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Marketing
Service

Fruit and
Vegetable
Division

Processed
Products
Branch

Frozen Brussels Sprouts

Grading Manual

Frozen Brussels Sprouts
February 1981

This manual is designed for Processed Products Branch personnel of the U.S. Department of Agriculture. Its purpose is to give background information and guidelines to assist in the uniform application and interpretation of U.S. grade standards, other similar specifications and special procedures.

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Address inquiries to:

Chief, Processed Products Branch
Fruit and Vegetable Division, AMS
U.S. Department of Agriculture
P.O. Box 96456, Rm. 0709, So. Bldg.
Washington, D.C. 20090-6456

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SUGGESTED ORDER FOR ON-LINE GRADING OF A SAMPLE UNIT

SAMPLING PROCEDURES

1. LOT (Stationary or moving lot).

Follow → { Regulations (109-A-1)
Sampling Procedures (120-A-1)
Lot Sampling Plan (120-A-7)
Condition of Container (125-A-1)

2. ON-LINE

Follow → { Regulations (109-A-1)
CuSum Sampling Plan (120-A-6)
Time Sampling (120-A-4)
In-plant Inspection (160-A-1; 162-A-1)
Condition of Container (125-A-1)

NONQUALITY PROCEDURES

1. Time Sampling (120-A-5)
2. Net Weight (128-A-10)
3. Fill of Container (128-A-40)
4. Thawing Procedures (130-A-34)
5. Cooking Procedures (130-A-38)
6. Enzyme Inactivation (135-A-12)

} → Follow (130-A-1)

CLASSIFICATION OF DEFECTS

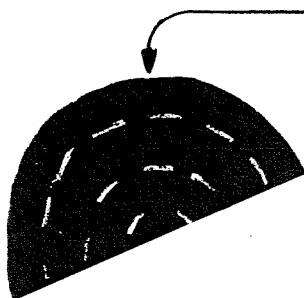
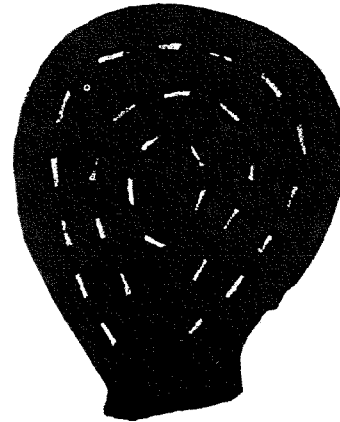
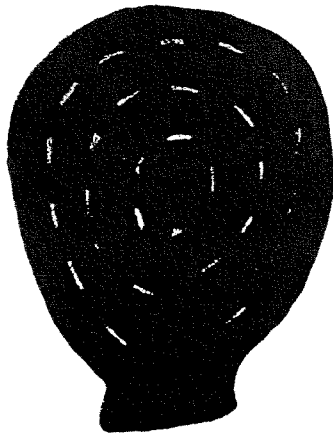
Other than the prerequisite quality factors (such as "brightness", "varietal characteristics", and "flavor and odor"), any Brussels sprout which fails to meet a requirement of the standards is classified as a defect. The defects are classified as "minor", "major", "severe" or "critical". "Total all classes" of defects means "critical", plus "severe", plus "major" plus "minor".

The tolerance for each class of defects is set to AQLs (Acceptable Quality Level). Usually, the tolerance is the same as the number of defects that would have been allowed in the old U.S. standards, a purchase specification, or other similar buying guide. But, the old tolerance might have been adjusted slightly to consider newer methods of harvesting and processing the product.

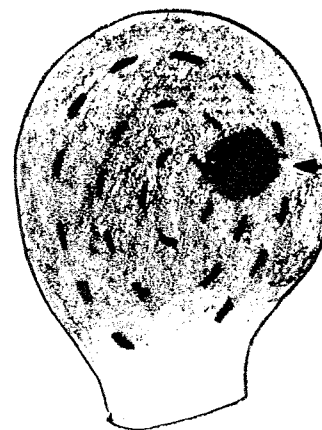
Defects are either related or unrelated. If the defects are related, count only the worst defect. If the defects are unrelated, count each defect. For example, a sprout might be: "fairly well colored" (major) and "blemished" (minor) and "poorly trimmed" (major). It would contain 3 "total all classes" of defects on one defective unit.

SUGGESTED ORDER FOR ON-LINE GRADING OF A SAMPLE UNIT

DEFECTS VS DEFECTIVES



Poorly trimmed



Blemish

Fairly well colored

3 defects but only 2 defective sprouts in the above example.

SUGGESTED ORDER FOR ON-LINE GRADING OF A SAMPLE UNIT

1. Select at random 50 Brussels sprouts from the processing line.
2. Evaluate the sample unit for varietal characteristics. Assign the letter grade "A" or "SSTD" for varietal characteristics in the "prerequisites" section of the defect tally sheet.
3. Determine the color of the individual sprouts by considering the overall color of the outer surface of the bud. Handle each unit that is not a definite green, turning it to observe the color.

Record on the defect tally the number of "fairly well colored" units. If the sample unit fails requirements for grade B, adjust the defect tally. "Fairly well colored" is a defect in grade A and B only. Disregard "fairly well colored" for grade C.

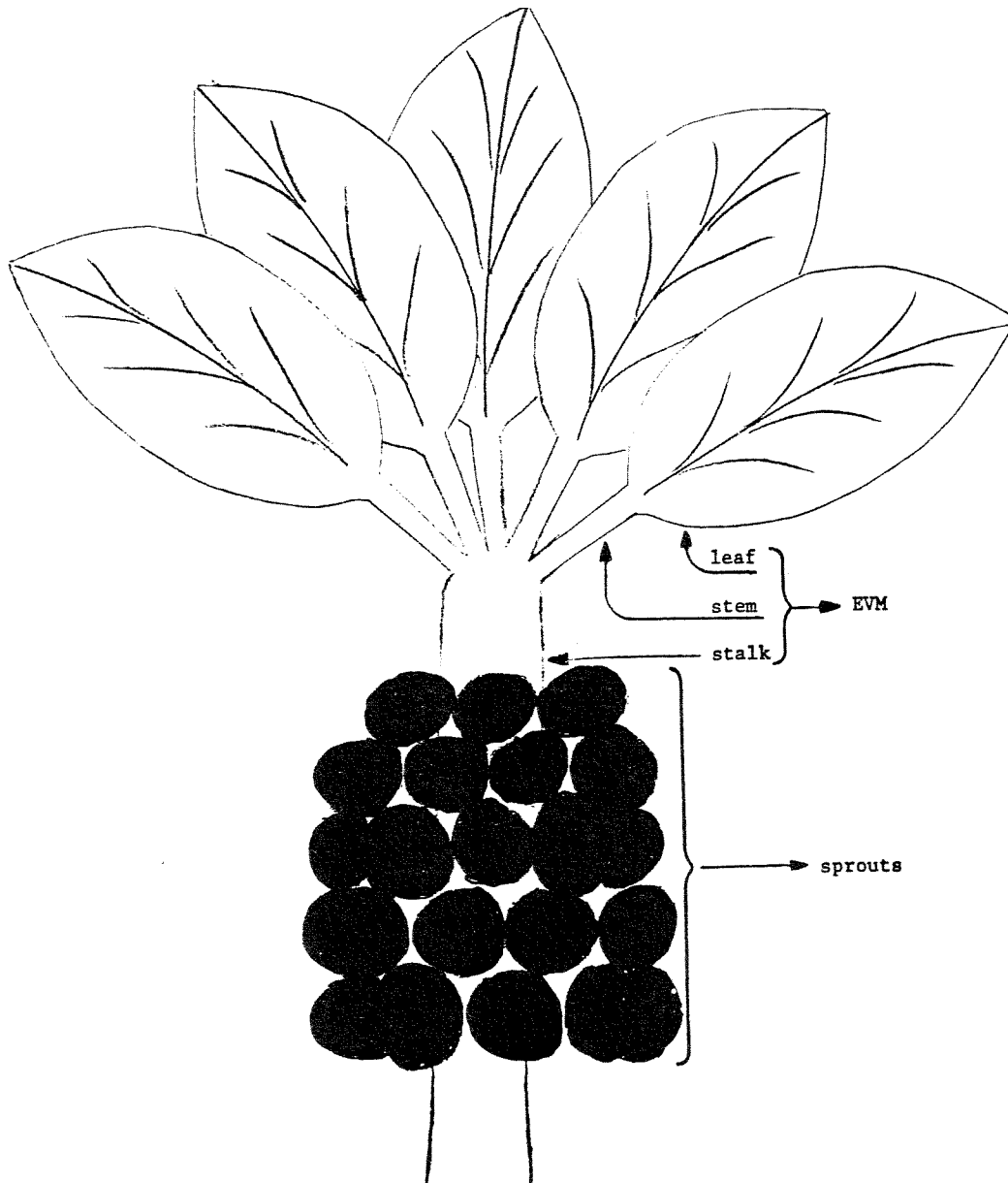
4. Count the number of pieces of Extraneous Vegetable Material (EVM) in the sample unit. EVM includes grass, weeds or material from the Brussels sprouts plant other than the bud leaves and fragments. Record on the defect tally as follows:

Critical - each piece of EVM.

(See the next page for example of EVM).

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SUGGESTED ORDER FOR ON-LINE GRADING OF A SAMPLE UNIT



SUGGESTED ORDER FOR ON-LINE GRADING OF A SAMPLE UNIT

5. Count the number of sprouts that are blemished. Blemished means that the sprout is affected by decay, insect injury, or surface and/or internal discoloration. Cut open enough buds to see if internal discoloration is present. Record the number of blemished sprouts on the defect tally as follows:
 - a. Severe (decay, dark pink centers);
 - b. Major; or
 - c. Minor.
6. Count the number of sprouts that are poorly trimmed. Poorly trimmed units include excessively trimmed as well as insufficiently trimmed Brussels sprouts. Use the guides in the "Illustrations" section of the manual to evaluate trim. Record on the defect tally the number of poorly trimmed sprouts as follows:

Major - each poorly trimmed sprout.

NOTE: BRUSSELS SPROUTS FROM WHICH THE LEAVES HAVE BEEN STRIPPED ARE NOT CONSIDERED POORLY TRIMMED. THESE UNITS ARE EVALUATED UNDER CHARACTER.

7. Visually scan the sample unit for those sprouts that are not "good character". Misshapen heads are considered "fairly good character". "Bushy" sprouts are usually "reasonably good character" or "fairly good character".

Separate the sprouts that are not "good character" into "reasonably good", "fairly good" or "poor" character classifications, using the definitions in the standards, illustrations and the definitions on the following page.

Record on the defect tally the number of units that are "reasonably good" (B) character, "fairly good" (C) character or "poor" (SSTD) character. If the sample unit fails requirements for grade A or B, adjust the defect tally. Only "fairly good" (C) character and "poor" (SSTD) character are defects for grade B. Disregard "reasonably good" (B) character for grade B. Only "poor" (SSTD) character is a defect for grade C. Disregard "fairly good" (C) character for grade C.

SUGGESTED ORDER FOR ON-LINE GRADING OF A SAMPLE UNIT

7. Character (continuation).
 - a. Good character
 - (1) Compactness - Compact or very compact. Reasonably firm.
 - (2) Tenderness - Very tender with no sign of toughness.
 - (3) Formation - Well rounded to pear shaped.
 - b. Reasonably good character
 - (1) Compactness - Reasonably compact. Fairly firm.
 - (2) Tenderness - Tender to slightly tough.
 - (3) Formation - Pear shaped to oval, but not deformed.
 - c. Fairly good character
 - (1) Compactness - Fairly compact.
 - (2) Tenderness - May be tough.
 - (3) Formation - May be deformed or bushy.
 - d. Poor character - Fails the requirements for fairly good character.
8. Total the classes of defects on the defect tally and compute the CuSum values as outlined in File Code 120-A-6.
9. Select at least one standard sample unit size (50 sprouts) for each production period code. This sample unit is to be selected after the sprouts have been frozen. It may be comprised of one container or multiple containers.
10. Open the container(s) and allow the product to thaw slightly. This will reduce further breakage of the bud leaves when the sprouts are taken from the container(s).

SUGGESTED ORDER FOR ON-LINE GRADING OF A SAMPLE UNIT

11. Carefully remove the sprouts and all of the leaf material from each container. Place them in a deep grading tray to thaw. From the last (or only) container required to obtain a sample unit size of 50 sprouts, remove leaf material in an amount proportionate to the number of sprouts selected at random for examination of the "frozen prerequisite" factors.
12. Remove the thawed sprouts individually from the water, making sure to rinse off any pieces of leaves and any grit or silt into the water. DO NOT DISCARD THE TRAY AND ITS CONTENTS. Temporarily, set the tray aside. You will return to the tray in step 15 of this procedure.
13. Spread the sprouts on a shallow grading tray and evaluate the sample unit as a whole for brightness. Record the letter grade for brightness as "A", "B", "C" or "SSTD" in the "prerequisites" section of the defect tally.
14. Cook a portion of the sample unit, according to Branch instructions for cooking frozen vegetables, to evaluate flavor and odor. Include, in the portion to be cooked, any sprouts with dark pink centers. Assign the letter grade (A or SSTD) for flavor and odor in the section for "prerequisites".

CAUTION: DON'T ADD TO THE DEFECT TALLY ANY
CLASSIFIED DEFECTS FOUND DURING
EXAMINATION OF THE FROZEN
PREREQUISITE CHECK.

15. Pour the contents of the tray (water, loose leaves and grit or silt, from step 12) into a clean pan through a previously tared 20 mesh screen. Rinse the tray and the material on the screen with a fine stream of water (as from a wash bottle) to insure transfer of any grit or silt. Allow the screen and its contents to drain for two minutes.
16. Determine the weight (in grams) of loose leaves and small pieces. Each 1 g increment (to the nearest whole gram) of leaves and pieces equals 1 defect. Record in the "prerequisites" section of the defect tally the number of defects. Assign the letter grade (A, B, C or SSTD) for loose leaves and small pieces.

CAUTION: SEE "SPECIAL ON-LINE SAMPLING
SITUATIONS; USE OF CUSUM PLANS FOR
PREREQUISITE QUALITY FACTORS."

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SUGGESTED ORDER FOR ON-LINE GRADING OF A SAMPLE UNIT

LOOSE LEAVES AND LOOSE SMALL PIECES			
TOLERANCE			
	Grade A	Grade B	Grade C
AQL <u>1</u> /	15.0	40.0	65.0

1/ AQL expressed as defects per hundred units.

17. Carefully, without losing any grit or silt, pour most of the water from the sediment pan.
18. Observe the amount of grit or silt in the bottom of the pan. Assign the letter grade "A", "C", or "SSTD" for grit or silt in the "prerequisites" section of the defect tally.

NOTE: NORMALLY, GRIT OR SILT IS NOT A PROBLEM IN BRUSSELS SPROUTS EXCEPT WHEN HARVESTING OCCURS DURING OR IMMEDIATELY AFTER A RAIN STORM OR A PROGRAM OF HELICOPTER DUSTING.

19. Resample the production period in question if any frozen sample unit drawn in step 9 of this procedure fails the designated grade. Any procedure approved by the Branch for reevaluation of "frozen prerequisites" may be used to accept or reject the production period. If the production period isn't resampled, it may be failed on the basis of one failing "frozen prerequisite" check.
20. Occasionally, equipment breakdown (flo-freeze unit, etc.) causes product deterioration. If the defective product is isolated, separately identified and set aside, don't count it as a portion of the production code that is being run.
21. Optionally, the entire evaluation of the sample unit and the classification of defects may be made on the product directly out of the freezer. Use CuSum, but bypass the selection of the sample unit from the production line prior to freezing. Omit step 19 of this procedure.

SPECIAL ON-LINE SAMPLING SITUATIONS

1. CHECKING "FROZEN PREREQUISITES".

Several prerequisite quality factors (such as flavor and odor) should be checked after freezing. If the other quality factors are evaluated from sample units drawn from the processing line (prior to freezing) you should evaluate at least one standard sample unit size (50 sprouts) for each production period code. If the "frozen prerequisites" check fails to meet the requirements of the intended grade, the period code in question may be resampled and reevaluated by any procedure approved by the Branch. Because it may be difficult for you to resample the product once it is warehoused, draw enough containers from the production line (frozen) to satisfy the requirements of increased sampling, should you need the additional containers. Any unopened containers could be returned to the freezer storage. Your check might be done as follows:

- a. Draw at least one standard sample unit size for each 30 minutes of production. Mark the time. Evaluate the first container from the period code. Accept the period if the first container meets the intended grade. Open and evaluate the additional containers from the period code in question if the first one fails. Allow a failure to occur at the rate in File Code 120-A-4 for time sampling deviants (one container could fail from containers 4 through 8). If a failure does occur, the recorded time of the "frozen prerequisites" check could be used to pinpoint the portion of the period code containing the problem.
- b. Draw at least one container for each 30 minutes of production. Make sure that you have enough product for one standard sample unit size from each period code. At random, open all of the containers and select one standard sample unit size for examination. The period code would pass or fail based on just one check. If a failure does occur, the exact time, or portion of the period code containing the problem could not be pinpointed. However, the period code in question could be resampled and reevaluated as in (a) above.

2. USE OF CUSUM PLANS FOR PREREQUISITE QUALITY FACTORS.

Consider prerequisite quality factors independent of the classified quality factors. Although the prerequisite quality factor of loose leaves and small pieces is set to AQLs and appropriate CuSum sampling plans, don't use the CuSum rules in File Code 120-A-6 for this prerequisite, except for assigning a grade to the period code.

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SPECIAL ON-LINE SAMPLING SITUATIONS

3. ADJUSTING A DEFECT TALLY.

If a sample unit fails to meet the requirements of grade B, adjust the defect tally before comparing the defects against the CuSum values for grade C. This must be done because "fairly well colored" (major defect) is not counted against grade C. A grade C sample unit could have all "fairly well colored" units. Adjust the defect tally as follows:

M A J O R	Fairly well colored (A & B only)				6	12	8	9	10	7
	Poorly trimmed				3	2	3	3	5	4
	Blemished				5	15	6	4	13	7
	TOTAL MAJOR				14	17 ²⁹	17	16	18 ²⁸	18
	CUSUM	Grade A	1	8	3					
		Grade B	3	18	9	0	⑨	8	6	⑨ 9
		Grade C	3	18	9		C			C

T	TOTAL ALL CLASSES					25	40 ²⁸	21	22	38 ²⁸	21
O	CUSUM	Grade A	2	12	5						
T		Grade B	3	22	9	6	⑨	8	8	⑨	8
		Grade C	4	27	10		C			C	
SAMPLE UNIT GRADE						B	C	B	B	C	B
PACKER'S GRADE: / FINAL GRADE:											

SUGGESTED ORDER FOR LOT GRADING OF A SAMPLE

1. Follow the procedure outlined in File Code 120-A-7 (Lot Single Sampling Plan [Attributes]).
2. Use the same defect tally sheet for lot grading as you would use for on-line grading. Ignore the section of the tally devoted to CuSum values.

NOTE: THE FOLLOWING PREREQUISITES ARE TO BE EVALUATED ON A CONTAINER-BY-CONTAINER BASIS: BRIGHTNESS; VARIETAL CHARACTERISTICS; LOOSE LEAVES AND PIECES; GRIT OR SILT; ODOR (Tentative).

3. Weigh and record the net weight of each container.
4. Open each container and allow the product to thaw slightly. This will reduce further breakage of the bud leaves when the sprouts are taken from the container.
5. Carefully remove the sprouts and all of the leaf material from each container. Place them container-by-container into deep grading trays to thaw according to Branch instructions for thawing frozen vegetables.
6. Remove the thawed sprouts individually from the water, making sure to rinse off any pieces of leaves and any grit or silt into the water. DO NOT DISCARD THE TRAY AND ITS CONTENTS. Temporarily, set each tray of water, loose leaves and grit or silt aside. You will return to the trays in step 15 of this procedure.
7. Spread the sprouts on shallow grading trays and evaluate on a container-by-container basis the following prerequisites:
 - a. Evaluate "brightness" and record the letter grade (A, B, C or SSTO) in the prerequisites section of the defect tally;
 - b. Assign the letter grade (A or SSTO) for "varietal characteristics" in the section for "prerequisites";
 - c. Evaluate the sprouts for "odor". Any container with sprouts "suspect" of having an off-odor should be retained for evaluation of flavor at a later step in this procedure. The "suspect" sprouts should be kept physically separate from the other containers, but must be evaluated for "classified defects" before cooking. If no off-odor is detected, tentatively assign the letter grade "A" for flavor and odor in the "prerequisites" section of the defect tally.

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SUGGESTED ORDER FOR LOT GRADING OF A SAMPLE

8. Assemble mentally or physically (except any "suspect" off-odor sprouts as mentioned in step 7) all of the sprouts from all of the containers into one sample. Adjust the total number of sprouts to equal one of the sample sizes on the following page. (See also the next page).
9. Determine the color of the individual sprouts by considering the overall color of the outer surface of the bud. Handle each unit that is not a definite green, turning it to observe the color.

Record on the defect tally the number of "fairly well colored" units in the sample (not each container). If the sample fails requirements for grade B, adjust the defect tally. "Fairly well colored" is a defect in grade A and B only. Disregard "fairly well colored" for grade C.

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SUGGESTED ORDER FOR LOT GRADING OF A SAMPLE

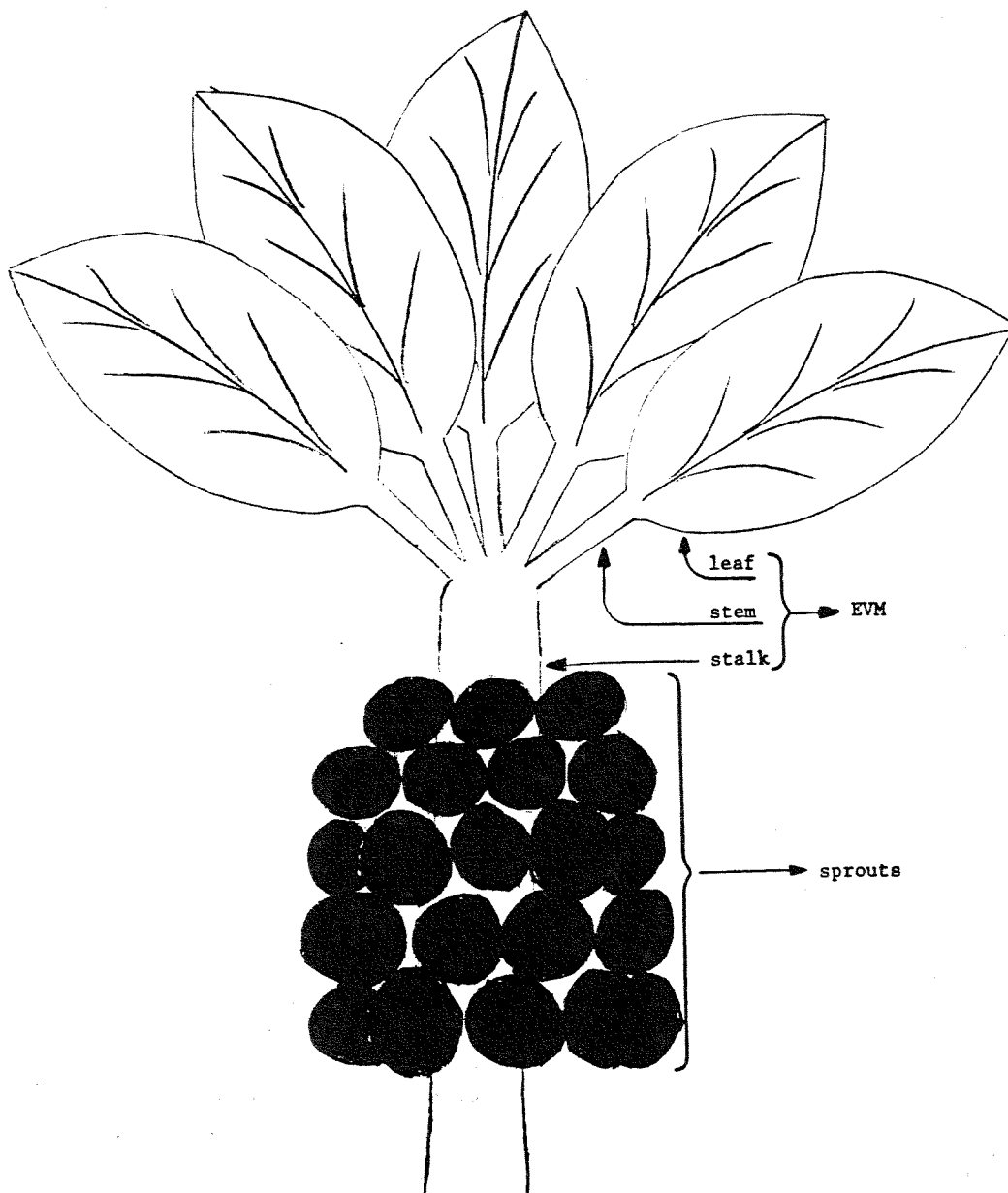
Sample Size for Classified Defects	Source of Acceptance Numbers Regulations (109-A-1)	
	Table (plan)	Sample Units
78	XVI (13)	6
126	XV (6)	21
150	XVII (25)	6
169	XVI (13)	13
174	XV (6)	29
273	XVI (13)	21
300	XVIII (50)	6
325	XVII (25)	13
377	XVI (13)	29
525	XVII (25)	21
600	XIX (100)	6
650	XVIII (50)	13
725	XVII (25)	29
1050	XVIII (50)	21
1300	XIX (100)	13
1450	XVIII (50)	29
2100	XIX (100)	21
2900	XIX (100)	29

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SUGGESTED ORDER FOR LOT GRADING OF A SAMPLE

10. Count the number of pieces of Extraneous Vegetable Material (EVM) in the sample (not each container). EVM includes grass, weeds or material from the Brussels sprouts plant other than bud leaves and fragments. Record on the defect tally as follows:

Critical - each piece of EVM.



SUGGESTED ORDER FOR LOT GRADING OF A SAMPLE

11. Count the number of sprouts that are blemished. Blemished means that the sprout is affected by decay, insect injury, or surface and/or internal discoloration. Cut open enough buds to see if internal discoloration is present. Record on the defect tally the number of blemished sprouts in the sample (not each container) as follows:
- a. Severe (decay, dark pink centers);
 - b. Major; or
 - c. Minor.

12. Count the number of sprouts that are poorly trimmed. Poorly trimmed units include excessively trimmed as well as insufficiently trimmed Brussels sprouts. Use the guides in the "Illustrations" section of this manual to evaluate trim. Record on the defect tally the number of poorly trimmed sprouts in the sample (not each container) as follows:

Major - each poorly trimmed sprout.

NOTE: BRUSSELS SPROUTS FROM WHICH THE LEAVES HAVE BEEN STRIPPED ARE NOT CONSIDERED POORLY TRIMMED. THESE UNITS ARE EVALUATED UNDER CHARACTER.

13. Visually scan the sample for those sprouts that are not "good character". Misshapen heads are considered "fairly good character". "Bushy" sprouts are usually "reasonably good character" or "fairly good character". Separate the sprouts that are not "good character" into "reasonably good", "fairly good" or "poor" character classifications, using the definitions in the standards, illustrations and the definitions in this step of the lot grading procedure.

Record in the "character defects" section of the tally the number of units in the sample (not each container) that are "reasonably good" (B) character, "fairly good" (C) character or "poor" (SSTD) character. If the sample fails requirements for grade A or B, adjust the character defect tally. Only "fairly good" (C) character and "poor" (SSTD) character are defects for grade B. Disregard "reasonably good" (B) character for grade B. Only "poor" (SSTD) character is a defect for grade C. Disregard "fairly good" (C) character for grade C.

a. Good Character

- (1) Compactness - Compact or very compact. Reasonably firm.

(see also next page)

SUGGESTED ORDER FOR LOT GRADING OF A SAMPLE

13. Character (continuation).

(2) Tenderness - Very tender with no sign of toughness.

(3) Formation - Well rounded to pear shaped.

b. Reasonably good character

(1) Compactness - Reasonably compact. Fairly firm.

(2) Tenderness - Tender to slightly tough.

(3) Formation - Pear shaped to oval, but not deformed.

c. Fairly good character

(1) Compactness - Fairly compact.

(2) Tenderness - May be tough.

(3) Formation - May be deformed or bushy.

d. Poor character - Fails the requirements for fairly good character.

14. Cook a portion of the sample, according to Branch instructions for cooking frozen vegetables, to evaluate flavor and odor. Include, in the portion to be cooked, any sprouts with pink centers. NOTE: Cook separately any "suspect" off-odor sprouts retained in step 7c of this procedure. If the "suspect" sprouts have a normal flavor and odor after cooking, they should be assigned grade "A" for "flavor and odor". Assign the letter grade "A" or "SSTD" for the sample (not each container) for "flavor and odor" in the "prerequisite" section of the defect tally.

15. Pour container-by-container the contents of each tray (water, loose leaves and grit or silt, from step 6) into a clean pan through a previously tared 20 mesh screen. Rinse each tray and the material on the screen with a fine stream of water (as from a wash bottle) to insure the transfer of any grit or silt. Allow the screen and its contents to drain for two minutes.

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SUGGESTED ORDER FOR LOT GRADING OF A SAMPLE

16. Weigh and record container-by-container in the "prerequisite" section of the defect tally the weight (in grams) of loose leaves and small pieces. Assign the letter grade "A", "B", "C" or "SSTD" for loose leaves and small pieces based on the tolerances shown below.

Loose Leaves and Small Pieces
Lot Tolerance (in grams)

Sample size	A	B	C	Sample size	A	B	C
78	17	40	62	525	93	234	372
126	26	62	97	600	105	226	423
150	30	73	114	650	114	287	456
169	34	81	127	725	126	318	507
174	35	83	131	1050	178	454	725
273	51	126	199	1300	218	558	892
300	56	138	218	1450	242	620	993
325	60	149	235	2100	344	888	1425
377	69	171	271	2900	469	1216	1956

Loose Leaves and Small Pieces
Individual Container Tolerance (in grams)

Count per container	A	B	C
13 or less	6	10	No limit
14 to 25	12	18	No limit
26 to 50	22	35	No limit
more than 50	43	69	No limit

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SUGGESTED ORDER FOR LOT GRADING OF A SAMPLE

17. Carefully, without losing any grit or silt, pour most of the water from each sediment pan.
18. Observe the amount of grit or silt in the bottom of each pan. On a container-by-container basis, assign the letter grade "A", "C" or "SSTD" for grit or silt in the "prerequisite" section of the defect tally.

NOTE: NORMALLY, GRIT OR SILT IS NOT A PROBLEM IN BRUSSELS SPROUTS EXCEPT WHEN HARVESTING OCCURS DURING OR IMMEDIATELY AFTER A RAIN STORM OR A PROGRAM OF HELICOPTER DUSTING.

19. Compare the total number of defects except character defects that you found in the sample (not each container) with the acceptance number for the applicable AQL and sample size in the Regulations (File Code 109-A-1, Tables XV - XIX).
20. Compare the total number of character defects that you found in the sample (not each container) with the acceptance number for the applicable AQL and sample size in the Regulations.
21. Assign a grade to the sample based on the procedure outlined in File Code 120-A-7 (Lot Single Sampling Plan).

SPECIAL LOT GRADING SITUATIONS

1. GRADING OF 2-1/2 POUND CARTONS OR OTHER LARGE CONTAINERS.

File Code 120-A-7 permits you to draw a minimum of 3 - 2-1/2 pound cartons for grading of small lots if Inspection Aid No. 42 specifies the 3 sample size. Although the lot single sampling plan is designed for a minimum of 6 sample units, you may use the maximum number of sprouts in the 3 cartons and adjust the sample to 78-126-150-169 or more sprouts. However, you must have at least 78 sprouts in the sample to perform lot grading. If 3 containers give fewer than 78 sprouts, draw 4 or more containers.

CAUTION: REMEMBER THAT INSPECTION AID NO. 42 SPECIFIES ONLY THE MINIMUM SAMPLE SIZE. YOU MAY INCREASE THE SAMPLE SIZE FOR SUSPECT OR BORDERLINE LOTS.

2. GRADING OF SMALL CONTAINERS (9 oz).

If lot grading covers small containers, it may be necessary to increase the number of containers that are to be drawn from the lot. Without the increase in sampling, the sample may not be adequate. If the approximate number of sprouts in each container in a lot is unknown, open one container at the sampling point to get this information.

3. ADJUSTING A DEFECT TALLY.

If a sample fails to meet the requirements of Grade B, adjust the defect tally before comparing the defects against the acceptance numbers for grade C. This must be done because "fairly well colored" (major defect) is not counted against grade C. A grade C lot could have all "fairly well colored" sprouts. Adjust the defect tally as shown on the following page.

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SPECIAL LOT GRADING SITUATIONS

3. ADJUSTING A DEFECT TALLY (continuation).

Count	13	14	15	15	14	7 4
-------	----	----	----	----	----	----------------

M A J O R	Fairly well colored						16
	Poorly trimmed						12
	Blemished						10
	TOTAL MAJOR						38 22

* * *

Failed grade B

-----<

TOTAL ALL CLASSES							53 37
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* * *

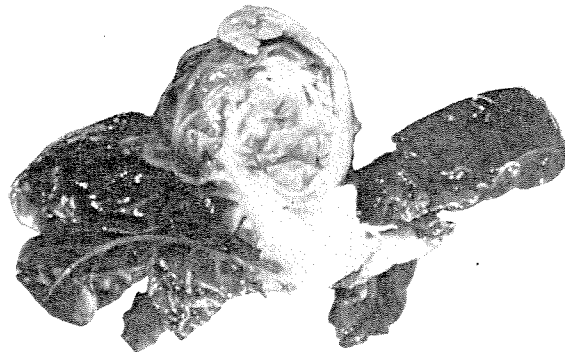
FINAL GRADE							C
-------------	--	--	--	--	--	--	---

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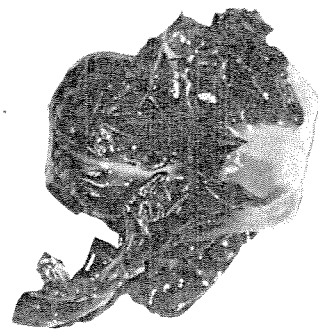
ILLUSTRATIONS - GUIDES FOR CLASSIFICATION OF TRIM



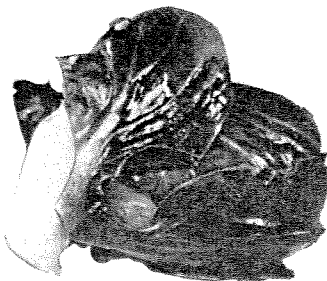
1.
POORLY TRIMMED



2.
POORLY TRIMMED



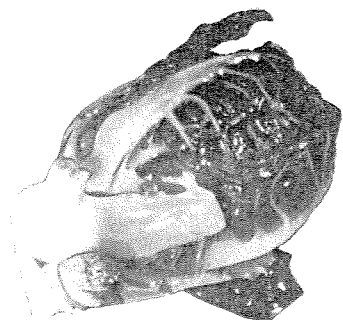
3.
POORLY TRIMMED



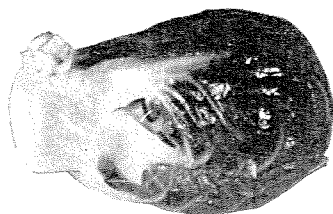
4.
POORLY TRIMMED



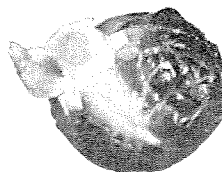
5.
WELL TRIMMED



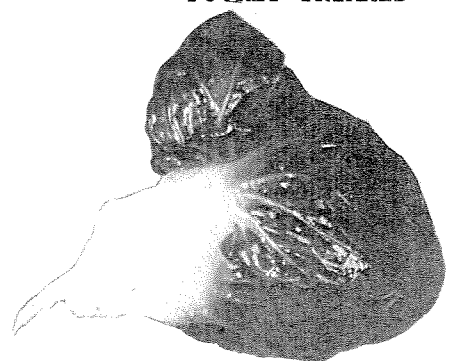
6.
POORLY TRIMMED



7.
WELL TRIMMED



8.
POORLY TRIMMED



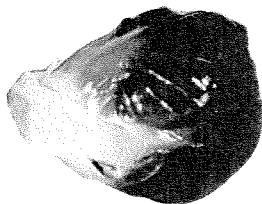
9.
POORLY TRIMMED

Frozen Brussels Sprouts
February 1981

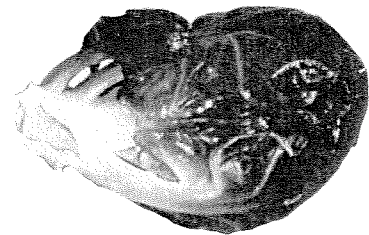
ILLUSTRATIONS - GUIDES FOR CLASSIFICATION OF TRIM



10.
WELL TRIMMED



11.
WELL TRIMMED



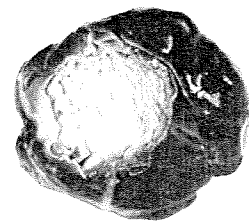
12.
WELL TRIMMED



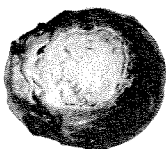
13.
WELL TRIMMED



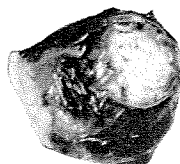
14.
EXCESSIVELY TRIMMED



15.
WELL TRIMMED



16.
WELL TRIMMED



17.
WELL TRIMMED



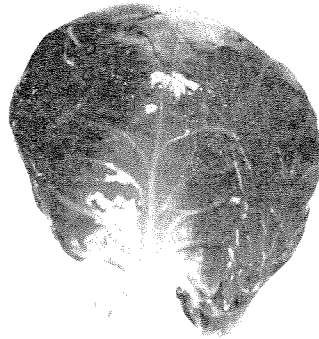
18.
WELL TRIMMED

Frozen Brussels Sprouts
February 1981

ILLUSTRATIONS - GUIDES FOR CLASSIFICATION OF TRIM



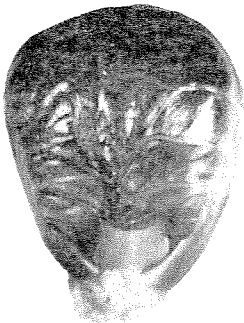
19.
WELL TRIMMED



20.
WELL TRIMMED



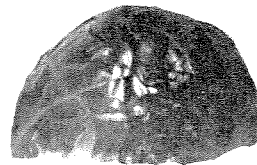
21.
WELL TRIMMED



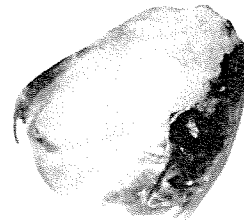
22.
WELL TRIMMED



23.



24.



25.

EXCESSIVELY TRIMMED



26.
POORLY TRIMMED



27.
WELL TRIMMED

Frozen Brussels Sprouts
February 1981

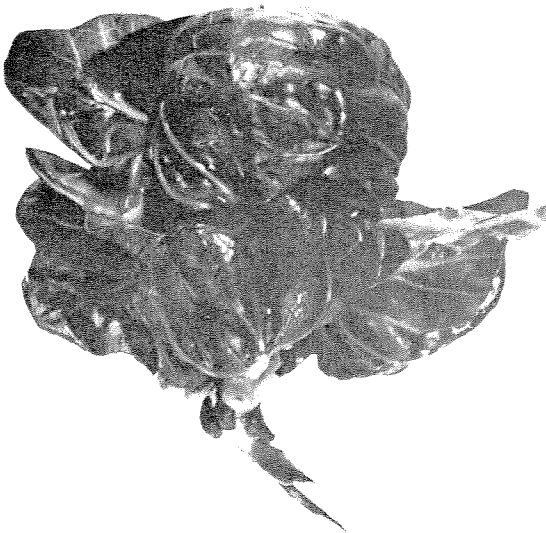
ILLUSTRATIONS - GUIDES FOR CLASSIFICATION OF TRIM



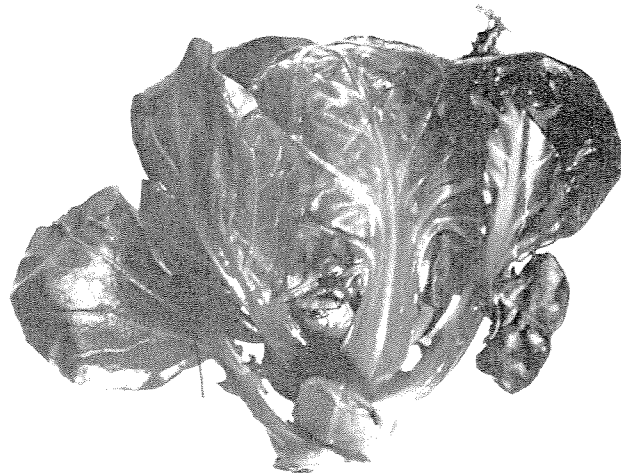
28.
INSUFFICIENTLY TRIMMED



29.
WELL TRIMMED



30.
INSUFFICIENTLY TRIMMED



31.
INSUFFICIENTLY TRIMMED

Frozen Brussels Sprouts
February 1981

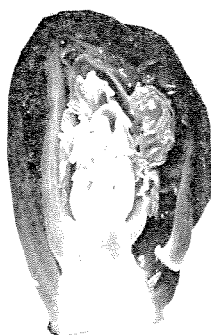
ILLUSTRATIONS - GUIDES FOR CLASSIFICATION OF CHARACTER



32.
VERY COMPACT



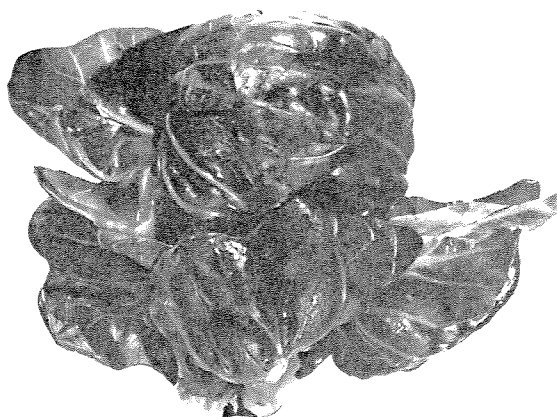
33.
COMPACT



34.
REASONABLY COMPACT



35. 36.
EXCESSIVELY STRIPPED



37.
BUSHY

Frozen Brussels Sprouts
February 1981

(RESERVED)

Frozen Brussels Sprouts
February 1981

(RESERVED)

Frozen Brussels Sprouts
February 1981

(RESERVED)

Frozen Brussels Sprouts
February 1981

(RESERVED)

Frozen Brussels Sprouts
February 1981

(RESERVED)