masici	CITY/STAT	£		U:		
	W PRECOOL				12.GA	<del></del>	meno:		
APPLICANT :			HOPEFU	ul, GA			Y. C	0. <b>* 5</b> 005	
Lot	inspection	F. 100 S 40 S 50							
			2 <b>5</b>			eyes)		2003	
NEET	1000	"Chi	p Brand"		_ ,	<del></del>		U.S. FAN	cy_
ORN	1.09 Bushel	-7 V-	1 9 . 1		adla Al	11 61	9:00		-
How type	wirebound erates	1/2:	to 9 inch ngth. No	es in wi	19141 1911 5170	estly 8 to	O THEM	·	
	CATICS	11.0	J 10. 10.	<u> </u>	- <del></del>				
•		Grad	le defect	S AVIVA	se with	in tokero	nce.		
		No.	Decay.						
			<del></del>	<del></del>		<del></del>		<u>i</u>	<del> </del>
				<del></del>					
·		<del> </del>		<del>-, </del>			· · · · · · · · · · · · · · · · · · ·		<del>                                     </del>
				· <del>····································</del>	<del></del>				
		<u> </u>					· · · · · · · · · · · · · · · · · · ·		<u> </u>
		<del> </del>		·			<u> </u>	1	<del> </del>
						<u> </u>			<del> </del> -
<u>,</u>	<del> </del>	<del> </del>						<u> </u>	+
		<del>                                     </del>							1
				-					
		<del> </del>			<del></del>			1	+
			MEET REQUIRE	ACTOR TO A MAN	VETNIC ARME				1
	PRODUCT 'AND NUMBER 'C	F CONTAIN	ERS : ARE PROVIDED	BY THE WTUCA	T AND AREHOT!	BNG CERTIFIED BY	THE WISPECTO	NULES OTHERWS	E MOTED
	ATA ENTRY ONLY WILLCONTINUATE HUMBE	1	REMARKS :	Inspec	tion ba	sed on 1	1.5.Fa	ney grad	ثد
1 1 1			at aco	licant	S Vequ	rst.		ncy grad	
21	A-FLICART -		1		t				
الللا	ON-SITE	<u> </u>	}			<del></del>			
CWT	MOURS L_L		f in the same	غامرة الأوالي المساعدة. عامرة الأوالي المساعدة	andha-an-	energy of the	a United St	etos }	
	0,T. 8rc.)		Department 4	of Agriculture	, do hereby	nspector of the certify that is	samples of	the FEE \$	
ENSPECTED	TRAVE		t .	bed product les were as		ed and the gr	ades as sh	O.T.: \$	
BY	MRES				<del></del>	-	<del></del>	EXP. \$	
	O.T. (vs.)		Den	re D	ioc_		7/5/	93 ESTIM	ATED TOTAL

INSPECT	:D:	0		)   <i>l</i>		3	··Ho	/: ur	Min. 0   0	AVP P M AVP					AGR FI	RUIT /	TURAL NO V	MAR	KETIN	DIVIS	RVICE SION
COMPL		01	72	1/1	913 -	<u>3</u>	0	<u>a:</u>	0 0 CID	NSTATE:					STA			ISF	EC	TIC	ON NOTESHEET
	- 1	1/21/2	ee 1	٧	Ln	0,				Bainhr	ide	je,	G	A		- 1	યાઃ 				
INSPEC POINT:	TION		<u>Sa1</u>	me													OTHER	R 40:	P. C	<u> 2. </u> *	5123
COHVE	YANCE N	10: L	ot	ins	pec	tio	<u>n</u>		TYPE:							1	CERT	FICAT	E NO.	EX	cample #2
Su.	JEE JEE	Number C	OR	N_[	ntaipar. M ( ) ( )	Descri	وأم	r Rod	uci (Brand, W EVILL	larkings, Siza, etc. Type	) % (*)	do Ma Q_(	teet: B <u>ra</u>	na	C.	1	0	) e	us	hel	5123 xample #2 1, Produce of USA
	45	0 c	ac:	lon	S																
						DEFEC	īs					SU	ZE.			ADDITIO	MAL II	NFORM	ATION		CWT :
			<u> </u>	CLUDING	RESTR	STAG	ADDIT		DESC	RIPTION OF		MIN.	MA	X.	A9.	2.47	42.4	5	Sq	Development af Eous	FEE
(count)	1	zi l				ANCES	TOLER	ANCES	1	FECTS		5	_	-	10,	17		cobs	3	4=+	OT \$
_	يو	R. DAW.		4											J. W	م د د ک	Freshiuss of	fo	fo h	and th	EXPENSES \$
SIZE	DEFEC	MINDE / SER.		\$					MOSTLY	OTHER	SIZE		妝	4	g.	35.	3	Filling	Covering	د امه	TOTAL \$
SAMPLE SIZE	TOTAL DEFECTS	1	Ē	DECAY /						:	UNDERSIZE		OVERSIZE		No. a	Vor	7.	1.13	Cov	Ž	REMARKS
<u>5</u> 8	90	10	17	0					MF ->	PE		Gen			58	P	FCC	<b>©</b>	WC	ଞ୍ଚ	Inspection based
64	120	60	1	0					MF	IM	2	5			64	13	1	1	V	/	on approximately
51	10	16	1	0		_		_	NWD	Smut	2	8			51	6	~	1	1		80% U.S. No 1
52	13	86	₩	0			_	-		PF, IM	2	(P)			52	0	/	1	<i>\</i>		quality at
54	13	59	1	0						IM, Sout	0	10			54	9	7	1	./	1	J J
55	10	40	$\Lambda$	0					MF >	ρF	16	_			55	16	1	/	./	7	request.
33			<del>, \</del>					-					-		-				V		1-1-900
1	21%	(91		0					MFBAF	NWD. IM, Smut	17				7	2/	,		-		
		W.		<del>                                     </del>			-			Lingsauch		-						ļ —			
				<del>                                     </del>														ļ		-	
				T														_			
-						$\vdash$										-			-		<b>†  </b>
				1				-													
			7.5	1	-									-				-	-		
	Nu	/\ =	M	tu	11	de	10/-		<b>/</b>		_						_				† <b></b>
				mm				JUC	-			$\vdash$		-							<b>†</b>
	m	¥ =	M	odes	14	w.	61	11													†
<del>                                     </del>	0	r_	P.	orle	7	17/	1	\alpha a													
<u> </u>	P	<u> </u>	· · ·	7.3	1	1 4														<del>                                     </del>	
<b> </b>				†	$f^-$	1		<u> </u>						<u> </u>		-					T
	-			+		<del>                                     </del>	<u> </u>	<del>                                     </del>	-							<del>                                     </del>	-			1	
		<del> </del>	<u> </u>	1				-	<u> </u>					-				1			<u> </u>
	_			+	1		-	-	:					<del>                                     </del>			$\vdash$				<b>†</b>
<b> </b>	<del> </del>			1	1		1				$\vdash$	1-									<del> </del>
					1	<u> </u>	-	-				<del>                                     </del>		$\vdash$		-					<b>+</b>
INSP	ECTO	R'S SI	GNAT	URE:		Ja	him		Do	_	٠	1	1	l	DA	TE:	7/:	21/	93	<del>!</del>	PAGE / OF /

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE FRUIT AND VEGETABLE DIVISION Example & 2

## FEDERAL-STATE INSPECTION CERTIFICATE

☐ SUBLOT

TARTED: 0 17	211 913 0	Our Min. RP S. counterfeit this certificate, or perticipate in any such act	e United States, make issue, aker longe, or ons, is subject to a face of not
Pricant: Pione	er Inc	Bainbridge, GA	
	AME	omaru: P.	0. *5123
FO FIGURE PARED	t inspection	DESCRIPTION OF PRODUCT	GRADE 353 22
SWEET	GEODATANER 450	"No Brand"	Approximately
CORN	cartons	100 01 2010	80% U.S. No 1
mixed colored		Generally 5 to 8 inches in length, mostly	quality
Kernel type		6/2 to 7/2 inches in length. Average 1%	0 3
		undersize.	
		Grade defects range 16 to 25%, average	
		21%, including 9%. serious damage, consisting	
-		of moduately filled to poorly filled, smut, immature, and not well developed.	
		immature, and not well developed.	
		No decay.	
<del></del>		, , , , , , , , , , , , , , , , , , ,	
			İ
			i
	· · · · · · · · · · · · · · · · · · ·		
ļ			
	l		1 1
VARIETY OF		RODUCTS:"MEET:"REQUIREMENTS:"OF:MARKETING:"ORDER: IF:CONTAINERS:"ARE PROADED BY THE APPLICANT:"AND ARE NOT BEING CERTIFIED: BY THE INSPECTO	OR UNICESS OTHERWISE NOTED.
	ATA ENTRY ONLY	REMARKS: Inspection based on approxim	ately 80%
	1 1 1 -		J
21	APPLICANT	u.s. No. 1 quality at applicants requ	usi.
	ON-SITE		
CWT	HOURS 11_		
1111	O.T. Bes.)	I, the undersigned a duly authorized inspector of the United S Department of Agriculture, do hereby certify that samples of	000000000
INSPECTED	TRAVEL	herein described product were inspected and the grades as sl by said samples were as herein stated.	ο.τ.: \$
BY	Miles L		EXP.: \$
	O.T. (firs.)	1 / Oper 17/2/1	ESTIMATED TOTAL
	OTHER \$	The state of the s	\$
EV 194 (10.93) (Pres	vious versions may be us	- I   // INSPECTOR'S SIGNATURE DATE IS	SUED

# Market Notesheets and Certificates

· .	
·	
	*****
	•
•	
	*
	P

APPLICATIONUMENT  2 1		A: NUMBER SOZE UNIT LIMITS  SANDO O O O O O O O O O O O O O O O O O O	R OF LOTE OF THE CONTRIBUTE OF
Carrier No. Stated by:  Applica  Additional Lot ID.:  Carrier Type / Name:  Doors:  ON OFF  Condition of Carrier:	nt OPEN C	O.7 / O 9 3 Inspection Completed: m m d d y y O.7 / O 9,3 APPLICANT: ALL PR Address: Anywhere SHIPPER: Sweet Core	1018 1018 1018 1018 1018 1018 1018 1018
75 Crates Y  TEMPRATURES:  38° - 40° F  B: FROODET:  CORN	BRANDS / MARKS: Yellow Kerne. crates /abco Express, fompo Mixed Coloned	Pompano led Sweet CORN led "Honey, 4 de ano Beach, FL, Pr  Kernels of Sweet	Beach, FL
C: PRODUCT:  NUMBER of CONTAINERS: MSP. COURT  YEMPERATURES:  NUMBER of CONTAINERS: MSP. COURT  TEMPERATURES:			
Condition of Load & Containers:  STACKED ON PALLETS AT ABOVE	LOCATION (	) INTAGT THROUGH COAD	( ) PARTLY UNLOADED

	سس	سإس	سلس	با		ړ۰		لـــــ	ب	ســــــــــــــــــــــــــــــــــــــ	<u></u>	لب	<u></u>		سل	<u>.</u>	لــا
		Α		PACK:		В			ACK:	С	;		IPACK:		D		
ľ	FT to	, T		rauk:	T				<b></b> .		•					4	
١	Gen 5-	7"L		size: .5¥2	-6"	1	• • • • • • • • • • • • • • • • • • • •	s	ØE:				SiZE:	٠٠٠٠,٠٠٠	······································	•••••	<b>-</b>
L	some cobs	s elipp	ed.		Clif	ped	,		<b>.</b> ,	,,			<u> </u>				
	200	);/ <b>:</b> 0;	ŒW.		Puz.	¥		DK		Fresh	X		Rust			Court	u.5
E	PLI Number	Other 1 D.	TEMP.	Sample	<b>\forall 7</b>	5.5		affec	ting es	f 1	s.D.					erafe	5"
۱	None	Yellan	38*	40	50	26	Points	10	\$	10	0		18			40	1
	None	Kernele	40'	25	18	0	Poorly Clipped	0		30	. (6		26			48	0
	None		38"	25	16	0	CHIPME	0		20	0		14			50	0
							-		<u>.</u>						-	460	1:
	· .			(	7%	(2).		(//.	1 (	87.	رازر		5%	/	Fail.	to W	ut
1							<u> </u>							(		led es	
ļ							<u> </u>		1					Kern	els p	lump	Mi
-							<u> </u>	<u> </u>	-	1	ļ			Husk	fresh	i gri	en
-						<u> </u>		<u> </u>									
			·				<del> </del>		-	Present	<del> </del>	Indu	61				
	<del></del>					ļ	<del> </del>	-	+-	Live	Υ—	Δ.	792		-		
	None	M:xel	39°	1	.0		mech.	-	┼	Woem	-	-	<b></b> -			<del></del>	0
	None	Colored		6	0	0	1	-	+	† '	$\vdash$	0	$\vdash$			6	
	None	Kernels	Un"	6	0	0	<del> </del>	0	1-	0	<del> </del>	16				4	0
	None	MATTE:	70	6	10	0	not	0	<del>                                     </del>	0		0		<u> </u>		1	0
١	None			6	0	0	L	0		0		0				6	0
	100.42			-			1		1 .								-
				1	11.		1	0	1	13%	1	3/.	1			6	0
								F									
															Cob	sel	pre
																	<u>ľ</u>
														611	p. h	usk	ed
				<u> </u>		<u> </u>		<u> </u>				A	usk	Rem	aini	19 15	fre
ļ	<del></del>			<u> </u>		ļ	1	_		<u> </u>	ļ	-	usk gre rne l	en.			<u> </u>
١		<u> </u>				<u> </u>	<u> </u>			1	<u> </u>	K	rall	1 ple	mp :	mi	Vcy
		ļ		ļ	L	<u> </u>		ļ.,		ļ			<u> </u>	<u> </u>	1 7		1
1	·····			<del> </del>	<u> </u>	ļ	↓	<u> </u>		<b>_</b>	ļ	<del> </del>	ļ	<u> </u>	ļ	<u> </u>	<u> </u>
1	<u> </u>	<del> </del>	ļ	<del> </del>		<b> </b>	1.45	┦		<b></b>	ļ	<del> </del>	ļ	<u> </u>	ļ	<b> </b>	<u> </u>
		-			ļ	<del> </del>	ļ	┼			┞	ļ	<del> </del>	<b> </b>	ļ	<del> </del>	-
	·		ļ	<del> </del>	<del> </del>	<del> </del> -	-	-			}		├	<del> </del>	-	ļ	<del> </del>
		<del> </del>	<del> </del> -	<del> </del>	<del> </del>	-	1-	╂	-	<del> </del>	-	╂	-		├		├
	PACI	A	tilio	4	E.	1:01	1	1	1	12	<u> </u>	-	-		-	<del>                                     </del>	┼
	PACI	50100	1	1000	100	0	010	10e	92	71.	11:5	74.1-	1	101	144	11	$\vdash$
1	REMARKS /	RESTRICT	ONS / SP	yvere I	IAAC	<u> PKL</u>	ahor	THE		1291	1110	<del>p</del> u	12	1	ne.	312	<u> </u>
		/						• • • • • •						<b></b>			
	•••••					• • • • • • •					· · · · · · · ·	• • • • • • • • • • • • • • • • • • • •	•••••				
	CARLOK Basi	is:			REF	ORTED	TO: J	<u> </u>	`			INSPEC	TED B	Y: ,	···	_	<del>.</del>
	HOURLY Bas				DAT	٠,١,٠	102	<u>.</u> .	TIME:	55A		ASSIST Ja	Jac	An	spec	tas	,
	TRAVEL Time	ø., <del></del>			REC	NESTED	BY:	1		3 J P		ASSIST	ED BY	<del></del>	<u> </u>		<del></del>
	EXPENSES				DAT	Ė	0/93	 	TIME:	·········		1	=	Die			
	EST. TOTAL	L:			- 1	7/1	0173	> :	- (	000	211	ya	ue .	,			

MWARWING Participal Pa	S. 9.9.3. Additional Lot 10: Shippen Sweet Tompa Inter	OORN "Honey" 4 doz.  CORN "Sweet Corn Express" U.S.Mo. 1 M. sed File Nived color. Kernels  CORN Sweet Corn Express "U.S.Mo. 1 M. sed Color. Kernels  CORN Sweet Corn Express "U.S.Mo. 1 M. sed Color. Kernels  CORN SWEET CORN EXPRESS "U.S.Mo. 1 M. sed File Nived color. Kernels	01 % 00 % (Indersize (	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Lot A: Fails to grade U.S. No. I account condition. Fails to meet count as Lot B: U.S. No. 1 Husked.	REMARKS: Lot B: Average 31. live uppms present, not after thing grade reported at applicant.s  reguest.  WARNING: Any person who knowingly shall falsely dee independ, aduly authorized inspector of the United States Department of Agricultum, to hereby certify that at the regions and make issues, aller, forge, or counterfelt this certificate, inspector a sine of not more and inspector as fine of not more incompleted and fine of not fine incompleted and fine in
--	--	--	--	---------------------------------------	--	--

APPLICATION MEER 22.11  2.11  OUT FULL: OTT FOURTH OF THE STATE COLUMN SCOOL OF THE STATE COLUMN	REVERSES. ACTON SY, SOCKENT CANAGE AND ACTON CONTROLS.   1   0   0   0   0   0   0   0   0   0
	A STATE ON US DEPARTMENT OF AGRICULTURE ACCORDING MALE THANKS THE SERVICE AND TEST SHOULD VEGE ABOVE ON STARTED TO SHOULD STARTED THANKS THE ACCORDING TO STARTED THANKS THE ACCORDING THANKS THE ACCORD
Additional Lot ID.:	016 013 913 110:010 A M. Inspection Completed:
Carrier Type / Name :	m m d d y y Hour Min. A/P
Mechanical Ke- Refrigeration Unit: Doors:	migerator 0,60,39,3 1,1:1,5 A M
	OPEN D My Produce
Condition of Carrier:	Address:
1 to 2 inches of to	SHIPPER:
throughout load.	Best CORN
Inspection Site: Applicant	s Dock Somewhere, CA.
ICMPENATURES:	BRANDS / MARKS: White Kerneled Sweet CORN "No Brand" stamped "2 day."
39'-43' F B: PRODUCT: + A D (A)	Vallas Karneled Swoot POPN in apprecioner parkage
MUMBER of CONTAINERS: INSP. COUNT	Yellow Kerneled Sweet CORN in consumer packages printed "Super CORN, U.S. Fancy Husked 4 ears
100 master y	Best Coen, Somewhere, CA, Produce of USA "in master containers stamped "12/4 pack, Produce of
39° - 40° F	master containers stamped "12/4 pack, Produce of
C: PRODUCT:	usa"
NUMBER of CONTAINERS: INSP. COUNT	
TEMPERATURES:	
D: PRODUCTY	
NUMBER of CONTAINERS: WSP. COUNT	
TEMPÉRATURES :	
Condition of Load & Containers: ( ) STACKED ON PALLETS AT ABOVE	E LOCATION WINTACT THROUGH LOAD ( ) PARTLY UNLOADED
10 rows, 5 Jayers.	Inspected during process of unloading.
	J

	A				B_				<u> </u>	,				D		
PACK:	T		PACK:	T			PA	ж:				PACK:				
Gen 5- W 6	9 ,-7*.	- 1	size:	5-6	·/ (	OI.pp	2 d   502	ė.	••••••	• • • • • • • • • • • • • • • • • • • •	•••••	SØÉ:			•••••	•
300	7.Z9);	(BE)		Qual.	×		DC		Disc. Husk	7		Live Aphids aff. he	4.		u.s. 5"	Col
PLI Number	Other 1 D.	TEMP.	Sample	0. Y	5.0.				4.6.	أنند		ATT. NA	uşteş			
None	White	43"	20	10	0	NUD	0		59			0			0	٤
11	Kernds		25	0	0		0		28			0			10	4
u		39°	24	0	0	AFRE	0		0			2			0	ì
11			23	26		NF4F PF	D		14			0			0	٤
41		40°	کد	0	0		0_		$\vdash \vdash \vdash \vdash$			0			0	é
41			25	0	0		0		0 4 <sup>©</sup>			_0			1@	_
11		413	24	312	0	Inna.	0		4	,		0			0	٥
u			25			LMMA			56						0	-
- 11		39"	24	0	0		0		0			0			0	3
		21	03	Ž	9		0					الم				٥
				37. (	11	<b>`</b>	10		8%			1.7			11	۲
*/	<b> </b>						<u> </u>		<b>"</b>			<del>""</del>		<b></b>	fails	-
<del> </del>											Ke	rnel	5 54	. Alu	مي و	
<del></del>				Qua	1:44		DK			Δ			en fo			ļ.
				I/D			affect	ing ker	els	S.D.	HELL	I	L D	5.D	0	6
None	Ve (bow	39"	4	ے ف	0 -		0			16		163	E	0		L
<u>I</u> I	Kernels		4	5/1	رها	Smut	0			0		0	0	0	<u> </u>	L
	ļ	400	4	رميا	0	ald-	1(25			260		0	0	0		L
ч				2/6	0	mich				0	ļ	0	0	0	<b>}</b>	Li
u			4	03 60	0	Smut	163			168		0	0	0		L
41	ļ	ļ	4	1/1		Janua	0.65	-		0		0	0	0		Į
		<u> </u>	4	0	0	<del> </del>	100			0	<u> </u>	0	0	0	<del> </del>	ľ
<u>u</u>			4	31/0	0	mech	0_		ļ			(62		0	├	1
<del>"</del>			4			-	10	-		0		10	65	126	-	╀
			7	0	0	┼─	0	<del>                                     </del>		0		2			<del>  -</del>	ď
		<b></b> -		13/1	8/./	<del> </del>   -	8%		-	13%		10%	(5/	3%	1	ľ
		l		1317	E. C	¥•	Far			13/		-	2/-	<del>\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ </del>	_	۲
Fey He	leeb			t		<del>                                     </del>	Stay	3								t
						$\Box$	-					He	ske	d.		
												Kur	nels	ع ليها	Kung	T
															mil	E
									<u> </u>							Ľ
	<u> </u>	<u> </u>	<u> </u>	1	<u> </u>	<u> </u>	<u> </u>	<u>L.</u>	<u> </u>	L	<u> </u>		<u> </u>	<u> </u>	<u> </u>	L
Presence PACA	E of	aphio	Is r	epor	ted	ed at a	dus 1991	car	its	ces (Lg	5 o ues	τ.	en la	adi	'ng.	•••
CARLOT, Basis		10 00	IA11.	REP	ORTED T	را رہ o:	140	<i>†</i>	·	11						
HOURLY Basi				DÁT	//2	lan	J.A.C	t νΕ: ///	10 au		/	Jak	L	isse	e7	4
					u 1.7	7 6		11.					~~	,	- 0	-

ACENTIFICATION STATION AND AND AND AND AND AND AND AND AND AN	40 % Substitute Cokin well filled pour lyfilled, imma here, not will dead of the 900 % Discolored Husks (0 to as 3:1)	Decay  Cheksum.  Cheksum.  Decay  Cheksum.  Decay  Cheksum.  Decay  Cheksum.  Decay  Checksum.  Cheksum.  Cheksum.  Cheksum.  Cos Overnatus (O to SO').  Checksum.  Checksum	Fails to gy  H. Huvey  Leguls  righ, or countriel the such actions, is subjected the s
		118881888	GRADE: Lot A: Fails to Lot B: Fails A AREMARKS: Lot A: Fails A AREMARKS: Lot A: Fails A AREMARKS: Lot A: Any person who knake, issue, alter, forge, or counterfe or participate in any such actions, is of not more than \$1,000 or Imprisonn than one year, or both.    Total A AREMARKS: Lot A AREMARKS   Same of the counterfe or participate in any such actions, is of not more than \$1,000 or Imprisonn than one year, or both.

2	C: MANGER SIZE UNIT	A; NUMBER SZE UNIT 20032  SIM. (2   0   1   1   1   1   1   1   1   1   1	# EVERSES ACION - PLODO GRITIFICATE MAMBRICANE
NOID  BEEFE GOUSEF SEE  Carrier No. Stated by:	LI	INSPECTION TO THE STATE OF THE	44 _
Additional Lot ID.:		0 15 2 5 9 3 Inspection Completed:	0, 1: 0, 0 P M Hour Min. A/P
Carrier Type / Name :  Refrigeration Unit: Doors:		0.5 2.5 9.3    APPLICANT:	0,2:0,0 P M
ON OFF Condition of Carrier:	PEN	OUR PRE Address: HERE, N SHIPPER:	'y
Inspection Site: Applicant's		PREMIUM Address: Someplace	PRODUCE.
Sweet CORN MARKER OF COUNTY SOO CRATES N HEATERATURES:	eranos i marks: Mixed colo stamped "U USA"	red Kernels "No US Fancy," "Ku.	Brand", Produce g
B: PRODUCT:	\		
TEMPERATURES:			
MUMBER of CONTAINERS: MSS. COUNT YEMPERATURES:			
D: PRODUCT:			X
NUMBER & CONTANENS: WSP. COUNT TEMPERATURES:			
Condition of Load & Containers:  (X) STACKED ON PALLETS AT ABOVE L	OCATION (	) INTACT THROUGH LOAD	( ) PARTLY UNLOADED

		Α				В			<del></del>	<u>C</u>	<u> </u>		IPACK:		D			
PACK: FT			PACK:					PACK: PAC										
	7-9	@ 7½	-8 <b>%</b>	SØE:				SØ	SIZE: SIZ						5 <b>25</b> :			
	<i>50</i> 0	Other	i zaii		Quaj.	74		الا مطور مالا	ing	Disc. Husks	7	Live Worm	S			Count per Crati	U.	
	PLI Number	ID.	TEMP.	Sample	I/D Y	٠٨٠	NWC		6	1/0.	5.0.	T.			<del></del>		_	
	None	Mired	40	36	12/0	0		18	<u> </u>	5/	0	0	<u>-</u>			36	0	
	4	colored	42	25	170	0	Trim	0	-6	0/0	0	4			<del></del>	37	0	
		Kernle	41	25		0	<del> </del>	Q	- 6	1/0	0	0				36	0	
	u u		41	25	0	0	Bird I.		6	2/0	0					36 35	0	
	<u>"</u>			25	2/0	0		0	6	40	0	0				1	0	
	ч			3	1/1	1	smut	14	7	146	10	0				36	0	
	4			36	110	0	NWC	0	┢	0	5	14				36	0	
				( <del>)</del>	1/0		-			<b> </b> \times		-					Ž	
	٠.			7	37.(Y	VIII		1%		47.1	1110	1/37				36		
			<del></del>							7		II.	chias					
												affe	ruls					
	US P	7									<u> </u>	<u> </u>	<u> </u>			<u>_</u> .	L	
				<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	ļ					r.E		
				<u> </u>	<u> </u>		<u> </u>		ļ	<u> </u>	<u> </u>	<u> </u>	Keri	els	plu	yo z	Mej	
		<u> </u>			ļ	ļ	<u> </u>	<u> </u>	<u> </u>				<u> </u>			<u> </u>		
		ļ	<u> </u>	ļ	<b> </b>	1	<b> </b>	<b>↓</b>	ļ		-	<b>├</b>	<u> </u>		<u> </u>	<del> </del>	┡	
		1,	<u> </u>	<del> </del>	<b> </b>	<del> </del>		ļ	-	╂	-	<del> </del>	<del> </del>	<del>                                     </del>		1	╀	
		<del> </del>	ļ	<del> </del>	┼	┨	<del>                                     </del>		-	┼	<del> </del>		<del> </del>			+-	╁	
		<del> </del>	-	<del> </del>	<del> </del>	┼	1		╂	┼	1	<del> </del>	<del>}</del>		<del> </del>	╁┈	╁	
		+-		┼	}	+-	$\vdash$	├	1-	<del> </del>	+-	┼─		<del> </del>	_	┼	╁╌	
		<del> </del>	<del> </del>	┼	<del> </del>	┼─	+	<del> </del>	<del> </del>	$\vdash$	<del>                                     </del>	<del> </del>	-	-	<del> </del>	+-	╁	
			<del>                                     </del>	<del> </del>	┼─	+	1	┼	<del> </del>	<del> </del>	-	1	<del>                                     </del>	1		+	T	
		<del>                                     </del>	-	<del> </del>	1-	╁──	+-	1	1	1	1	T	<del> </del>			$\vdash$	十	
			<del>                                     </del>	1.	1	1	1	T	1	1	†	1	<b>†</b>			<del>                                     </del>		
				1	1					1							T	
		1		1	1						1						T	
				1														
													T					
						-												
												1					$\perp$	
	ļ		ļ		1		1	<u> </u>	1	1	1		<u> </u>		<u> </u>	1	1	
			<b></b>		1	<u> </u>	1		1		1	<del> </del>	<del> </del>	<b> </b>	<u> </u>		1	
	DCM BYD :	DEGLES	101/2 1 2			1				1		١.,		ب	<u> </u>	1	1_	
	REMARKS /	nt de	term	inca	plie * 1	cant Lap	st	can	5 a 13	regi	muu ust	r of	.7	nche	<u>ن</u> کی ا	n Ge	194	
		<b>,</b>								•								
	CARLOT Bas HOURLY Bas	\ ——			- DÁ	PORTED	TO: 5/42	Don	ME:	550		INSPEC	TED B	r:		Dae		
	TRAVEL Tim	. · \			L	-1-	( '-	<u>, : : : : : : : : : : : : : : : : : : :</u>					ED BY					

AMPLE *3	ord king 500 crass  order 7/2 to 6 inc  th. No undersice  state,  trate,	Count determined at his spokent and on the ESTIMATED TOTAL hown by said samples were as herein sitted.  History Official  History Official  **A **E **E **E **********************
Lot 102 Addissing HERE, NY Lot 102 Shippon PREMIUM TRODUCE  Addissing Shippon PREMIUM TRODUCE  Addissing Phicant's Warehouse  Thomas Hara Marange Control  Thomas Shippolicant's Warehouse  Thomas Shippolicant's Warehouse	Cuality (not Nellowerd) Discoloration of the Hellowerd) Dican Checksum	ograde U.S. Fancy, Tinch minimum length, account condition,  ant states ears must be a minimum of Tinches in length. Count determines  reguest.  request.  Inspector squall falsely lithe undersigned, a duly authorized huppodor of the United States Department of Agricultum, to hardy earlify that at the request of the sociology is subject to a fine actions, is subject to a fine inspector a sine inspector squally and occidence and the available when as hear in state.  Here E. NY  Here E. NY
10   Add   O   O   O   O   O   O   O   O   O	A. 40 10 43 EP 50 00 00 00 00 00 00 00 00 00 00 00 00	GRADE: Fails to grade U.S. Fane REWARKS: Applicant states ears applicants request WARNING: Any person who knowingly shall falsely make, issue, alier, lorge, or counterfelt this certificate, or participate in any such actions, is subject to a fine of not more than \$1,000 or imprisonment for not more than one year, or both, enew FV.300 (1-80) And EV.300 (1-80) which are