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POPCORN LOSS ADJUSTMENT STANDARDS HANDBOOK

2016 and Succeeding Crop Years

**UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250**

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| FEDERAL CROP INSURANCE HANDBOOK | | NUMBER: 25350 (11-2010) 25350-1 (12-2015) 25350-2 (05-2016) | |
| SUBJECT: POPCORN LOSS ADJUSTMENT STANDARDS HANDBOOK 2016 AND SUCCEEDING CROP YEARS | | OPI: Product Administration and Standards Division | |
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| | | <i>/s/Thomas W. Worth</i> Acting Deputy Administrator, Product Management | |

THIS HANDBOOK CONTAINS THE OFFICIAL FCIC-ISSUED LOSS ADJUSTMENT STANDARDS FOR THIS CROP FOR THE 2016 AND SUCCEEDING CROP YEARS. ALL REINSURED COMPANIES WILL UTILIZE THESE STANDARDS FOR BOTH LOSS ADJUSTMENT AND LOSS TRAINING.

SUMMARY OF CHANGES/CONTROL CHART

The following list contains significant changes to this handbook, as determined by us. It may not represent all changes made. All changes made to this handbook are applicable regardless of whether or not listed.

Major Changes: See changes or additions in text which have been highlighted. Three stars (***) identify where information has been removed.

Changes for Crop Year 2016 (FCIC-25350-2):

- A. Production Worksheet Instructions – Deleted language in item 60b stating “For other than shelled popcorn, (Refer to the LAM for standard test weights) enter the result of dividing the actual test weight by the standard test weight (ear popcorn must be shelled for sample), to three decimal places.” Popcorn is converted to pounds using the “actual” test weight, so any further test weight conversion is not necessary.

POPCORN LOSS ADJUSTMENT HANDBOOK

SUMMARY OF CHANGES/CONTROL CHART (Continued)

| Control Chart for: Popcorn Loss Adjustment Standards Handbook | | | | | | |
|---|---------------|---------------|---------------------------------|-----------------------|---|--|
| | SC Page(s) | TC Page(s) | Text Page(s) | Reference Material | Date | Directive Number |
| Remove | 1-2 | | 49-50 | | 12-2015 | FCIC-25350-1 |
| Insert | 1-2 | | 49-50 | | 05-2016 | FCIC-25350-2 |
| Current Index | 1-2 | 1-2 | 1-46 47-48 49-50 51-54 | 55-66 | 05-2016 11-2010 12-2015 05-2016 11-2010 | FCIC-25350-2 FCIC-25350 FCIC-25350-1 FCIC-25350-2 FCIC-25350 |

**POPCORN LOSS ADJUSTMENT HANDBOOK
TABLE OF CONTENTS**

| | <u>PAGE</u> |
|---|-------------|
| 1. INTRODUCTION | 1 |
| 2. SPECIAL INSTRUCTIONS | 1 |
| A. DISTRIBUTION | 1 |
| B. TERMS, ABBREVIATIONS, AND DEFINITIONS | 1 |
| 3. INSURANCE CONTRACT INFORMATION | 2 |
| A. INSURABILITY | 2 |
| B. PROVISIONS AND PROCEDURES NOT APPLICABLE TO CAT COVERAGE | 3 |
| C. UNIT DIVISION..... | 3 |
| D. QUALITY ADJUSTMENT | 3 |
| 4. REPLANTING PAYMENT PROCEDURES | 4 |
| A. GENERAL INFORMATION | 4 |
| B. QUALIFICATIONS FOR REPLANTING PAYMENT..... | 4 |
| C. MAXIMUM REPLANTING PAYMENT | 5 |
| D. REPLANTING PAYMENT INSPECTIONS | 6 |
| 5. POPCORN APPRAISALS | 6 |
| A. GENERAL INFORMATION | 6 |
| B. SELECTING REPRESENTATIVE SAMPLES FOR APPRAISALS | 6 |
| C. MEASURING ROW WIDTH FOR SAMPLE SELECTION | 7 |
| D. STAGES OF GROWTH | 7 |
| 6. APPRAISAL METHODS | 9 |
| A. GENERAL INFORMATION | 9 |
| B. STAND REDUCTION METHOD..... | 9 |
| C. HAIL DAMAGE METHOD..... | 9 |
| D. MATURITY LINE WEIGHT METHOD | 11 |
| E. WEIGHT METHOD | 12 |
| 7. APPRAISAL DEVIATIONS AND MODIFICATIONS | 13 |
| A. DEVIATIONS | 13 |
| B. MODIFICATIONS..... | 13 |

**POPCORN LOSS ADJUSTMENT HANDBOOK
TABLE OF CONTENTS (Continued)**

| | <u>PAGE</u> |
|---|--------------------|
| 8. APPRAISAL WORKSHEET ENTRIES AND COMPLETION PROCEDURES | 16 |
| A. APPRAISAL WORKSHEET FORM STANDARDS | 16 |
| B. GENERAL INFORMATION FOR WORKSHEET ENTRIES AND COMPLETION INFORMATION | 17 |
| C. WORKSHEET ENTRIES AND COMPLETION INFORMATION STAND REDUCTION METHOD..... | 17 |
| APPRAISAL WORKSHEET EXAMPLE..... | 20 |
| D. HAIL DAMAGE METHOD..... | 21 |
| APPRAISAL WORKSHEET EXAMPLE..... | 25 |
| E. MATURITY LINE WEIGHT METHOD..... | 26 |
| APPRAISAL WORKSHEET EXAMPLE..... | 28 |
| F. WEIGHT METHOD | 29 |
| APPRAISAL WORKSHEET EXAMPLE..... | 31 |
| 9. CLAIM FORM ENTRIES AND COMPLETION PROCEDURES | 32 |
| A. CLAIM FORM STANDARDS..... | 32 |
| B. GENERAL INFORMATION FOR ENTRIES AND COMPLETION INSTRUCTIONS.. | 32 |
| C. FORM ENTRIES AND COMPLETION INFORMATION..... | 33 |
| SECTION I - DETERMINED ACREAGE APPRAISED, PRODUCTION AND ADJUSTMENTS..... | 36 |
| SECTION II – DETERMINED HARVESTED PRODUCTION | 45 |
| CLAIM FORM EXAMPLE | 53 |
| CLAIM FORM EXAMPLE (REPLANT) | 54 |
| 10. REFERENCE MATERIAL | 55 |
| TABLE A - MINIMUM REPRESENTATIVE SAMPLE REQUIREMENTS..... | 55 |
| TABLE B - ROW WIDTH AND LENGTH TABLE | 55 |
| TABLE C - POPCORN STAND REDUCTION | 56 |
| TABLE D - HAIL STAND REDUCTION LOSS | 57 |
| TABLE E - LEAF LOSS | 58 |
| TABLE F - STAGE MODIFICATION TABLE..... | 59 |
| TABLE G - SHELLING PERCENTAGES-EAR POPCORN | 60 |
| TABLE H - POPCORN MOISTURE ADJUSTMENT FACTOR TABLE | 61 |
| TABLE I - POPCORN – COMBINED TEST WEIGHT AND PACK FACTORS | 62-63 |
| EXHIBIT 1 – POPCORN STAGE DEFINITIONS..... | 64-65 |
| EXHIBIT 2 - POPCORN PLANT AND KERNEL CHARACTERISTICS | 66 |

1. INTRODUCTION

THIS HANDBOOK MUST BE USED IN CONJUNCTION WITH THE LOSS ADJUSTMENT MANUAL (LAM) STANDARDS HANDBOOK, FCIC-25010.

The FCIC-issued loss adjustment standards for this crop are the official standard requirements for adjusting losses in a uniform and timely manner. The FCIC-issued standards for this crop and crop year are in effect as of the signature date for this crop handbook at www.rma.usda.gov/handbooks/25000/index.html. All reinsured companies will utilize these standards for both loss adjustment and loss training for the applicable crop year. These standards, which include crop appraisal methods, claims completion instructions, and form standards, supplement the general (not crop-specific) loss adjustment standards identified in the LAM.

2. SPECIAL INSTRUCTIONS

This handbook remains in effect until superseded by reissuance of **either** the entire handbook **or** selected portions (through slipsheets or bulletins). If slipsheets have been issued for a handbook, the original handbook as amended by slipsheet pages shall constitute the handbook. A bulletin can supersede either the original handbook or subsequent slipsheets.

A. DISTRIBUTION

- (1) The following is the minimum distribution of forms completed by the adjuster and signed by the insured (or insured's authorized representative) for the loss adjustment inspection:
 - (a) One legible copy to insured.
 - (b) The original and all remaining copies as instructed by the Approved Insurance Provider (AIP).
- (2) It is the AIP's responsibility to maintain original insurance documents relative to policyholder servicing as designated in their approved plan of operations.

B. TERMS, ABBREVIATIONS, AND DEFINITIONS

- (1) Terms, abbreviations, and definitions **general** (not crop specific) to loss adjustment are identified in the LAM.
- (2) Terms, abbreviations, and definitions **specific** to popcorn loss adjustment and this handbook, which are not defined in this section, are defined as they appear in the text.
- (3) Abbreviations:

| | |
|-------------|--|
| CAT | Catastrophic Risk Protection |
| CIH | Crop Insurance Handbook |
| DSSH | Document and Supplemental Standards Handbook, (FCIC-24040) |
| FGIS | Federal Grain Inspection Service |
| SP | Special Provisions |

(4) Definitions:

Base contract price The price stipulated on the contract executed between the insured and the processor before any adjustments for quality.

Merchantable popcorn Popcorn that meets the provisions of the processor contract.

3. INSURANCE CONTRACT INFORMATION

The AIP is to determine that the insured has complied with all policy provisions of the insurance contract. Crop provisions which are to be considered in this determination include (but are not limited to):

A. INSURABILITY

The following may not be a complete list of insurability requirements. Refer to the Basic Provisions, Popcorn Crop Provisions, and **SP** for a complete list.

- (1) The crop insured will be all the popcorn grown in the county by the insured for which a premium rate is provided by the actuarial documents, in which the insured has a share, and that is planted for harvest as popcorn.
- (2) Insurable popcorn acreage must be grown under, and in accordance with the requirements of, a processor contract executed on or before the acreage reporting date and is not excluded from the processor contract at any time during the crop year.
- (3) Popcorn acreage is not insurable (unless allowed by the **SP** or by written agreement) if it is:
 - (a) interplanted with another crop; or
 - (b) planted into an established grass or legume.
- (4) The insured will be considered to have a share in the insured popcorn crop if, under the processor contract:
 - (a) the insured retains control of the acreage on which the popcorn is grown;
 - (b) the insured has a risk of loss; and
 - (c) the processor contract provides for delivery of popcorn under specified conditions and at a stipulated base contract price.
- (5) A popcorn producer who is also a processor may be able to establish an insurable interest in the popcorn crop. Refer to the Popcorn Crop Provisions for requirements.

- (6) The total production to count (in pounds) from all insurable acreage in the unit includes (but is not limited to):
 - (a) All appraised production (as stated in the crop provisions) and all harvested production from the insurable acreage in the unit. All harvested and appraised production lost or damaged by uninsured causes.
 - (b) For processor contracts that stipulate the amount of production to be delivered, all harvested popcorn production from any other insurable unit that has been used to fulfill the processor contract applicable to the unit;
 - (c) Any production from yellow or white dent corn on a weight basis and any production harvested from plants growing in the insured crop may be counted as popcorn on a weight basis.
- (7) Any acreage of the insured crop damaged before the final planting date, to the extent that the majority of producers in the area would normally not further care for the crop, must be replanted unless the AIP agrees that it is not practical. Refer to the LAM for replanting provision issues. Refer to Section 4 of this handbook for replanting payment procedures.
- (8) In addition to the causes of loss excluded by the Basic Provisions, insurance is not provided against:
 - (a) Damage resulting from frost or freeze after the date designated in the **SP**; or
 - (b) Failure to follow the requirements contained in the processor contract.

B. PROVISIONS AND PROCEDURES NOT APPLICABLE TO CAT COVERAGE

Refer to the CIH and LAM for provisions and procedures not applicable to CAT.

C. UNIT DIVISION

Refer to the Popcorn Crop Provisions for unit division requirements.

D. QUALITY ADJUSTMENT

- (1) Refer to the LAM for information on speculative type contract prices in quality adjustment. **THE QUALITY ADJUSTMENT FACTOR CANNOT BE GREATER THAN 1.000 OR LESS THAN ZERO (.000).** Refer to the LAM regarding contract prices in regard to quality adjustment.
- (2) Popcorn production will be eligible for quality adjustment, if due to an insurable cause of loss that occurs within the insurance period, it is not merchantable popcorn and is rejected by the processor. The production will be adjusted by:

- (a) dividing the value per pound of the damaged popcorn by the base contract price per pound for undamaged popcorn; and
 - (b) multiplying the result by the number of pounds of such popcorn.
- (3) Document quality adjustment information as described in the instructions for the “Narrative” section of the claim form (section 9B) or on a Special Report.
 - (4) If a local market cannot be found for the damaged popcorn, or when determining a salvage value, refer to the LAM.
 - (5) Moisture adjustment is applied prior to applying any qualifying quality adjustment factors such as test weight, kernel damage, etc. A popcorn moisture adjustment factors chart is in **TABLE H**. Moisture adjustment results in a reduction in production to count of 0.12 percent for each 0.1 percent moisture in excess of 15 percent.
 - (6) Refer to the LAM for special instructions regarding mycotoxin-infected popcorn.
 - (7) For additional quality adjustment definitions, instructions, qualifications, sampling requirements, graders, and testing requirements, refer to the LAM.

4. REPLANTING PAYMENT PROCEDURES

A. GENERAL INFORMATION

- (1) Replanting payments made on acreage replanted by a practice that was uninsurable as an original planting will require the deduction of the replanting payment for such acreage from the original unit liability. If the unit dollar loss (final claim) is less than the original unit liability minus such replant payment, the actual indemnity dollar amount will not be affected by the replanting payment. The premium will not be reduced.
- (2) No replanting payment will be made on acreage on which a prior replant payment has been made during the current crop year.

B. QUALIFICATIONS FOR REPLANT PAYMENT

To qualify for replanting payment, the:

- (1) insured crop must be damaged by an insurable cause;
- (2) AIP determines that it is practical to replant (refer to the LAM);
- (3) acres being replanted must have been initially planted on or after the “Earliest Planting” date established by the SP;

- (4) per acre appraisal (or appraisal plus any appraisals for uninsured causes of loss) must be less than 90 percent of the per acre production guarantee for the acreage the insured intends to replant (refer to Section 5, "Popcorn" Appraisals);
- (5) acreage replanted must be AT LEAST the lesser of 20 acres or 20 percent of the insured **planted** acreage for the unit as determined on the final planting date or within the late planting period, if a late planting period is applicable. (Any acreage planted after the end of the late planting period will not be included when determining if the 20 acres or 20 percent qualification is met. Refer to the LAM); and
- (6) AIP has given consent to replant after verifying that the processor contract terms can accept delivery, or the processor agrees in writing that it will accept the production from the replanted acreage.
- (7) In the "Narrative" of the claim form or on Special Report, show the appraisal for each field or subfield and the calculations to document that qualifications for a replanting payment have been met.

C. MAXIMUM REPLANTING PAYMENT

The maximum amount of the replanting payment per acre will be the LESSER OF:

- (1) the insured's actual replanting cost;
- (2) the product of multiplying the maximum pounds allowed in the policy (150 pounds) by the insured's price election, times the insured's share in the crop; or
- (3) 20 percent of the production guarantee times the applicable price election times the insured's share.

Compute the number of pounds per acre allowed for a replanting payment by dividing the maximum replanting payment by the price election. Show all calculations in the Narrative of the claim form or on a Special Report.

EXAMPLE 1

Owner/operator (100 percent share)

25.0 acres replanted

Actual cost to replant = \$14.00 per acre

Price election = \$0.10 per lb.

20 percent of prod. guar. (2000 lbs. x 20%) = 400 lbs. x \$0.10 (price election) x 1.000 (share) = \$40.00

150 pounds (maximum lbs. allowed in policy) x \$0.10 (price election) x 1.000 (share) = \$15.00

The lesser of \$15.00, \$14.00 and \$40.00 is \$14.00

Actual lbs. per acre allowed = 140 lbs. (\$14.00 ÷ \$0.10 – rounded to whole lbs.)

Enter the number of pounds per acre allowed (140 lbs.) in Section I, **column 31, "Appraised Potential"** of the claim form.

EXAMPLE 2

Landlord/tenant both insured (50/50 share)

25.0 acres replanted

Actual cost to replant = \$7.00 per acre (insured's share of cost)

Price election = \$0.10 per pound

20 percent of prod. guar. (2000 lbs. x 20%) = 400 lbs. x \$0.10 (price election) x .500 (share) = \$20.00

150 pounds (maximum lbs. allowed in the policy) x \$0.10 (price election) x .500 (share) = \$7.50

The lesser of \$7.00, \$20.00 and \$7.50 is \$7.00

Actual lbs. per acre allowed = 70 lbs. (\$7.00 ÷ \$0.10 rounded to whole lbs.)

Enter the number of pounds allowed (70 lbs.) if share has been applied, or the number of pounds allowed (140 lbs.) if share has yet to be applied in Section I, column 31, "Appraised Potential" of the claim form. (Follow individual AIP guidelines). Indicate in the "Narrative" if the pounds allowed for replanting have/have not been reduced for share on the claim form according to individual AIP guidelines.

D. REPLANTING PAYMENT INSPECTIONS

*** Replanting payment inspections are to be prepared as final inspections on the claim form only when qualifying for a replant payment. Non-qualifying replant-payment inspections are to be handled as preliminary inspections. If qualified for a replanting payment, a Certification Form may be prepared on the initial farm visit. Refer to the LAM.

5. POPCORN APPRAISALS

A. GENERAL INFORMATION

Potential production for all types of inspections will be appraised in accordance with procedures specified in this handbook and the LAM.

B. SELECTING REPRESENTATIVE SAMPLES FOR APPRAISALS

- (1) Determine the minimum number of required samples for a field or subfield by the field size, the average stage of growth, age (size) and general capabilities of the plants, and variability of potential production and plant damage within the field or subfield.
- (2) Split the field into subfields when:

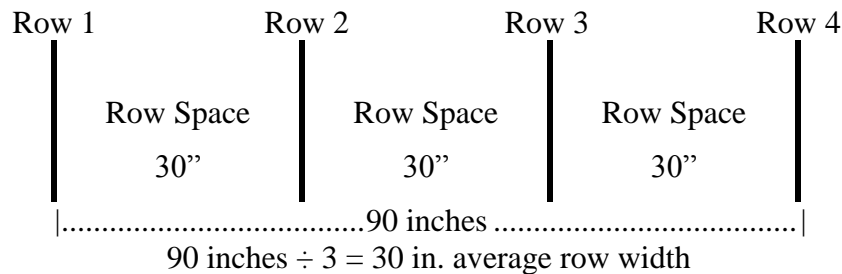
- (a) variable damage causes the crop potential to appear to be significantly different within the same field; or
 - (b) the insured wishes to destroy a portion of a field.
- (3) Each field or subfield must be appraised separately.
- (4) Take not less than the minimum number (count) of representative samples required in **TABLE A** for each field or subfield.

C. MEASURING ROW WIDTH FOR SAMPLE SELECTION

Use these instructions for all appraisal methods that require row width determinations.

- (1) Use a measuring tape marked in inches or convert a tape marked in tenths to inches, to measure row width (refer to the LAM for conversion table).
- (2) Measure across **THREE OR MORE** row spaces, from the center of the first row to the center of the fourth row (or as many rows as needed), and divide the result by the number of row spaces measured across, to determine an average row width.

EXAMPLE:



- (3) Where rows are skipped for tractor and planter tires, refer to the LAM.
- (4) Apply average row width in **TABLE B** to determine the required length for the sample row.
- (5) When two or more rows are used for a **required sample row**, divide the **required sample row length** when **conducting crop appraisals** by the number of rows **being used**. The combined length of all rows must equal the single row length.

D. STAGES OF GROWTH

- (1) These instructions provide growth-stage information for use when appraising potential production during various stages of growth.
- (2) Sampling Procedures.
 - (a) Determine average popcorn growth stage in selected representative samples.

- (b) Establish the stage of growth as the most advanced stage of development in which at least 50% of the plants in the representative sample have reached.
 - (c) Use the stage of growth on the date of adjustment (the date when the adjuster first appraises crop damage) when determining yield loss. The date of damage is used when applying the hail appraisal method.
- (3) Actual leaf count is used to determine stages of growth from emergence to tasseling.
- (a) Starting with the rounded tip leaf, count all leaves developed up to, and including, the stage indicator leaf. The stage indicator leaf is that leaf which is 40 to 50 percent exposed. It is usually the uppermost leaf that is pointing below a horizontal line.
 - (b) If the rounded tip leaf cannot be determined, the node identification system will be used as follows (refer to **EXHIBIT 2, Figure A**):
 - 1 Pull up the entire plant and carefully split stalk to expose stalk nodes and root whorls.
 - 2 The **SIXTH** leaf attaches to the top of the first noticeable elongation between the stalk nodes (an internode).
 - 3 After the sixth leaf node is identified, count upward to the stage indicator leaf.
 - 4 In the early stages of the plant's development, the internodes are very compact and, therefore, difficult to distinguish. By the seventh or eighth leaf stage, the internode elongation should be easily found.
- (4) Ear development is used to determine stage of growth from tasseling to maturity (100 percent stage).
- (5) Stage Definitions. The definitions listed in **EXHIBIT 1** are based on normal or average conditions in the Corn Belt Area for 120-day or full season popcorn. There are approximately 7 days from planting to emergence, and 21 days from emergence to the 7th actual leaf stage.

6. APPRAISAL METHODS

A. GENERAL INFORMATION

These instructions provide information on **the following** appraisal methods:

| Appraisal Method... | Use... |
|-----------------------------|--|
| Stand Reduction Method | for planted acreage with no emerged seed, and from emergence to the milk stage. |
| Hail Damage Method | for hail-damaged appraisals beginning with the 7th leaf stage and until popcorn reaches the milk stage. |
| Maturity Line Weight Method | for all appraisals from the milk stage until kernels are physiologically matured and kernel moisture drops below 40 percent. If at all possible, defer appraisals to weight method. |
| Weight Method | for all appraisals after the kernels are physiologically matured and kernel moisture drops below 40 percent. |

B. STAND REDUCTION METHOD

- (1) This method is based on the number of surviving plants in a designated sample row length.

If the reduction in stand is solely due to non-emerged seed due to insufficient soil moisture, do not complete appraisals prior to the time specified in the LAM. Refer to the paragraph in the LAM regarding deferred appraisals and non-emerged seed.
- (2) Surviving plant counts, at the time of appraisal, are converted to pounds per acre by multiplying the percent of potential remaining by the base yield. Base yield is the appropriate verified yield for the acreage from the APH form.
- (3) Prior to the 11th leaf stage, the “Stand Reduction Chart” is used to determine the percent of potential remaining (**TABLE C**).
- (4) In the 11th leaf to the milk stage, the yield and stand reductions are on a one-to-one ratio. (**EXAMPLE:** 80 percent stand = 80 percent potential.)
- (5) Samples consist of 1/100 acre.

C. HAIL DAMAGE METHOD

- (1) This method is based on the calculation of direct and indirect damage from hail to determine percent of potential remaining, converted to a pounds-per-acre appraisal.

- (2) For damage due to hail, inspections for immature popcorn shall be delayed a minimum of 7 days after damage for a more accurate damage assessment.
- (3) Direct damage includes loss from stand reduction, crippled plants, and damage to the ear and stalk.
 - (a) Stand Reduction:
 - 1 Prior to the 11th leaf stage, the “Hail Stand Reduction Loss Chart” (**TABLE D**) is used to determine percent of damage due to stand reduction.
 - 2 Beginning with the 11th leaf stage, stand reduction and yield are on a one-to-one ratio. (**EXAMPLE:** 80 percent stand = 80 percent potential).
 - (b) Crippled Plants:
 - 1 Cripples are plants which grow to approximately normal height or less but do not produce a normal, harvestable ear. Barren stalks should not be counted as cripples.
 - 2 Crippled plants must be individually evaluated to determine their contribution to potential yield. **CRIPPLES ARE NOT COUNTED AS TOTALLY DESTROYED PLANTS.** For example, in a particular sample it may take three ears from crippled plants to make an average ear (3-for-1). If 30 cripples were counted out of 100 remaining plants and evaluated on a 3-for-1 basis (.67 factor, since 2 of every 3 plants are considered damaged), the gross cripple damage would be 20 percent (.67 x 30).
 - (c) Ear Damage:

Ear damage is determined by comparing the number of damaged kernels to the number of total kernels, in a sample of all harvestable ears from 10 consecutive representative plants.
 - (d) Stalk Damage:

Plants having bruises on the stalk should not be counted as destroyed until such time as they actually fall over and become unharvestable. Young bruised plants usually will produce a normal (or near normal) ear. When considerable bruising is evident, the adjustment should be deferred until the actual loss can be determined.
- (4) Indirect damage is caused by defoliation (the loss of leaf area) due to hail. To determine defoliation or leaf destruction:
 - (a) select representative plants;
 - (b) remove the leaves which were exposed at the time of damage;

- (c) determine the percent of leaf area destroyed (missing or brown areas) for each leaf;
 - (d) total the percentages; and
 - (e) divide by the number of leaves to determine the average percent. Apply the percent to the Leaf Loss table (**TABLE E**).
- (5) Stage Modification Procedure:

Plant stages may not be accurate for leaf area determination when short season (short stature) field varieties which produce less than 19-21 actual leaves in a season are appraised. The stages used for defoliation determination are modified to reflect this lower potential leaf area. Determine the ultimate number of leaves to be produced by tearing the plant down. After the stage indicator leaf has been identified, dissect the plant and count the nodes or leaves not yet emerged to determine the ultimate number.

- (a) If the actual number of leaves to be produced cannot be determined, defer the appraisal until the actual number of leaves can be determined. At the time of deferral, accurately determine percent of defoliation as of date of loss.
 - (b) When the actual leaves to be produced can be determined, refer to the Stage Modification Chart (**TABLE F**), to obtain the modified stage for use with the Leaf Loss table (**TABLE E**).
 - (c) No further determination of defoliation should be made at the time of a later inspection unless further damage occurs.
- (6) Samples consist of 1/100 acre.

D. MATURITY LINE METHOD

- (1) Select representative samples of:
 - (a) 1/100 acre, if potential appears to be 500 pounds per acre or less.
 - (b) 1/1000 acre, if potential appears to be in excess of 500 pounds per acre.
- (2) This method is based on weighing the samples which are grouped according to maturity and converting this production to pounds per acre.
- (3) The stage of maturity is established by determining where the line separating the solids and the liquid is located in the grain kernel. The solids start to form at the end opposite the kernel tip. The five stages of maturity and the number of pounds of immature-ear popcorn required to make a pound of mature shelled popcorn are as illustrated in **EXHIBIT 2, Figure C**.
- (4) Pick and husk all harvestable ears in the sample area. Discard portions of ears without kernels.

- (5) Break the ears in half and with the exposed kernels on the tip end of the cob, use a pen/pencil to determine which quarter of the kernel the maturity (solids) line is located. To locate the maturity line, apply moderate pressure at the top of the kernel and draw the pencil toward the bottom of the kernel. Place both parts of each ear in an appropriate stage pile to determine the stage weights. In most samples, the ears will be in only two stages (Refer to **EXHIBIT 2, Figure C**).
- (6) Use the appropriate factor for converting the stage weight to pounds per acre of mature potential production. (Refer to items 12 - 16 of Maturity Line Weight Method Appraisal Worksheet instructions). Total the stage weight pounds per acre to obtain the appraisal for the sample.

E. WEIGHT METHOD

- (1) This method is based on weighing the ears in a fraction of an acre, then converting this production to pounds-per-acre.
- (2) Select representative samples of:
 - (a) 1/100 acre, if potential appears to be 500 pounds per acre or less.
 - (b) 1/1000 acre, if potential appears to be in excess of 500 pounds per acre.
- (3) Pick and husk all harvestable ears in the sample area. Weigh production.
- (4) Multiply average sample weight by:
 - (a) 100 if sample size was 1/100 acre.
 - (b) 1000 if sample size selected was 1/1000 acre.

The results will be the pounds-per-acre of potential production (not corrected for moisture, test weight, etc.).

- (5) Determine shelling percentage factor as follows:
 - (a) Select a five-pound representative ear popcorn sample, shell, and weigh.
 - (b) Apply weight to **TABLE G** to arrive at shelling percent factor. If weight of shelled popcorn is not listed in **TABLE G**, divide the weight from (a) above by 5 and round to two decimals.

7. APPRAISAL DEVIATIONS AND MODIFICATIONS

A. DEVIATIONS

Deviations in appraisal methods require RMA written authorization (as described in the LAM) prior to implementation.

B. MODIFICATIONS

Modifications in appraisal methods require AIP authorization (as described in the LAM).

Use the following instructions in conjunction with the appropriate appraisal methods for damage due to insurable causes.

(1) No Pollination Due To Drought, Heat, Hot Winds, And/Or Insects:

Insect damage must be due to insurable causes. Refer to the Crop Provisions.

Appraise popcorn as “0” (for the stand reduction method of appraisal) if, after a thorough survey of the crop, the adjuster finds:

(a) Ear shoots, and the pollination period:

- 1 has ended. Blisters on the cob are enlarged (wart-like); or
- 2 is in progress. Blisters on the cob are not enlarged, and all the silk has been eaten off below the husk by insects.

(b) No ear shoots, and the pollination period:

- 1 is in progress or has ended; or
- 2 has not begun. The tassel is exposed and the still unexposed ear bud is less than 2 inches in length.

(2) Poor Pollination Due to Drought, Heat, Hot Winds, and/or Insects:

Insect damage must be due to insurable causes. Refer to the Crop provisions.

Appraise popcorn based upon stand reduction only if the appraisal cannot be deferred. After normal silking to milk stage, stalks with partial pollination are considered surviving plants but only to the extent they contribute to the production of a normal ear of popcorn, i.e., if 3 ears are required to produce the grain equivalent of one normal ear, count only 1/3 of such plants. Barren stalks are not counted as surviving. Individually evaluate ears to determine total surviving plants to be entered on the appraisal worksheet. Document adjustment in the “Notes and Calculations section” of the Stand Reduction Appraisal Worksheet or on an attached Special Report.

(3) **Severely Drought-Stunted Popcorn:**

Defer the appraisal until the milk stage, at which time the maturity line method is used. If the insured does not wish to leave representative sample areas for this appraisal, or it is impractical to do so, use the stand reduction method.

(4) **Permanently Wilted Popcorn:**

Note on appraisal worksheet “no production potential due to permanent wilt” and enter a zero appraisal for the affected acres. For acreage with minimal or no damage due to permanent wilt, but wilt conditions have been determined to be in the area, appraise in the normal manner unless the insured agrees to leave representative sample areas for later appraisal. Inform insured to request another appraisal within 30 days of this inspection.

Permanent wilt is caused by extremely dry soil conditions and can occur at any stage of growth. Permanent wilt is a condition where plants are stressed from lack of moisture to the extent that all leaves remain tightly rolled throughout the night. Lower plant leaves become dry and brittle and will crumble when rolled between the hands. Permanently wilted plants are damaged to the extent that they will die even if supplied moisture. From the tasseled stage forward, appraisals should be deferred until the maturity line or weight method appraisals can be used because of the difficulty with the determination of whether the popcorn will produce grain.

(5) **Irregular Germination or Crop Development Due to Insured Causes:**

Use the stand reduction method of appraisal based upon the number of plants capable of reaching the milk stage prior to a killing frost.

- (a) Count all plants to determine the plant population and enter in normal plant population per 1/100 acre (item 11, Stand Reduction Appraisal Worksheet).
- (b) Determine stage of growth for EARLY-GERMINATING popcorn and record in item 19 (Stage of Growth at Time of Damage).
- (c) Determine the stage of growth for EACH LATE-GERMINATING popcorn plant and record in “NOTES AND CALCULATIONS” section (item 23, Stand Reduction Appraisal Worksheet):
 - 1 The stage of each plant; and
 - 2 The computation of the number of days from the current stage to the milk stage for each plant and add FIVE days (the additional five days are to account for slower plant development as the frost date approaches).
- (d) Compute the number of days from the appraisal date to the average killing frost date for the area (contact State Extension Service) and show calculation in “NOTES AND CALCULATIONS” SECTION (item 23, Stand Reduction Appraisal Worksheet).

- (e) Count and record the number of surviving plants per 1/100 acre (item 12, Stand Reduction Appraisal Worksheet) which will reach the milk stage before the average killing frost date (include early-germinated plants).
- (f) The percent of potential (item 15, Stand Reduction Appraisal Worksheet) is equal to the percent of “surviving” plants (“surviving” plant number divided by original plant population) on a “one-for-one” basis for plants in the 11th leaf stage and beyond. Before the 11th leaf stage, the Stand Reduction Chart is used to determine the percent of potential.
- (g) The percent of potential (item 15) multiplied by the applicable APH yield results in the pound-per-acre appraisal.

EXAMPLE:

Some plants are in the 5th, 8th, and 10th leaf stages. Date of the appraisal is July 24. Frost date is September 25; 63 days from the date of appraisal. Late developing plants which will not reach the milk stage prior to the frost date will not be counted as surviving plants.

Plants in the 10th leaf stage will be counted as surviving, since they will reach the milk stage in 60 days (allowing the additional FIVE days for maturity retardation). Plants in the 8th leaf and earlier stage would not be counted as surviving, as they would not reach the milk stage prior to the frost date.

| <u>STAGE</u> | <u>DAYS TO MILK STAGE</u> |
|--------------|---------------------------|
| 5th leaf | 75 |
| 8th leaf | 66 |
| 10th leaf | 60 |

(6) Appraisal Modification for Early Freeze Damage:

- (a) When authorized by the AIP, the Maturity Line Appraisal method may be modified to more closely reflect the actual potential remaining after freeze damage. Apply the following procedure on a case-by-case basis only as circumstances warrant.
- (b) Document on a Special Report, all pertinent information regarding the loss such as the popcorn hybrid planted, the maturity rating of the popcorn, whether the late planting provisions apply, planting (and any replanting) dates, the practicality of any late replanting, extent of freeze damage to popcorn in the area (whether general or isolated), date of normal freeze, date(s) of damaging freeze(s), and specifically why the popcorn did not escape freeze damage. Do not apply the appraisal modification for early freeze damage if it is determined that the insured could have prevented the damage through proper farming practices. The modification is only applied on popcorn that is less than fully mature. Quality adjustment procedures do not apply when using the freeze modification. The stage of popcorn on the date of final adjustment must be used when applying the modification factors. Do not backstage to the stage at the date of freeze.

- (c) The conditions that determine the extent of damage are the maturity of the plant at the time of freeze and the number of leaves killed above the ear-stalk attachment. If the freeze occurs when the maturity line method of appraisal is applicable (except 100 percent stages), adjustments to the maturity line appraisal are allowed if all the leaves above the base of the ears are killed by the freeze. For:
- 1 25 percent stage - count 25 percent of the appraisal.
 - 2 50 percent stage - count 50 percent of the appraisal.
 - 3 75 percent stage - count 75 percent of the appraisal.
 - 4 95 percent stage - count 95 percent of the appraisal.
- (d) The adjustments do not apply if:
- 1 Kernels are in the 100 percent stage -- use normal appraisal.
 - 2 Any leaves remain alive above the base of the ear (regardless of stage) -- use normal appraisal; or
 - 3 Kernels are in the pre-25 percent stage - (leaves are all killed above the base of the ear) ear has no potential. If all ears are in this category, appraise at zero.
- (e) For purposes of this appraisal modification, “early freeze damage” refers to a freeze which occurs early enough in the popcorn’s growth stages to cause damage to the developing ears, without regard to its relationship to the calendar date of occurrence. The calendar date of the freeze **is** important, however, in determining whether the insured could have prevented the damage through proper farming practices.
- (f) Freeze is NOT an insurable cause of loss if the freeze or frost occurs after the date designated in the **SP**.

8. APPRAISAL WORKSHEET ENTRIES AND COMPLETION PROCEDURES

A. APPRAISAL WORKSHEET FORM STANDARDS

- (1) The entry items in subsections C - F are the minimum requirements for the Popcorn Appraisal Worksheets. All entry items are “Substantive,” (i.e., they are required.)
- (2) Appraisal Worksheet Completion Instructions. The completion instructions for the required entry items on the appraisal worksheet in the following subsections are “Substantive,” (i.e., they are required.)

(3) The Privacy Act and Nondiscrimination statements are required statements that must be printed on the form or provided to the insured as a separate document. These statements are not shown on the example form in this section. The current Privacy Act and Nondiscrimination Statements can be found on the RMA website at <http://www.rma.usda.gov/regs/required.html> or successor website.

(4) Refer to the DSSH for other crop insurance form requirements (e.g., font point size, etc.)

B. GENERAL INFORMATION FOR WORKSHEET ENTRIES AND COMPLETION INFORMATION

(1) Include the AIP's name in the appraisal worksheet title if not preprinted on the AIP's worksheet, when a worksheet entry is not provided.

(2) Include the claim number on the appraisal worksheet (when required by the AIP), when a worksheet entry is not provided.

(3) Separate appraisal worksheets are required for each unit appraised, and for each field or subfield which has a differing base (APH) yield or farming practice (applicable to replant, preliminary, and final claims). Refer to section 5 for sampling requirements.

(4) Standard appraisal worksheet items are numbered consecutively in Subsections C - F. Example worksheets are also provided to illustrate how to complete all entries, except the last three items on the respective appraisal worksheets.

(5) For all zero appraisals, refer to the LAM.

C. WORKSHEET ENTRIES AND COMPLETION INFORMATION

STAND REDUCTION METHOD

Verify or make the following entries:

**Item
No.**

Information Required

Company: Name of AIP, if not preprinted on the worksheet. (Company Name).

1. **Insured's Name:** Name of the insured that identifies EXACTLY the person (legal entity) to whom the policy is issued.

2. **Policy Number:** Insured's assigned policy number.

3. **Unit No.:** Unit number from the Summary of Coverage after it is verified to be correct.

Claim Number: Claim number as assigned by the AIP.

4. **Crop:** “Popcorn.”
5. **Crop Year:** Four-digit crop year, as defined in the policy, for which the claim has been filed.
6. **FSA Farm No.:** FSA Farm Serial Number, if applicable.
7. **Field No.:** Field or subfield identification symbol.
No. of Acres: Number of determined acres, to tenths, in the field or sub-field being appraised.
8. **Row Width:** Row width to nearest inch. Refer to subsection 5 C for row width determination information.
9. **Base Yield:** The approved yield, to the nearest whole pound, from the APH form, after verifying to be correct.
10. **Sample No.:** MAKE NO ENTRY.
11. **Normal Plant Population 1/100 Acre:** Determine by counting the potential (living, dead, missing, and non-merged) plants in a length of row equivalent to 1/100 acre rounded to the nearest multiple of ten.
12. **No. of Surviving Plants 1/100 acre:** Number of surviving plants in the same sample.
13. **Percent of Stand:** MAKE NO ENTRY.
14. **Round Col. 13 to Nearest 5 Percent:** MAKE NO ENTRY.
15. **Percent of Potential:** Enter percent of potential as follows:
 - a. Determine the stage at time of damage and enter in stage of growth at time of damage (item 19).
 - b. Before the 11th leaf stage, use the Stand Reduction table (**TABLE C**) and enter the percent potential to the nearest whole percent, after interpolating.
 - c. In the 11th leaf stage and beyond, enter result of dividing the number of surviving plants (item 12) by the normal plant population (item 11) to the nearest whole percent.
16. **Base Yield:** Repeat the entry from item 9.
17. **Appraisal for Sample:** Result (to whole pounds) of multiplying percent of potential (item 15) (expressed as a decimal) by the base yield (item 16).
18. **Total:** Sum of all “Appraisal for Sample” entries (item 17), in whole pounds.

19. **Stage of Growth at Time of Damage:** Stage of growth at time of damage (refer to Section 5 D).
20. **Total Appraisals for All Samples:** Repeat entry from item 18.
21. **No. of Samples:** Total Number of Samples.
22. **Appraisal Per Acre/Field:** Result (to whole pounds) of dividing the total appraisals for all samples (item 20) by the total number of samples (item 21).
23. **Notes and Calculations:** Remarks pertinent to the appraisal, sampling, and conditions in general (e.g., very hot and dry). etc.

The following required entries are not illustrated on the appraisal worksheet example below.

24. **Insured's Signature and Date:** Insured's (or insured's authorized representative's) signature and date. BEFORE obtaining insured's signature, REVIEW ALL ENTRIES on the Appraisal Worksheet WITH THE INSURED (or insured's authorized representative), particularly explaining codes, etc. which may not be readily understood.
25. **Adjuster's Signature, Code No., and Date:** Signature of adjuster, code number, and date signed **after** the insured (or insured's authorized representative) has signed. If the appraisal is performed prior to the signature date, document the date of appraisal in the Remarks section of the Appraisal Worksheet (if available); otherwise, document the appraisal date in the Narrative of the Production Worksheet.

Page: Page numbers - (EXAMPLE: Page 1 of 1, Page 1 of 2, Page 2 of 2, etc.).

| | | | | | | | | | |
|--|---|---|---|--|----------------------------|------------------|---|---------------|--------------|
| (FOR ILLUSTRATION PURPOSES ONLY) STAND REDUCTION APPRAISAL WORKSHEET (Corn and Grain Sorghum, HYBRID SEED CORN, HYBRID SORGHUM SEED, POPCORN) | | | COMPANY | | 1. INSURED'S NAME | | 2. POLICY NUMBER | | |
| | | | ANY COMPANY | | I. M. INSURED | | XXXXXXXXXX | | |
| | | | 3. UNIT NO. | | CLAIM NUMBER | | 4. CROP | | 5. CROP YEAR |
| 0001-0001 BU | | XXXXXXXXXX | | POPCORN | | YYYY | | | |
| 6. FSA FARM NO. | | 7. FIELD NO. | | NO. OF ACRES | | 8. ROW WIDTH | | 9. BASE YIELD | |
| 106 | | A | | 80.0 | | 30" | | 2000 | |
| SAMPLE NO. 10 | NORMAL PLANT POPULATION 1/100 ACRE 11 | NO. OF SURVIVING PLANTS 1/100 ACRE 12 | GRAIN SORGHUM SEED AND GRAIN SORGHUM ONLY | | PERCENT OF POTENTIAL 15 | BASE YIELD 16 | APPRaisal FOR SAMPLE (COL. 15 X 16) 17 | | |
| | | | PERCENT OF STAND 13 | ROUND COL. 13 TO NEAREST 5 PERCENT 14 | | | | | |
| 1 | 220 | 36 | | | 37 | X 2000 | = | 740 | |
| 2 | 220 | 32 | | | 34 | X 2000 | = | 680 | |
| 3 | 220 | 23 | | | 27 | X 2000 | = | 540 | |
| 4 | 220 | 42 | | | 41 | X 2000 | = | 820 | |
| 5 | 220 | 51 | | | 47 | X 2000 | = | 940 | |
| 6 | | | | | | X | = | | |
| 7 | After 10th leaf stage percent potential is in direct proportion to percent stand: | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | 220 | 100 | Column 12 ÷ Column 11 = 45 X 2000 = 900 | | | | | | |
| 10 | | | | | | | = | | |
| 11 | | | | | | X | = | | |
| 12 | | | | | | X | = | | |
| 13 | | | | | | X | = | | |
| | | | | | | | 18. TOTAL | 3720 | |
| 19. STAGE OF GROWTH AT TIME OF DAMAGE | | | 20. TOTAL APPRAISALS FOR ALL SAMPLES | | 21. NO. OF SAMPLES | | 22. APPRAISAL PER ACRE/FIELD | | |
| 8th leaf | | | 3720 | | 5 | | = 744 LBS. | | |
| 23. NOTES AND CALCULATIONS | | | | | | | | | |

Refer to the Above Appraisal Worksheet instructions for required statements and signature entries.

D. WORKSHEET ENTRIES AND COMPLETION INFORMATION

HAIL DAMAGE METHOD

Verify or make the following entries:

**Item
No.**

Information Required

Company: Name of AIP, if not preprinted on the worksheet (Company Name).

Claim No.: Claim number as assigned by the AIP.

1. **Insured's Name:** Name of the insured that identifies EXACTLY the person (legal entity) to whom the policy is issued.
2. **Policy No.:** Insured's assigned policy number.
3. **Unit Number:** Unit number from the Summary of Coverage after it is verified to be correct.
4. **Crop:** "Popcorn."
5. **Crop Year:** Four-digit crop year, as defined in the policy, for which the claim is filed.
6. **FSA Farm No.:** FSA Farm Serial Number, if applicable.
7. **Field No.:** Field or subfield identification symbol.
8. **Ultimate No. of Leaves:** MAKE NO ENTRY.
9. **Base Yield:** The approved yield, to the nearest whole pound, from the APH form after verifying to be correct.
10. **Sample No.:** MAKE NO ENTRY.
11. **Normal No. of Plants 1/100 acre:** Normal plant population (original stand) - determine by counting the potential (living, dead, missing or non-emerged) plants in a length of row equivalent to 1/100 acre rounded to the nearest multiple of ten. Refer to **TABLE B**.
12. **No. of Plants Totally Destroyed 1/100 acre:** Number of plants totally destroyed. If totally destroyed plants cannot be accurately counted, complete item 13 and enter result of subtracting remaining stand (item 13) from normal number of plants (item 11).

13. **Remaining Stand No. Plants:** Determine the number of remaining plants or enter the result of subtracting number of plants totally destroyed (item 12) from normal number of plants (item 11).
14. **% Damage from Stand Reduction (Chart):** Determine and enter percent of damage, to whole percent.
- From 7th through 10th leaf stages, use “Hail Stand Reduction Loss Table” (**TABLE D**) based on entries in items 11 (normal number of plants) and item 13 (remaining stand number of plants). Interpolate to nearest whole percent.
 - After 10th leaf stage, divide number of plants totally destroyed (item 12) by normal number of plants (item 11), round to nearest whole percent.
15. **% Cripples (Corn Only):** Determine entry as follows (refer to sample on worksheet for calculations and **section 6 C (3) (b)** for definition):
- Count the number of cripples in 100 remaining live plants.
 - Individually evaluate the ears on the crippled plants to determine the **gross** damage from cripples.
 - Multiply this **gross** percent times the remaining crop (100 - percent of damage from Stand Reduction table (item 14)) to obtain the **net** percent of damage. Round to nearest tenth.
16. **% Ear Damage (Corn):**
- If no ear damage - MAKE NO ENTRY.
 - If ear damage:
 - Select all ears from 10 consecutive representative plants.
 - Determine the total number of kernels on these ears.
 - Determine the total number of damaged kernels on sample ears. The gross percent of ear damage is determined by dividing the total number of kernels damaged by the total number of kernels.
 - Determine NET percent of ear damage by multiplying the **gross** percent times the remaining crop (100 - item 14 - item 15) and enter the result in item 16, to tenths.
17. **Total Direct Damage:** Sum of items 14, 15, and 16.

18. **Potential Remaining:** Result of subtracting entry in total direct damage (item 17) from 100.
19. **% Leaf Area Destroyed:** Determine and enter percent of leaf area destroyed.
20. **% Damage for Leaf Destruction:** Percent of damage for leaf destruction based on **TABLE E**, percent leaf area destroyed (item 19) and stage of plant growth at time of damage (item 27), to nearest tenth percent.
21. **Net Indirect Damage:** Result (to tenths) of multiplying potential remaining (item 18) by percent damage for leaf destruction (item 20).
22. **% Damage from Hail:** Sum of total direct damage (item 17) and net indirect damage (item 21), to tenths.
23. **% Potential Production Remaining:** Result (to tenths) of subtracting percent damage from hail (item 22) from 100.
24. **Base Yield:** Repeat the approved yield entry from item 9 (Base Yield).
25. **Appraisal For Sample:** Result (to whole pounds) of multiplying percent potential production remaining (item 23, expressed as a decimal), by base yield (item 24).
26. **Total:** Sum of appraisal for sample entries (item 25).
27. **Stage of Plant Growth at Time of Damage:** Stage of growth at time of damage.
28. **Total All Samples:** Repeat item 26 entry.
29. **No. of Samples:** Total number of samples.
30. **Per Acre Appraisal:** Result of dividing total all samples (item 28) by number of samples (item 29), rounded to whole pounds.
31. **Remarks:** Remarks pertinent to the appraisal, sampling, conditions in general (e.g., very hot and dry), etc.

Show calculations converting cripples to net percent of damage. Refer to example on worksheet.

- a. No. of cripples in 100 plants, expressed as a percent.
- b. Percent of cripples which will not produce a normal harvestable ear (this example shows a "3 for 1" situation).
- c. $a \times b =$ percent damage from cripples.

- d. 100 minus percent of damage from Stand Reduction (item 14) entry.
- e. Resulting net cripple damage against remaining stand.

The following required entries are not illustrated on the appraisal worksheet example below.

- 32. **Insured's Signature and Date:** Insured's (or insured's authorized representative's) signature and date. BEFORE obtaining insured's signature, REVIEW ALL ENTRIES on the Appraisal Worksheet WITH THE INSURED (or insured's authorized representative), particularly explaining codes, etc., which may not be readily understood.
- 33. **Adjuster's Signature, Code No., and Date:** Signature of adjuster, code number, and date signed **after** the insured (or insured's authorized representative) has signed. If the appraisal is performed prior to the signature date, document the date of appraisal in the Remarks/Narrative section of the Appraisal Worksheet (if available); otherwise, document the appraisal date in the Narrative of the Production Worksheet.

Page: Page numbers - (EXAMPLE: Page 1 of 1, Page 1 of 2, Page 2 of 2, etc.).

| COMPANY: ANY COMPANY | | | | | CLAIM NO.: XXXXX | | | | | | | | | | |
|---|------------------------------------|---|------------------------------------|---|------------------------------|--|---------------------------------------|-----------------------------------|-------------------------------|---|----------------------------------|---------------------------------|---|------------|-----------------------------------|
| (FOR ILLUSTRATION PURPOSES ONLY) HAIL DAMAGE APPRAISAL WORKSHEET (Corn and Grain Sorghum) | | | 1. INSURED'S NAME I. M. INSURED | | | 2. POLICY NO. XXXXXXXXX | | | 3. UNIT NUMBER 0001-0001BU | | | 4. CROP POPCORN | | | |
| | | | 5. CROP YEAR YYYY | | 6. FSA FARM NO. 106 | | 7. FIELD NO. A | | 8. ULTIMATE NO. OF LEAVES | | | 9. BASE YIELD 2000 | | | |
| COMPUTATIONS | | | | | | | | | | | | | | | |
| SAMPLE NO. | NORMAL NO. OF PLANTS 1/100 ACRE | NO. PLANTS TOTALLY DESTROYED 1/100 ACRE | REMAINING STAND NO. PLANTS | % DAMAGE FROM STAND REDUCTION (Chart) | % CRIPPLE (Corn Only) | % EAR DAMAGE % HEAD DAMAGE (Grain Sorghum) | TOTAL DIRECT DAMAGE (14 + 15 + 16) | POTENTIAL REMAINING (100 - 17) | % LEAF AREA DESTROYED | % DAMAGE FOR LEAF DESTRUCTION (Chart) | NET INDIRECT DAMAGE (18 X 20) | % DAMAGE FROM HAIL (17 + 21) | % POTENTIAL PRODUCTION REMAINING (100 - 22) | BASE YIELD | APPRAISAL FOR SAMPLE (23 X 24) |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 1 | 240 | 201 | 39 | 63 | 6.2 | | 69.2 | 30.8 | 45 | 1.0 | 0.3 | 69.5 | 30.5 | 2000 | 610 |
| 2 | 230 | 189 | 41 | 61 | 7.8 | | 68.8 | 31.2 | 40 | 1.0 | 0.3 | 69.1 | 30.9 | 2000 | 618 |
| 3 | 240 | 198 | 42 | 61 | 7.3 | | 68.3 | 31.7 | 40 | 1.0 | 0.3 | 68.6 | 31.4 | 2000 | 628 |
| 4 | 240 | 216 | 24 | 73 | 1.8 | | 74.8 | 25.2 | 45 | 1.0 | 0.3 | 75.1 | 24.9 | 2000 | 498 |
| 5 | 240 | 205 | 35 | 65 | 5.9 | | 70.9 | 29.1 | 40 | 1.0 | 0.3 | 71.2 | 28.8 | 2000 | 576 |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 26. Total | | | | | | | | | | | | | | 2930 | |
| 27. STAGE OF PLANT GROWTH AT TIME OF DAMAGE 7 TH LEAF | | | | | | 28. TOTAL ALL SAMPLES 2930 | | | 29. NO. SAMPLES 5 | | | 30. PER ACRE APPRAISAL = 586 | | | |
| 31. REMARKS | | | | | | | | | | | | | | | |
| Net percent cripple damage | | | | | | | | | | | | | | | |
| Sample Number | Percent Cripples | | Percent Damage from Cripples | = | Percent Damage from Cripples | X | Percent Remaining plants | = | Net Percent cripple damage | | | | | | |
| 1 | 25 | X | .67 | = | 16.8 | X | 37 | = | 6.2 | | | | | | |
| 2 | 30 | X | .67 | = | 20.1 | X | 39 | = | 7.8 | | | | | | |
| 3 | 28 | X | .67 | = | 18.8 | X | 39 | = | 7.3 | | | | | | |
| 4 | 10 | X | .67 | = | 6.7 | X | 27 | = | 1.8 | | | | | | |
| 5 | 25 | X | .67 | = | 16.8 | X | 35 | = | 5.9 | | | | | | |

Refer to the Above Appraisal Worksheet instructions for required statements and signature entries.

E. WORKSHEET ENTRIES AND COMPLETION INFORMATION

MATURITY LINE WEIGHT METHOD

Complete heading items 1 through 7, and Part II items 20 through 32.

Verify or make the following entries:

Item

No. Information Required

Company: Name of AIP, if not preprinted on the worksheet. (Company Name)

Claim Number: Claim number as assigned by the AIP.

1. **Insured's Name:** Name of the insured that identifies EXACTLY the person (legal entity) to whom the policy is issued.
2. **Policy No.:** Insured's assigned policy number.
3. **Unit No.:** Unit number from the Summary of Coverage after it is verified to be correct.
4. **Crop:** "Popcorn."
5. **Crop Yr.:** Four-digit crop year, as defined in the policy for which the claim has been filed.
6. **FSA Farm No.:** FSA Farm Serial Number, if applicable.
7. **Circle Appraisal Code and enter in Col. 10 Part I:** Circle "PEC" for ear popcorn.

PART II - MATURITY LINE WEIGHT METHOD

Verify or make the following entries:

Item

No. Information Required

20. **Field ID:** Field or subfield identification symbol.
21. **Acres in Field to tenths:** Number of determined acres, to tenths, in field or sub-field being appraised.
22. **Stage:** MAKE NO ENTRY.
23. **Fraction of Acre:** Use "1/100" if potential appears to be 500 pounds per acre or less. Use "1/1000" if potential appears to be in excess of 500 pounds per acre.

24. **Weight by Stage:** Weight for each sample by stage of maturity. Determine weights by:
- Picking and husking all ears from the sample.
 - Discarding portions of ears having no kernels.
 - Dissecting each ear in order to determine its stage.
 - Sorting ears by stage and weighing all ears in stage (pounds to tenths).
 - Enter 95 percent stage ears in the “Doughy” portion of the appraisal worksheet.
 - Enter 100 percent stage ears in the “Extended” portion of the appraisal worksheet.

25. **Total Weight All Sample Plots:** Total of sample weights from all sample plots for that stage (to tenths).

26. **Yield Factor:** Appropriate factor for popcorn for the fraction of an acre used is preprinted on the appraisal worksheet.

27. **Appraisal Per Stage:** Result of multiplying the total weight of all sample plots (item 25) by appropriate yield factor (item 26), rounded to whole pounds.

For appraisal modifications for early freeze damage, multiply the result of appraisal per stage by the appropriate freeze damage appraisal adjustment, to whole pounds and make a notation of adjustment in the remarks section of the appraisal worksheet.

28. **Total Appr. All Stages:** Sum of entries for the appraisal per stage (item 27), in whole pounds.

29. **Total No. Rep. Sample Plots:** Number of sample plots.

30. **Acre Appraisal:** Result of dividing the total appraisal for all stages (item 28) by the total number of representative sample plots (item 29), to whole pounds.

Remarks: Remarks pertinent to the appraisal, sampling, conditions in general (e.g., very hot and dry), etc.

The following required entries are not illustrated on the appraisal worksheet example below.

31. **Insured’s Signature and Date:** Insured’s (or insured’s authorized representative’s) signature and date. BEFORE obtaining insured’s signature, REVIEW ALL ENTRIES on the appraisal worksheet WITH THE INSURED (or insured’s authorized representative), particularly explaining codes, etc., which may not be readily understood.

32. **Adjuster’s Signature, Code No., and Date:** Signature of adjuster, code number, and date signed **after** the insured (or insured’s authorized representative) has signed. If the appraisal is performed prior to the signature date, document the date of appraisal in the Remarks section of the Appraisal Worksheet (if available); otherwise, document the appraisal date in the Narrative of the Production Worksheet.

Page: Page numbers - (Example: Page 1 of 1, Page 1 of 2, Page 2 of 2, etc.)

(FOR ILLUSTRATION PURPOSES ONLY) MATURITY LINE WEIGHT METHOD APPRAISAL

| | | | | | | | | | | | | | | | | | |
|--|---------------------|------------------------|---|---|--------|---|--------|---|----------------------------|--|---------------------------|---|--------------------|-----------------------------------|---|--|-----|
| COMPANY Any Company | | CLAIM NUMBER XXXXXX | 1. INSURED'S NAME I. M. INSURED | | | 2. POLICY NO. XXXXXXXX | | | 3. UNIT NO. 0002-0002BU | | | 7. CIRCLE APPRAISAL CODE And enter in Col. 10 Part I GRAIN SORGHUM - GS EAR CORN - EC POPCORN - PEC CORN SILAGE - CS GRAIN SORGHUM, SILAGE - GSS | | | | | |
| 4. CROP. POPCORN | | 5. CROP YR. YYYY | 6. FSA FARM NO. 100 | | | YIELD FACTOR | | | | | | | | | | | |
| | | | | | | POPCORN 100 if sample size selected was 1/100 acre 1000 if sample size selected was 1/1000 acre | | CORN 1.43 if sample size selected was 1/100 acre 14.3 if sample size selected was 1/1000 acre.3 | | GRAIN SORGHUM 1.34 if sample size selected was 1/100 acre 13.4 if sample size selected was 1/1000 acre | | | | | | | |
| PART I - MATURE EAR CORN - POPCORN - HYBRID SEED (corn, grain sorghum) - GRAIN SORGHUM AND SILAGE WEIGHT METHOD | | | | | | | | | | | | | | | | | |
| FIELD ID 8 | ACRES IN FIELD 9 | KIND OF APPR 10. | FRACTION OF ACRE 11 | RECORD IN EACH BLOCK THE POUNDS PER SAMPLE PLOT TO TENTHS 12 | | | | | | TOTAL WEIGHT ALL SAMPLE PLOTS 13 | NO. OF SAMPLE PLOTS 14 | AVG. SAMPLE WEIGHT PER FIELD 15 | YIELD FACTOR 16 | PER ACRE YIELD (CIRCLE ONE) 17 | FOR MATURE CORN POPCORN AND GRAIN SORGHUM PERCENT/FACTOR | | |
| | | | | | | | | | | | | | | BUSHELs _____ TONS POUNDS | 18. MOISTURE | 19. SHELLING | |
| | | | | | | | | | | | | | | BUSHELs _____ TONS POUNDS | 18. MOISTURE | 19. SHELLING | |
| PART II - MATURITY LINE WEIGHT METHOD (For ear corn from milk stage to 40% moisture) | | | | | | | | | | | | | | | | | |
| FIELD ID 20 | STAGE 22 | FRACTION OF ACRE 23 | Record in Each Block the Pounds per Sample Plot to Tenths 24 | | | | | | | | | TOTAL WEIGHT ALL SAMPLE PLOTS 25 | YIELD FACTOR 26 | | APPRAISAL PER STAGE 27 | REPRESENTATIVE SAMPLES (Popcorn) | |
| | | | Plot 1 | Plot 2 | Plot 3 | Plot 4 | Plot 5 | Plot 6 | Plot 7 | Plot 8 | Plot 9 | | Corn | Popcorn | | 1/100 acre if potential appears to be 500 lbs/acre or less. 1/1000 acre if potential appears to be in excess of 500 lbs/acre. | |
| C | ¼ | 1/100 | 6.1 | 3.3 | 3.3 | 0.0 | 0.0 | | | | | 12.7 | .7092 | 40.0 | 508 | REPRESENTATIVE SAMPLES (Corn, Grain Sorghum) | |
| | | 1/1000 | | | | | | | | | | | 7.0920 | 400.0 | | 1/100 acre if potential appears to be 20 bushels/acre or less. 1/1000 acre if potential appears to be in excess of 20 bushels/acre. | |
| Acres In Field to Tenths 21 | ½ | 1/100 | 7.1 | 6.5 | 4.4 | 5.2 | 6.3 | | | | | 29.5 | .7463 | 42.0 | 1239 | | |
| | | 1/1000 | | | | | | | | | | | 7.4630 | 420.0 | | | |
| 20.0 | ¾ | 1/100 | 6.9 | 4.1 | 3.2 | 0.0 | 0.0 | | | | | 14.2 | .8000 | 45.0 | 639 | | |
| | | 1/1000 | | | | | | | | | | | 8.0000 | 450.0 | | | |
| | Doughy | 1/100 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 3.5 | .8475 | 47.0 | 165 | | |
| | | 1/1000 | | | | | | | | | | | 8.4750 | 470.0 | | | |
| | Extended | 1/100 | | | | | | | | | | | 1.0638 | 59.0 | | TOTAL NO. REP. SAMPLE PLOTS 29 | |
| | | 1/1000 | | | | | | | | | | | 10.6380 | 590.0 | | ACRE APPRAISAL 30 | |
| REMARKS: The four stages shown above are for illustration purposes only. Normally, popcorn is in only two stages. | | | | | | | | | | | | 28. TOTAL APPR. ALL STAGES 2551 | | ÷ | 5 | = | 510 |

Refer to the Above Appraisal Worksheet instructions for required statements and signature entries.

F. WORKSHEET ENTRIES AND COMPLETION INFORMATION

WEIGHT METHOD

Complete heading items 1 through 7, Part I items 8 through 19 and Part II items 31 and 32.

Verify or make the following entries:

Item

No.

Information Required

Company: Name of AIP, if not preprinted on the worksheet (Company Name).

Claim Number: Claim number as assigned by the AIP.

1. **Insured's Name:** Name of the insured that identifies EXACTLY the person (legal entity) to whom the policy is issued.
2. **Policy No.:** Insured's assigned policy number.
3. **Unit No.:** Unit number from the Summary of Coverage after it is verified to be correct.
4. **Crop:** "Popcorn."
5. **Crop Yr.:** Four-digit crop year, as defined in the policy, for which the claim is filed.
6. **FSA Farm No.:** FSA Farm Serial Number.
7. **Circle Appraisal Code and enter in Col. 10 Part 1:** Circle "PEC" for ear popcorn and enter in item 10, Part I.

PART I - WEIGHT METHOD

Verify or make the following entries:

Item

No.

Information Required

8. **Field ID:** Field or subfield identification symbol.
9. **Acres in Field to tenths:** Number of determined acres, to tenths, in field or subfield being appraised.
10. **Kind of Appr.:** Enter "PEC".

11. **Fraction of Acre:** Enter “1/100” if the potential appears to be 500 pounds per acre or less. Enter “1/1000” if the potential appears to be in excess of 500 pounds per acre.
12. **Weight per Sample:** Weight for each sample (pounds to tenths).
13. **Total Weight All Sample Plots:** Sum of entries in item 12 (weight per sample) in pounds, to tenths.
14. **No. of Sample Plots:** Number of sample plots.
15. **Avg. Sample Weight per Field:** Result (to tenths) of dividing the total weight of all sample plots (item 13) by the number of sample plots (item 14).
16. **Yield Factor:** If the entry for fraction of an acre (item 11) is “1/100”, enter “100”; if entry for fraction of an acre (item 11) is “1/1000”, enter “1000”.
17. **Per Acre Yield:** Result (to whole pounds) of multiplying the average sample weight per field (item 15) by the yield factor (item 16). Circle “Pounds”.
18. **Moisture:** Moisture percentage (to tenths) if in excess of 15.0 (through 40 percent), rounded to tenths.
19. **Shelling:** To determine shelling percentage for ear popcorn:
 - a. Husk 5 lbs. of ear popcorn.
 - b. Shell all ears and weigh grain.
 - c. Apply weight to **TABLE G**, column (3) to get shelling percent.
 - d. Enter shelling percent to whole percent.

Remarks: Remarks pertinent to the appraisal, sampling, conditions in general (e.g., very hot and dry), etc.

The following required entries are not illustrated on the appraisal worksheet example below.

31. **Insured’s Signature and Date:** Insured’s (or insured’s authorized representative’s) signature and date. BEFORE obtaining insured’s signature, REVIEW ALL ENTRIES on the appraisal worksheet WITH THE INSURED (or insured’s authorized representative), particularly explaining codes, etc., which may not be readily understood.
32. **Adjuster’s Signature, Code No. and Date:** Signature of adjuster, code number, and date signed **after** the insured (or insured’s authorized representative) has signed. If the appraisal is performed prior to the signature date, document the date of appraisal in the Remarks section of the Appraisal Worksheet (if available); otherwise, document the appraisal date in the Narrative of the Production Worksheet.

Page: Page numbers - (Example: Page 1 of 1, Page 1 of 2, Page 2 of 2, etc.).

(FOR ILLUSTRATION PURPOSES ONLY) WEIGHT METHOD APPRAISAL

| | | | | | | | | | | | | | | | | | | | | |
|--|---------------------|-------------------------|---|---|--------|---|---------------------------|--------|---|----------------------------|------------------------------------|--|---|---|---------------------------|--|----------------------|---------------------------|----------------------|--------------------|
| COMPANY Any Company | | CLAIM NUMBER XXXXX | | 1. INSURED'S NAME I. M. INSURED | | | 2. POLICY NO. XXXXXXXX | | | 3. UNIT NO. 0001-0001BU | | | 7. CIRCLE APPRAISAL CODE and enter in Col. 10 Part 1 GRAIN SORGHUM – GS EAR CORN – EC POPCORN – (PEC) CORN SILAGE – CS GRAIN SORGHUM, SILAGE – GSS | | | | | | | |
| 4. CROP. POPCORN | | 5. CROP YR. YYYY | | 6. FSA FARM NO. 106 | | | YIELD FACTOR | | | | | | | | | | | | | |
| | | | | | | POPCORN 100 if sample size selected was 1/100 acre 1000 if sample size selected was 1/1000 acre | | | CORN 1.43 if sample size selected was 1/100 acre 14.3 if sample size selected was 1/1000 acre.3 | | | GRAIN SORGHUM 1.34 if sample size selected was 1/100 acre 13.4 if sample size selected was 1/1000 acre | | | | | | | | |
| PART I – MATURE EAR CORN – POPCORN – HYBRID SEED (corn, grain sorghum) – GRAIN SORGHUM AND SILAGE WEIGHT METHOD | | | | | | | | | | | | | | | | | | | | |
| FIELD ID 8 | ACRES IN FIELD 9 | KIND OF APPR 10. | FRACTION OF ACRE 11 | RECORD IN EACH BLOCK THE POUNDS PER SAMPLE PLOT TO TENTHS 12 | | | | | TOTAL WEIGHT ALL SAMPLE PLOTS 13 | NO. OF SAMPLE PLOTS 14 | AVG. SAMPLE WEIGHT PER FIELD 15 | YIELD FACTOR 16 | PER ACRE YIELD (CIRCLE ONE) 17 | FOR MATURE CORN POPCORN AND GRAIN SORGHUM | | | | | | |
| B | 10.0 | PEC | 1/100 | 4.3 | 6.2 | 5.1 | 3.9 | 5.0 | = | 24.5 | ÷ | 5 | = | 4.9 | x | 100 | = | BUSHEL TONS POUNDS 490 | 18. MOISTURE 20.5 | 19. SHELLING 80 |
| | | | | | | | | | = | | ÷ | | = | | x | | = | BUSHEL TONS POUNDS | 18. MOISTURE | 19. SHELLING |
| PART II – MATURITY LINE WEIGHT METHOD (For ear corn from milk stage to 40% moisture) | | | | | | | | | | | | | | | | | | | | |
| FIELD ID 20 | STAGE 22 | FRAC-TION OF ACRE 23 | Record in Each Block the Pounds per Sample Plot to Tenths 24 | | | | | | | | | TOTAL WEIGHT ALL SAMPLE PLOTS 25 | YIELD FACTOR 26 | | APPRaisal PER STAGE 27 | REPRESENTATIVE SAMPLES (Popcorn) | | | | |
| | ¼ | 1/100 | Plot 1 | Plot 2 | Plot 3 | Plot 4 | Plot 5 | Plot 6 | Plot 7 | Plot 8 | Plot 9 | | Corn | Popcorn | | 1/100 acre if potential appears to be 500 lbs./acre or less 1/1000 acre if potential appears to be in excess of 500 lbs/acre. | | | | |
| | | 1/1000 | | | | | | | | | | = | 7.0920 | 40.0 | = | | | | | |
| Acres In Field to Tenths 21 | ½ | 1/100 | | | | | | | | | | = | .7463 | 42.0 | = | REPRESENTATIVE SAMPLES (Corn, Grain Sorghum) | | | | |
| | | 1/1000 | | | | | | | | | | = | 7.4630 | 420.0 | = | 1/100 acre if potential appears to be 20 bushels/acre or less. 1/1000 acre if potential appears to be in excess of 20 bushels/acre. | | | | |
| | ¾ | 1/100 | | | | | | | | | | = | .8000 | 45.0 | = | | | | | |
| | | 1/1000 | | | | | | | | | | = | 8.0000 | 450.0 | = | | | | | |
| | Doughy | 1/100 | | | | | | | | | | = | .8475 | 47.0 | = | | | | | |
| | | 1/1000 | | | | | | | | | | = | 8.4750 | 470.0 | = | | | | | |
| | Extended | 1/100 | | | | | | | | | | = | 1.0638 | 59.0 | = | | | | | |
| | | 1/1000 | | | | | | | | | | = | 10.6380 | 590.0 | = | TOTAL NO. REP. SAMPLE PLOTS 29 | ACRE APPRAISAL 30 | | | |
| REMARKS: | | | | | | | | | | | | | | 28. TOTAL APPR. ALL Stages ÷ = | | | | | | |

Refer to the Above Appraisal Worksheet instructions for required statements and signature entries.

9. CLAIM FORM ENTRIES AND COMPLETION PROCEDURES

A. CLAIM FORM STANDARDS

- (1) The entry items in subsection C are the minimum Claim Form (hereafter referred to as “Production Worksheet”) requirements. All of these entry items are considered “Substantive,” (i.e., they are required.)
- (2) Production Worksheet Instructions. The completion instructions for the required entry items on the Production Worksheet in the following subsections are “Substantive,” (i.e., they are required.)
- (3) The Privacy Act and Nondiscrimination statements are required statements that must be printed on the form or provided as a separate document. These statements are not shown in the example form in this exhibit. The current Non-Discrimination Statement and Privacy Act Statement can be found on the RMA website at: <http://www.rma.usda.gov/regs/required.html> or successor website.
- (4) The certification statement required by the current DSSH must be included on the form directly above the insured’s signature block and immediately followed by the statement below:

“I understand the certified information on the Production Worksheet will be used to determine my loss, if any, to the above unit. The insurance provider may audit and approve this information and supporting documentation. The Federal Crop Insurance Corporation, an agency of the United States, subsidizes and reinsures this crop insurance.”

- (5) Refer to the DSSH for other crop insurance form requirements (e.g., point size of font, etc.)

B. GENERAL INFORMATION FOR ENTRIES AND COMPLETION PROCEDURES

- (1) The Production Worksheet is a progressive form containing all notices of damage for all preliminary, replant, and final inspections on a unit.
- (2) If a Production Worksheet has been prepared on a prior inspection, verify each entry and enter additional information as needed. If a change or correction is necessary, strike out all entries on the line and re-enter correct entries on a new line. The adjuster and insured should initial any line deletions.
- (3) Refer to the LAM for instructions regarding the following:
 - (a) Acreage report errors;
 - (b) Delayed notices and delayed claims;
 - (c) Corrected claims or fire losses (double coverage) and cases involving uninsured causes of loss, unusual situations, controversial claims, concealment, or misrepresentation;

- (d) Claims involving a Certification Form (when all the acreage on the unit has been appraised to be put to another use, when acreage is being appraised for replanting payment and all acreage on the unit has been initially planted, or other reasons described in the LAM);
 - (e) “No Indemnity Due” claims (which must be verified by an APPRAISAL or NOTIFICATION from the insured that the production exceeded the guarantee); and
 - (f) Late planting.
- (4) Refer to the Prevented Planting Handbook for information on prevented planting.
 - (5) The adjuster is responsible for determining if any of the insured’s requirements under the notice and claim provisions of the policy have not been met. If any have not, the adjuster should contact the AIP.
 - (6) Instructions labeled “**PRELIMINARY**” apply to preliminary inspections only. Instructions labeled “**REPLANT**” apply to replant inspections only. Instructions labeled “**FINAL**” apply to final inspections only. Instructions not labeled apply to ALL inspections.
 - (7) If the AIP determines the claim is to be DENIED, refer to Paragraph 67 K of the LAM for PW completion instructions.

C. FORM ENTRIES AND COMPLETION INFORMATION

Verify or make the following entries:

| <u>Item No.</u> | <u>Information Required</u> |
|------------------------|--|
| 1. | Crop/Code #: “Popcorn” (0043). |
| 2. | Unit #: Unit number from the Summary of Coverage after it is verified to be correct. |
| 3. | Location Description: Land location that identifies the legal description, if available, and the location of the unit (e.g., section, township, and range; FSA Farm Numbers; FSA Common Land Units (CLU) and tract numbers; GPS identifications; or Grid identifications) as applicable for the crop. |
| 4. | Date(s) of Damage: First three letters of the month(s) during which the determined insured damage occurred for the inspection and cause(s) of loss listed in item 5 below. If no entry in item 5 below, MAKE NO ENTRY. For progressive damage, enter the month that identified when the majority of the insured damage occurred. Include the SPECIFIC DATE where applicable as in the case of hail damage (e.g., Aug 11). Enter additional dates of damage in the extra spaces, as needed. If more space is needed, document the additional dates of damage in the Narrative (or on a Special Report). Refer to the illustration in item 6 below. |

If there is no insurable cause of loss, and a no indemnity due claim will be completed, MAKE NO ENTRY.

5. **Cause(s) of Damage:** Name of the determined insured cause(s) of damage for this crop as listed in the LAM for the date of damage listed in item 4 above. If an insured cause(s) of damage is coded as “Other,” explain in the Narrative. Enter additional causes of damage in the extra spaces, as needed. If more space is needed, document the additional determined insured causes of damage in the Narrative (or on a Special Report). Refer to the illustration in item 6 below.

If it is evident that no indemnity is due, enter “NO INDEMNITY DUE” across the columns in Item 5 (refer to the LAM for more information on no indemnity due claims).

6. **Insured Cause %:**

PRELIMINARY: MAKE NO ENTRY.

REPLANT AND FINAL: Whole percent of damage for the insured cause of damage listed in item 5 above. Enter additional “Insured Cause %” in the extra spaces, as needed. If additional space is needed, enter the additional determined “Insured Cause %” in the Narrative (or on a Special Report). The total of all “Insured Cause %” including those entered in the Narrative must equal 100%. If there is no insurable cause of loss, and a no indemnity due claim will be completed, MAKE NO ENTRY.

Example entries for items 4-6 and the Narrative, reflecting entries for multiple dates of damage, the corresponding insured causes of damage and insured cause percents:

| | | | | | |
|--|-----------------|---------|--------|---------|------|
| 4. Date(s) of Damage | MAY | JUN 30 | JUN 30 | AUG | AUG |
| 5. Cause(s) of Damage | Excess Moisture | Tornado | Hail | Drought | Heat |
| 6. Insured Cause % | 10 | 20 | 15 | 25 | 20 |
| Narrative: Additional date of damage – SEP 5; Cause of Damage – Freeze; Insured cause percent - 10%. | | | | | |

7. **Company /Agency:** Name of company and agency servicing the contract.
8. **Name of Insured:** Name of the insured that identifies EXACTLY the person (legal entity) to whom the policy is issued.
9. **Claim #:** Claim number as assigned by the AIP.
10. **Policy #:** Insured’s assigned policy number.
11. **Crop Year:** Four-digit crop year, as defined in the policy, for which the claim is filed.
12. **Additional Units:**

PRELIMINARY AND REPLANT: MAKE NO ENTRY

FINAL: Unit number(s) for ALL non-loss units for the crop at the time of final inspection. A non-loss unit is any unit for which a Production Worksheet has not been completed. Additional non-loss units may be entered on a single Production Worksheet. If more spaces are needed for non-loss units, enter the unit numbers, identified as “Non-Loss Units,” in the Narrative or on an attached Special Report.

13. **Est. Production Per Acre:**

PRELIMINARY AND REPLANT: MAKE NO ENTRY.

FINAL: Estimated yield per acre, in whole pounds, of all non-loss units for the crop at the time of final inspection.

14. **Date(s) Notice of Loss:**

PRELIMINARY:

- a. Date the first or second notice of damage or loss was given for the unit in item 2, in the 1st or 2nd space, as applicable. Enter the complete date (MM, DD, YYYY) for each notice.
- b. A notice of damage or loss for a third preliminary inspection (if needed) requires an additional set of Production Worksheets. Enter the date of notice for a third preliminary inspection in the 1st space of item 14 on the second set of Production Worksheets.
- c. Reserve the “Final” space on the first page of the first set of Production Worksheets for the date of notice for the final inspection.
- d. If the inspection is initiated by the AIP, enter “Company Insp.” instead of the date.
- e. If the notice does not require an inspection, document as directed in the Narrative instructions.

REPLANT AND FINAL: Transfer the latest date in the 1st or 2nd space from the first or second set of Production Worksheets) to the FINAL space on the first page of the first set of Production Worksheets) if a final inspection should be made as a result of the notice. Always enter the complete date of notice (MM, DD, and YYYY) for the FINAL inspection in the FINAL space on the first page of the first set of Production Worksheets. For a delayed notice of loss or delayed claim, refer to the LAM.

15. **Companion Policy(s):**

- a. If no other person has a share in the unit (insured has 100 percent share), MAKE NO ENTRY.
- b. In all cases where the insured has LESS than a 100 percent share of a loss-affected unit, ask the insured if the OTHER person sharing in the unit has a multiple-peril contract (i.e., not crop-hail, fire, etc.). If the other person does not, enter “NONE.”

- (1) If the other person has a multiple-peril **crop insurance** contract and it can be determined that the SAME AIP services it, enter the contract number. Handle these companion policies according to AIP instructions.
 - (2) If the OTHER person has a multiple-peril **crop insurance** contract and a DIFFERENT AIP or agent services it, enter the name of the AIP and/or agent (and contract number) if known.
 - (3) If unable to verify the existence of a companion contract, enter “Unknown” and contact the AIP for further instructions.
- c. Refer to the LAM for further information regarding companion contracts.

SECTION I – **DETERMINED** ACREAGE APPRAISED, PRODUCTION AND ADJUSTMENTS

Make separate line entries for varying:

- (1) Rate classes, types, **class, sub-class, intended use, irrigated practice, cropping practice, or organic practices, as applicable;**
- (2) APH yields;
- (3) Appraisals;
- (4) Adjustments to appraised mature production (moisture and/or quality adjustment factors);
- (5) Stages or intended use(s) of acreage;
- (6) Shares (e.g., 50 percent and 75 percent shares on the same unit); or
- (7) Appraisals for damage due to hail or fire if Hail and Fire Exclusion is in effect.

Verify or make the following entries:

**Item
No.**

Information Required

*****16.**

Field ID: The field identification symbol from a sketch map or an aerial photo. Refer to the “Narrative.”

Where acreage is PARTLY replanted, omit the field ID symbol for the fields that have not been replanted and that have been consolidated into a single line entry.

17. Multi-Crop Code:

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: The applicable two-digit code for first crop and second crop. REFER TO THE LAM FOR INSTRUCTIONS REGARDING ENTRY OF FIRST CROP AND SECOND CROP CODES.

*****18. Reported Acres:** In the event of over-reported acres, handle in accordance with the individual AIP's instructions. In the event of under-reported acres, enter the reported acres to tenths for the field or subfield. If there are no under-reported acres MAKE NO ENTRY.

*****19. Determined Acres:** Refer to the LAM for definition of acceptable determined acres used herein. Enter the determined acres to tenths for the field or subfield for which consent is given for other use and/or:

- a. Put to other use without consent;
- b. Abandoned;
- c. Damaged by uninsured causes;
- d. For which the insured failed to provide acceptable records of production.

Refer to the LAM for procedures regarding when estimated acres are allowed and documentation requirements.

REPLANT: Determine the total acres, to tenths, of replanted acreage for each field or subfield. Make a separate line entry for any PART of a field or subfield NOT replanted (DO NOT ESTIMATE).

- a. Determine the planted acreage of any fields or subfield NOT replanted. Consolidate it into a single line entry UNLESS the usual reasons for separate line entries apply. Record the field or subfield identities (from a map or aerial photo) in the Narrative.
- b. ACCOUNT FOR ALL PLANTED ACREAGE IN THE UNIT.

PRELIMINARY AND FINAL: Determined acres to tenths.

Acreage breakdowns WITHIN a unit or field may be estimated (refer to the LAM) if a determination is impractical.

ACCOUNT FOR ALL PLANTED ACREAGE IN THE UNIT.

20. Interest or Share: Insured's interest in the crop to three decimal places as determined at the time of inspection. If shares vary on the same UNIT, use separate line entries.

21. Risk: Three-digit code for the correct "Rate" specified on the actuarial document maps. If a "Rate" or "High Risk Area" is not specified on the actuarial document maps, MAKE NO ENTRY. Verify with the Summary of Coverage and if the "Rate" is found to be incorrect, revise according to the AIP's instructions. Refer to the LAM.

Unrated land is uninsurable without a written agreement.

22. Type: Three-digit code number, entered exactly as specified on the actuarial documents for the type (or variety) grown by the insured. If "No Type Specified" or "No Variety Specified" is shown in the actuarial documents, enter the appropriate three-digit code number from the actuarial documents (e.g., 997). If a type (or variety) is not specified on the actuarial documents, MAKE NO ENTRY.

23. **Class:** Three-digit code number, entered exactly as specified on the actuarial documents for the class grown by the insured. If “No Class Specified” is shown in the actuarial documents, enter the appropriate three-digit code number from the actuarial documents (e.g., 997). If a class is not specified on the actuarial documents, MAKE NO ENTRY.
24. **Sub-Class:** Three-digit code number, entered exactly as specified on the actuarial documents for the sub-class grown by the insured. If “No Sub-Class Specified,” is shown in the actuarial documents, enter the appropriate three-digit code number from the actuarial documents (e.g., 997). If a sub-class is not specified on the actuarial documents, MAKE NO ENTRY.
25. **Intended Use:** Three-digit code number, entered exactly as specified on the actuarial documents for the intended use of the crop grown by the insured. If “No Intended Use Specified” is shown in the actuarial documents, enter the appropriate three-digit code number from the actuarial documents (e.g., 997). If an intended use is not specified on the actuarial documents, MAKE NO ENTRY.
26. **Irr. Practice:** Three-digit code number, entered exactly as specified on the actuarial documents for the irrigated practice carried out by the insured. If “No Irrigated Practice Specified” is shown in the actuarial documents, enter the appropriate three-digit code number from the actuarial documents (e.g., 997). If no irrigated practice is specified on the actuarial documents, MAKE NO ENTRY.
27. **Cropping Practice:** Three-digit code number, entered exactly as specified on the actuarial documents for the cropping practice (or practice) carried out by the insured. If “No Cropping Practice Specified” or “No Practice Specified” is shown in the actuarial documents, enter the appropriate three-digit code number from the actuarial documents (e.g., 997). If a cropping practice is not specified on the actuarial documents, MAKE NO ENTRY.
28. **Organic Practice:** Three-digit code number, entered exactly as specified on the actuarial documents for the organic practice carried out by the insured. If “No Organic Practice Specified” is shown in the actuarial documents, enter the appropriate three-digit code number from the actuarial documents (e.g., 997). If an organic practice is not specified on the actuarial documents, MAKE NO ENTRY.

29. **Stage:**

PRELIMINARY: MAKE NO ENTRY.

REPLANT: Replant stage abbreviation as shown below.

STAGE

EXPLANATION

“R”Acreage replanted and qualifying for replanting payment.

“NR”Acreage not replanted or not qualifying for a replanting payment. Enter “NR” if the combined potential production appraisal and uninsured cause appraisal totals 90 percent or more of the guarantee for replanting claims.

FINAL: Stage abbreviation as shown below.

| <u>STAGE</u> | <u>EXPLANATION</u> |
|--------------|--|
| “P” | Acreage abandoned without consent, put to other use without consent, damaged solely by uninsured causes, or for which the insured failed to provide records of production which are acceptable to the AIP. |
| “H” | Harvested. |
| “UH” | Unharvested or put to other use with consent. |

PREVENTED PLANTING: Refer to the Prevented Planting Handbook for proper codes for any eligible prevented planting acreage.

GLEANED ACREAGE: Refer to the LAM for information on gleaning.

30. Use of acreage: Use the following “Intended Use” abbreviations.

| <u>USE</u> | <u>EXPLANATION</u> |
|--------------------------|--|
| “Replant” | Acreage replanted and qualifying for replanting payment |
| “Not Replanted” | Acreage not replanted or not qualifying for a replanting payment |
| “To Soybeans,” etc. | Use made of the acreage |
| “WOC” | Other use without consent |
| “SU” | Solely uninsured |
| “ABA” | Abandoned without consent |
| “H” | Harvested |
| “UH” | Unharvested |

Verify any “Intended Use” entry. If the final use of the acreage was not as indicated, strike out the original line and initial it. Enter all data on a new line showing the correct “Final Use.”

PREVENTED PLANTING: Refer to the Prevented Planting Handbook for proper codes for any eligible prevented planting acreage.

GLEANED ACREAGE: Refer to the LAM for information on gleaning.

31. Appraised Potential:

REPLANT: Enter the pounds per acre allowed for replanting as determined from the replant calculation documented in the Narrative. Document calculations in the Narrative. (Refer to the Section 4, for qualifications and computations.)

PRELIMINARY AND FINAL: Per-acre appraisal in whole pounds of POTENTIAL production for the acreage appraised as shown on the appraisal worksheet. Refer to Section 5, "Popcorn Appraisals" for additional instructions.

If there is no potential on UH acreage enter "0." Refer to paragraph 85 of the LAM for procedures for documenting zero yield appraisals.

32a. Moisture %:

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: Moisture percent (if in excess of 15.0 percent) to nearest tenth. Moisture adjustment is applied prior to applying any qualifying adjustment for quality.

32b. Factor:

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: Moisture factor - For appraised mature grain production in excess of 15.0 percent, obtain factor from **TABLE H**.

33. Shell%, Factor, or Value:

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: If a Weight Method appraisal is made, enter the shelling percentage factor rounded to a two-place decimal (Refer to **TABLE G**). Popcorn production is measured in pounds, therefore, the 0.4 volume to bushel factor is not used when using the Weight Method appraisal. It will be necessary to multiply the gross pounds (ear popcorn pounds) by the actual shelling percentage as specified in (**TABLE G**, column [4]).

34. Production Pre QA:

REPLANT: Enter the result of multiplying column 31 times column 19 rounded to whole pounds. If no entry in column 31, MAKE NO ENTRY.

PRELIMINARY AND FINAL: Result of multiplying column 31 times column 19 times column 32b, times column 33, if applicable, and round the result to whole pounds. If no entry in column 31, MAKE NO ENTRY.

35. Quality Factor:

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: For Weight Method appraisals of mature popcorn, which due to insurable causes, is not of merchantable popcorn quality and is rejected by the processor, divide the value per pound of the damaged popcorn by the base contract price per pound for undamaged popcorn. Enter the factor to three decimal places.

36. Production Post QA:

REPLANT: Transfer the entry in item 34.

PRELIMINARY AND FINAL: Result of multiplying column 34 times column 35, rounded to whole pounds. If no entry in column 35, transfer entry from column 34.

37. Uninsured Cause:

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: Result of per acre appraisal for uninsured causes (taken from appraisal worksheet or other documentation) multiplied by column 19, rounded to whole pounds. Refer to the LAM for information on how to determine uninsured cause appraisals. If no uninsured causes, MAKE NO ENTRY.

- a. Hail and Fire exclusion NOT in effect.
 - (1) Enter the result of multiplying column 19 entry by NOT LESS than the insured's production guarantee per acre in whole pounds, for the line, (calculated by multiplying the elected coverage level percentage times the approved APH yield per acre shown on the APH form) for any "P" stage acreage.
 - (2) On preliminary inspections, advise the insured to keep the harvested production from any acreage damaged SOLELY by uninsured causes separate from other production. Refer to the LAM for information on how to determine uninsured cause appraisals.
 - (3) For acreage that is damaged PARTLY by uninsured causes, enter the result of multiplying the APPRAISED UNINSURED loss of production per acre, in whole pounds, by column 19 for any such acreage. Refer to the LAM for concepts regarding assessing uninsured cause appraisals.
- b. When there is late-planted acreage, the applicable production guarantee for such acreage is the production guarantee per-acre that has been reduced for late-planted acreage, multiplied by column 19 entry.
- c. Refer to the LAM when a Hail and Fire Exclusion is in effect and damage is from hail or fire.
- d. Enter the result of adding uninsured cause appraisals to hail and fire exclusion appraisals.
- e. For fire losses, if the insured also has other fire insurance (double coverage), refer to the LAM.

38. Total to Count: Result of adding item 36 and item 37.

39. Total:

PRELIMINARY: MAKE NO ENTRY.

REPLANT AND FINAL: Total determined acres (column 19), to tenths.

40. Quality:

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: Check the applicable qualifying quality adjustment (QA) condition(s) affecting the unit's production (refer to Table below). Check all qualifying conditions that apply to the unit's appraised and harvested production (refer to the crop provisions and SPOI).

| Qualifying QA Condition: |
|---|
| Test Weight (TW) |
| Kernel Damage (KD) and Total Defects |
| Garlicky (Grade) |
| Aflatoxin |
| Vomitoxin |
| Fumonisin |
| Dark Roast (for Sunflowers only) |
| Sclerotinia (for Sunflowers only) |
| Ergoty (Grade) |
| COFO (commercially objectionable foreign odor) (includes Musty and Sour Odor) |
| Other |
| None |

a. For all qualifying QA conditions checked, in the Narrative (or on a Special Report):

- (1) Document the level for each qualifying QA condition as indicated by approved test results, and the name and location of each testing facility that verifies the presence of the qualifying QA condition and the date of the test(s); or
- (2) Enter "See documentation included in the claim file" (e.g., include copy of the test facility certificate, grade certificate, summary or settlement sheet, etc., that documents the QA condition).

b. If "Other" is checked, in addition to the above documentation requirements, document in the Narrative (or on a Special Report):

- (1) A description of the qualifying QA condition;
- (2) The name of the controlling authority that considers this qualifying QA condition to be injurious to human and animal health and why.

c. Check "None" if none of the production qualifies for QA.

41. **Mycotoxins exceed FDA, State, or other health organization maximum limits. Check “Yes.”**

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: Check “Yes” if any mycotoxins listed in item 40 (including any identified as “Other”) exceed the FDA, state, or other health organization maximum limits, otherwise leave blank. Document in the Narrative (or on a Special Report), the disposition of the production that was:

a. Sold (Document the name and address of the buyer); or

b. Not sold (Document the date(s) of the disposition, how the production was used, or how it was destroyed.).

Refer to the LAM and the SPOI for additional information for claims involving mycotoxins.

42. **Totals:** Total of entries in columns 34, 36, 37 and 38. If a column has no entries, **MAKE NO ENTRY.**

NARRATIVE:

If more space is needed, document on a Special Report, and enter “See Special Report.” Attach the Special Report to the Production Worksheet.

- a. If no acreage is released on the unit, enter “No acreage released,” adjuster’s initials, and date.
- b. If notice of damage was given and “No Inspection” is necessary, enter the unit number(s), “No Inspection,” date, and adjuster’s initials. The insured’s signature is not required.
- c. Explain any uninsured causes, unusual, or controversial cases.
- d. If there is an appraisal in Section I, column 37 for uninsured causes due to a hail/fire exclusion, show the original hail/fire liability per acre and the hail/fire indemnity per acre.
- e. Document the actual appraisal date if an appraisal was performed prior to the adjuster’s signature date on the appraisal worksheet, and the date of the appraisal is not recorded on the appraisal worksheet.
- f. State that there is “No other fire insurance” when fire damages or destroys the insured crop and it is determined that the insured has no other fire insurance. Refer to the LAM.
- g. Explain any errors found on the Summary of Coverage.
- h. Explain any commingled production. Refer to the LAM.

- i. Explain any entry for “Production Not to Count” in Section II, column 62 and/or any production not included in Section II, column 56 or column 49-52 entries (e.g., harvested production from uninsured acreage that can be identified separately from the insured acreage in the unit).
- j. Explain a “NO” checked in item 44, “Damage similar to Other Farms in the Area.”
- k. Attach a sketch map or aerial photo to identify the total unit:
 - (1) If consent is or has been given to put part of the unit to another use or to replant;
 - (2) If acreage has been replanted to a practice uninsurable as an original practice;
 - (3) If uninsured causes are present; or
 - (4) For unusual or controversial cases.

Indicate on the aerial photo or sketch map, the disposition of acreage destroyed or put to other use with or without consent.

- l. Explain any difference between date of inspection and signature dates. For an ABSENTEE insured, enter the date of the inspection AND the date of mailing the Production Worksheet for signature.
- m. When any other adjuster or supervisor accompanied the adjuster on the inspection, enter the code number of the other adjuster or supervisor and date of inspection.
- n. Explain the reason for a “No Indemnity Due” claim. “No Indemnity Due” claims are to be distributed in accordance with the AIP’s instructions.
- o. Explain any delayed notices or delayed claims as instructed in the LAM.
- p. Document any authorized estimated acres as instructed in the LAM, shown in Section I, column 19.
- q. Document the method and calculation used to determine acres for the unit. Refer to the LAM.
- r. Specify the type of insects or disease when the insured cause of damage or loss is listed as insects or disease. Explain why control measures did not work.
- s. Document the appraisal (plus appraisal for uninsured causes of loss, if applicable) for replanted acreage, and the calculations to show that the qualifications for a replanting payment have been met. Refer to Section 4.
- t. If any acreage to be replanted in the unit does not qualify for a replanting payment, enter Field No., “NOT QUAL FOR RP PAYMENT,” date of inspection, adjuster’s initials, and reason not qualified.

- u. For production that qualifies for Quality Adjustment (include the following supporting documentation in the insured's claim file):
 - (1) Explain any “.000” quality adjustment factor (QA) factor entered in columns 35 and 65.
 - (2) Explain any deficiencies, substances, or conditions that are allowed for quality adjustment, as well as any which were not allowed.
 - (3) If mycotoxins are present, document the level based on laboratory test results.
 - (4) Document the DFs or the RIV's and Local Market Price, as applicable, used in establishing the QA factor for mature appraised or harvested production.
 - (5) Refer to the LAM for documentation requirements when any excess transportation costs or conditioning costs are included in the QA factor.
 - (6) Document all calculations used in determining QA factors.
 - (7) Refer to the LAM for additional documentation requirements.
- v. Document field or subfield ID's date and method of destruction of mycotoxin-infested popcorn if it has no market value. For further documentation instructions, refer to the LAM.
- w. Document any other pertinent information, including any data to support any factors used to calculate the production.
- x. Document the name and address of the charitable organization when gleaned acreage is applicable. Refer to the LAM for more information on gleaning.

SECTION II – **DETERMINED** HARVESTED PRODUCTION

GENERAL INFORMATION:

- (1) Account for ALL HARVESTED PRODUCTION (for ALL ENTITIES sharing in the crop) except production appraised BEFORE harvest and shown in Section I because the quantity cannot be determined later.
- (2) Columns 49 through 52 are for structure measurements entries (Rectangular, Round, Square, Conical Pile, etc.). If structures are a combination of shapes, break into a series of average measurements, if possible. Enter “Odd Shape” if production is stored in an odd shaped structure. Document measurements on a Special Report or other worksheet used for this purpose.
- (3) If farm-stored production has been weighed prior to storage and acceptable weight tickets are available showing gross weights, enter “Weighed and Stored On Farm” in columns 49 through 52. Refer to the LAM for acceptable weight tickets.
- (4) For production commercially stored, sold, etc., make entries in columns 49 through 52 as follows:
 - (a) Name and address of storage facility or buyer.

- (b) “Seed,” “Fed,” etc.
- (5) There will be no “harvested production” entries for replanting payments.
- (6) If acceptable sales or weight tickets are not available, refer to the LAM.
- (7) If additional lines are necessary, the data may be entered on a continuation sheet.
USE SEPARATE LINES FOR:
 - (a) Separate storage structures.
 - (b) Varying names and addresses of buyers of sold production.
 - (c) Varying determinations of production (varying moisture, foreign material (FM), test weight, value, etc.). Average percent of FM or moisture can be entered when the elevator has calculated the average on the summary sheet, and the determined average is acceptable to the adjuster. Separate line entries are not otherwise required. Refer to the LAM for instructions.
 - (d) Varying shares; e.g., 50 percent and 75 percent shares on same unit.
 - (e) Conical piles. Do **NOT** add the cone in the top or bottom of a bin to the height of other grain in the structure. For computing the production in cones and conical piles, refer to the LAM.
- (8) There will generally be no harvested production entries in columns 47 through 66 for preliminary inspections.
- (9) If there is harvested production from more than one insured practice (or type) and a separate approved APH yield has been established for each, the harvested production also must be entered on separate lines in columns 47 through 66 by type or practice. If production has been commingled, refer to the LAM.

Verify or make the following entries:

**Item
No.**

Information Required

43. Date Harvest Completed: (Used to determine if there is a delayed notice or a delayed claim. Refer to the LAM.)

PRELIMINARY: MAKE NO ENTRY.

REPLANT AND FINAL:

- a. The earlier of the date the ENTIRE acreage on the unit was (1) harvested, (2) totally destroyed, (3) replanted; (4) put to other use; (5) a combination of harvested, destroyed, or put to other use or (6) the calendar date for the end of the insurance period.

- b. If at the time of final inspection (if prior to the end of the insurance period), there is any unharvested insured acreage remaining on the unit that the insured does not intend to harvest, enter “**Incomplete.**”
- c. If at the time of final inspection (if prior to the end of the insurance period), **none** of the insured acreage on the unit has been harvested, and the insured does not intend to harvest such acreage, enter “**No Harvest.**”
- d. If the case involves a Certification Form, enter the date from the Certification Form when the entire unit is put to another use, replanting is complete for the unit, etc. Refer to the LAM.

44. Damage similar to other farms in the area?:

PRELIMINARY: MAKE NO ENTRY.

REPLANT AND FINAL: Check “Yes” or “No.” Check “Yes” if amount and cause of damage due to insurable causes is similar to the experience of other farms in the area. If “No” is checked, explain in the Narrative.

45. **Assignment of Indemnity:** Check “Yes” **only** if an assignment of indemnity is in effect for the crop year; otherwise, check “No.” Refer to the LAM.

46. **Transfer of Right to Indemnity:** Check “Yes” **only** if a transfer of right to indemnity is in effect for the unit for the crop year; otherwise, check “No.” Refer to the LAM.

47a. **Share:** RECORD ONLY VARYING SHARES on the SAME unit to three decimal places.

47b. **Field ID:**

- (a) If only one practice and/or type of harvested production is listed in Section I, MAKE NO ENTRY.
- (b) If more than one practice and/or type of harvested production is listed in Section I, and a separate approved APH yield exists, indicate for each practice/type the corresponding Field ID (from Section I, column 16).

48. **Multi-Crop Code:** The applicable two-digit code for first crop and second crop. REFER TO THE LAM FOR INSTRUCTIONS REGARDING ENTRY OF FIRST CROP AND SECOND CROP CODES.

49. **Length or Diameter:** Internal measurement in feet to tenths of structural space occupied by crop.

- a. Length if rectangular or square.
- b. Diameter if round or conical pile. Refer to the LAM to convert circumference to diameter, if internal diameter measurement is not possible.

- 50. **Width:** Internal width measurement in feet to tenths of space occupied by crop in structure, if rectangular or square. If round enter “RND.” If conical pile, enter “Cone.”
- 51. **Depth:** Depth measurement in feet to tenths of space occupied by crop in rectangular, round, or square structure. If conical pile, enter the height of the cone. If there is production in the storage structure from other units or sources, refer to the LAM.
- 52. **Deduction:** Cubic feet, to tenths, of crop space displaced by chutes, vents, studs, crossties, etc. Refer to the LAM for computation instructions.
- 53. **Net Cubic Feet:** Net cubic feet, to tenths, of crop in the storage structure. Refer to the LAM for computation instructions.

54. **Conversion Factor:** Enter Conversion Factor as follows:

| | |
|-----------------------------|------|
| Shelled Popcorn..... | 0.8 |
| Ground Shelled Popcorn..... | 0.7 |
| Ground Ear Popcorn..... | 0.6* |
| Ear Popcorn..... | 0.4 |

*Unless otherwise directed.

55. **Gross Production:** Multiply column 53 times column 54 rounded to tenths of a bushel. The results of the calculation represents the amount of gross bushels in the bin.

56. **Bu., Ton, Lbs., Cwt.:** Circle “Lbs.” in column heading. Enter the gross production in whole pounds, before deductions for grain moisture and foreign material for production:

a. Weighed and stored on the farm.

For farm stored ear popcorn production, calculate the pounds as follows: column 55 (gross production in bushels) times column 60a (actual test weight), rounded to the nearest whole pound.

For farm stored shelled popcorn production, calculate the pounds as follows: column 55 (gross production in bushels) times column 60a (actual test weight), rounded to the nearest whole pound.

b. Sold and/or stored in commercial storage - Obtain gross production for the UNIT from the summary and/or settlement sheets. (Individual load slips only WILL NOT suffice unless the storage facility or buyer WILL NOT provide summary and/or settlement sheets to the insured, and this is documented in the Narrative.)

c. Stored in odd-shaped structures. The adjuster must compute the amount of gross production. (Refer to the LAM for cubic footage and production computations). A copy of ALL production calculations must be left in the file folder.

d. For mycotoxin-infected popcorn, enter ALL production, even if it has no market value.

57. **Shell/Sugar Factor:** Shelling percentage for EAR popcorn production recorded in:
- a. Gross weight from settlement sheets, or other weight records acceptable to the AIP, (column 56), enter shelling percentage from **TABLE G**, column (3) as two-place decimal. If shelling percentage is not on the settlement sheets or other weight records, or is otherwise unavailable, enter standard shelling percentage of “.80.”
 - b. Standard shelling percent (“.80”) is included in the bushel factor (0.4) used to convert EAR bushel by volume to pounds of popcorn by multiplying grain bushels by the actual test weight of the grain. Use of the actual-determined shelling percent (as in “a” above) would result in double adjustment in this case (“c” below). The shelling percentage FACTOR, **TABLE G**, column (3), corrects the calculated production to reflect the shelling-percent deviation from the standard.
 - c. Volume/structure measurements (items B-E), enter the shelling FACTOR from **TABLE G**, column (4) as two-place decimal. If not available, enter the standard shelling FACTOR of “1.00.”

58a. **FM%:** Make entry to nearest tenth. Refer to the LAM for instructions.

Refer to the LAM for FGIS definition of “FM.”

58b. **Factor:** Enter the three-place factor determined by subtracting the percent of FM from 1.000, or subtract the entry in 58a from 100 and divide by 100. **EXAMPLE:** For 4 percent, enter “.960.”

59a. **Moisture %:** Enter moisture percent to tenths. Moisture adjustment is applied prior to applying any qualifying quality adjustment for quality.

59b. **Factor:** If grain moisture is more than 15.0 percent enter the four-place moisture factor from the popcorn moisture adjustment factor table (**TABLE H**).

60a. **Test Wt.:** Enter test weight (ONLY when storage structure measurements are entered) in whole pounds (or pounds to tenths IF so instructed by the AIP). Refer to the LAM for instructions on determining test weight.

60b. **Factor:** For shelled popcorn, use the Combination Test Weight Factor - enter the factor from the appropriate table (**TABLE I**) for the square footage of floor space in the storage structure. Refer to the LAM for instructions on calculating floor space of a structure.

 Combination test weight pack factors are applicable only to shelled popcorn.

If the AIP instructs test weights to be entered to the nearest tenth, use the nearest ½ pound test weight value on the combination test weight pack factor chart.

For test weights not shown on the chart, multiply the actual test weight by the last available combination test weight pack factor for the appropriate bin size and divide the result by the last available test weight shown on the chart.

EXAMPLE FOR TEST WEIGHT NOT SHOWN ON THE CHART:

Popcorn with a test weight of 65 pounds stored in a less than 255 Sq. Ft. bin
65 (actual test weight) x 1.135 (last available factor) ÷ 64 (last available test weight) =
1.153 factor.

61. **Adjusted Production:** The result of multiplying column 56 x 57 x 58b x 59b. **(Round to whole pounds).**

For farm stored shelled popcorn, the result of multiplying column 56 x 57 x 58b x 59b x 60b. (Round to nearest tenth).

62. **Production Not to Count:** Net production NOT to count, in whole pounds, WHEN ACCEPTABLE RECORDS IDENTIFYING SUCH PRODUCTION ARE AVAILABLE, from harvested acreage which has been assessed an appraisal of not less than the guarantee per acre, or from other sources (e.g., other units or uninsured acreage) in the same storage structure (if the storage entries include such production).

THIS ENTRY MUST NEVER EXCEED PRODUCTION SHOWN ON THE SAME LINE. EXPLAIN THE TOTAL BIN CONTENTS (bin grain depth, etc.) AND ANY "PRODUCTION NOT TO COUNT" IN THE NARRATIVE.

Make no entry if only the depth for production to count has been entered in column 51, and the depth for production not to count has been entered in the "Narrative" section. Refer to example in the LAM.

63. **Production Pre-QA:** Result of subtracting column 62 from column 61.
- 64a. **Value:** Sold or otherwise disposed of - Enter the actual dollar-and-cents value per pound received for the damaged production on the earlier of the day of adjustment or the date such production is sold, taking into account reduction in value due to insurable causes (including mycotoxins). Refer to the LAM for further instructions.
- 64b. **Mkt. Price:** If entry is made in 64a, enter the base contract price per pound, to three decimal places.
65. **Quality Factor:** For production eligible for quality adjustment, enter the 3-digit quality adjustment factor determined by dividing column 64a divided by 64b. Explain in the Narrative. If moisture adjustment is applicable, it will be made prior to any adjustment for quality. Refer to section 3D, Quality Adjustment and the Crop Provisions for additional information on quality adjustment.
66. **Production to Count:** Enter result from multiplying column 63 times column 65, rounded to nearest whole pound.
67. Total of column 63. If no entry in column 63, MAKE NO ENTRY.

68. Section II Total:

PRELIMINARY AND REPLANT: MAKE NO ENTRY.

FINAL: Total of **column 66** to whole pounds.

69. Section I Total:

PRELIMINARY AND REPLANT: MAKE NO ENTRY.

FINAL: Enter figure from Section I column **38** total.

70. Unit Total:

PRELIMINARY AND REPLANT: MAKE NO ENTRY.

FINAL: Total of **column 68 and column 69**, to whole pounds.

71. Allocated Prod.: Refer to paragraph 126 C and 127 of the LAM for instructions for determining allocated production. Enter the total production, rounded to whole pounds, allocated to this unit that is included in Sections I or II of the Production Worksheet. Document how allocated production was determined and record supporting calculations in the Narrative or on a Special Report.

72. Total APH Prod.: Result, rounded to whole pounds, of subtracting the total of column 37 (item 42 "Totals") and item 71 (Allocated Prod.) from item 70 (Unit Total). If no entries in column 37 and item 71, transfer the entry in item 70. MAKE NO ENTRY when separate APH yields are maintained by type, practice, etc., within the unit.

The following required entries are not illustrated on the Production Worksheet example below.

73. Insured's Signature and Date: Insured's (or insured's authorized representative's) signature and date. BEFORE obtaining **the** signature, REVIEW ALL ENTRIES on the Production Worksheet WITH THE INSURED (**or insured's authorized representative's**), particularly explaining codes, etc., that may not be readily understood.

Final indemnity inspections and final replanting payment inspections should be signed on bottom line.

74. Adjuster's Signature, Code #, and Date: Signature of adjuster, code number, and date signed **after** the insured (or insured's authorized representative) has signed. For an absentee insured, enter adjuster's code number ONLY. The signature and date will be entered AFTER the absentee has signed and returned the Production Worksheet.

Final indemnity inspections and final replanting payment inspections should be signed on bottom line.

75.

Page:

PRELIMINARY: Page numbers – “1,” “2,” etc., at the time of inspection.

REPLANT AND FINAL: Page numbers - (Example: Page 1 of 1, Page 1 of 2, Page 2 of 2, etc.).

PRODUCTION WORKSHEET

| | | | | |
|---|---|--|---|--|
| 1. Crop/Code # POPCORN 0043 | 2. Unit # 0001-0001- BU | 3. Location Description SW1-96N-3W | 7. Company Agency ANY COMPANY ANY AGENCY | 8. Name of Insured I.M. INSURED |
| 4. Date(s) of Damage July | 5. Cause(s) of Damage DROUGHT | 6. Insured Cause % 100 | 12. Additional Units 0002-0002-BU | 13. Est. Prod. Per Acre 2000 |
| 9. Claim # XXXXXXXX | | | | 11. Crop Year YYYY |
| 10. Policy # | | | | 14. Date(s) Notice of Loss MM/DD/YYYY |
| 15. Companion Policy(s) | | | | Final MM/DD/YYYY |

SECTION I – DETERMINED ACREAGE APPRAISED, PRODUCTION AND ADJUSTMENTS

| A. ACTUARIAL | | | | | | | | | | | | | | | B. POTENTIAL YIELD | | | | | | | | | |
|--|-----------------|----------------|------------------|---|------|------|-------|-----------|--------------|--------------|-------------------|------------------|-------|----------------|---------------------|-------------------|--------------------------|-------------------|----------------|--------------------|------------------|----------------|-----|--|
| 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | 25. | 26. | 27. | 28. | 29. | 30. | 31. | 32a. | 32b. | 33. | 34. | 35. | 36. | 37. | 38. | |
| Field ID | Multi-Crop Code | Reported Acres | Determined Acres | Interest or Share | Risk | Type | Class | Sub-Class | Intended Use | Irr Practice | Cropping Practice | Organic Practice | Stage | Use of Acreage | Appraised Potential | Moisture % Factor | Shell % Factor, or Value | Production Pre QA | Quality Factor | Production Post QA | Uninsured Causes | Total to Count | | |
| A | NS | | 80.0 | 1.000 | | 997 | | | | | 003 | | UH | PASTURED | 744 | | | 59520 | | 59520 | | 59520 | | |
| B | NS | | 10.0 | 1.000 | | 997 | | | | | 003 | | UH | SILAGE | 490 | 20.5 .9340 | .80 | 3662 | | 3662 | | 3662 | | |
| C | NS | | 60.0 | 1.000 | | 977 | | | | | 003 | | H | H | | | | | | | | | | |
| 39. TOTAL | | | 150.0 | 40. Quality: TW <input type="checkbox"/> KD <input type="checkbox"/> Aflatoxin <input type="checkbox"/> Vomitoxin <input type="checkbox"/> Fumonisin <input type="checkbox"/> Garlicky <input type="checkbox"/> Dark Roast <input type="checkbox"/> Sclerotinia <input type="checkbox"/> Ergoty <input type="checkbox"/> CoFo <input type="checkbox"/> Other <input type="checkbox"/> None <input checked="" type="checkbox"/> | | | | | | | | | | | | 42. TOTALS | | 63182 | | 63182 | | 63182 | | |
| 41. Mycotoxins exceed FDA, State or other health organization maximum limits. Yes <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | |

NARRATIVE (If more space is needed, attach a Special Report) **Acres were determined using permanent field measurements.**

SECTION II – DETERMINED HARVESTED PRODUCTION

| 43. Date Harvest Completed MM/DD/YYYY | | | | | | 44. Damage similar to other farms in the area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | | | | | | 45. Assignment of Indemnity Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | | | | | | 46. Transfer of Right to Indemnity? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | | | | | |
|---|-----------------|-------------------------------------|-------|-------|-----------|---|-------------------|-------------|------------------|--------------------|------------|--|----------------|---------------------|--------------------|-------------------|---------------------|--|---------------------|-------|--|--|--|
| A. MEASUREMENTS | | | | | | B. GROSS PRODUCTION | | | | | | C. ADJUSTMENTS TO HARVESTED PRODUCTION | | | | | | | | | | | |
| 47a. | 48. | 49. | 50. | 51. | 52. | 53. | 54. | 55. | 56. | 57. | 58a. | 59a. | 60a. | 61. | 62. | 63. | 64a. | 65. | 66. | | | | |
| 47b. | Multi-Crop Code | Length or Diameter | Width | Depth | Deduction | Net Cubic Feet | Conversion Factor | Gross Prod. | By-Ton (Lbs) CWT | Shell/Sugar Factor | FM% Factor | Moisture % Factor | Test WT Factor | Adjusted Production | Prod. Not to Count | Production Pre-QA | Value Mkt. Price | Quality Factor | Production to Count | | | | |
| | NS | ACME ELEVATOR ANYTOWN, ANY STATE | | | | | | | 10500 | .80 | | 15.5 .9940 | | | 8350 | | 8350 | | | 8350 | | | |
| | NS | 10.0 | 10.0 | 9.0 | | 900.0 | .4 | 360.0 | 23040 | 1.00 | | 16.0 .9880 | 64 | 22764 | | 22764 | | | 22764 | | | | |
| 67. TOTAL | | | | | | | | | | | | | | | | | 31114 | 68. Section II Total | | 31114 | | | |
| | | | | | | | | | | | | | | | | | 69. Section I Total | | 63182 | | | | |
| | | | | | | | | | | | | | | | | | 70. Unit Total | | 94296 | | | | |
| | | | | | | | | | | | | | | | | | 71. Allocated Prod. | | | | | | |
| | | | | | | | | | | | | | | | | | 72. Total APH Prod. | | 94296 | | | | |

PRODUCTION WORKSHEET

| | | | | |
|---|---|--|---|---|
| 1. Crop/Code # POPCORN 0043 | 2. Unit # 0001-0001- BU | 3. Location Description SW1-96N-3W | 7. Company Agency ANY COMPANY ANY AGENCY | 8. Name of Insured I.M. INSURED |
| 4. Date(s) of Damage MAY 10 | 5. Cause(s) of Damage FREEZE | 6. Insured Cause % 100 | 12. Additional Units | 13. Est. Prod. Per Acre |
| 9. Claim # XXXXXXXX | 11. Crop Year YYYY | 10. Policy # XXXXXXXXXX | 14. Date(s) 1st Notice of Loss MM/DD/YYYY | 2nd Final MM/DD/YYYY |
| 15. Companion Policy(s) | | | | |

SECTION I – DETERMINED ACREAGE APPRAISED, PRODUCTION AND ADJUSTMENTS

| A. ACTUARIAL | | | | | | | | | | | | | | B. POTENTIAL YIELD | | | | | | | | | |
|--|-----------------|----------------|------------------|---|------|------|-------|-----------|--------------|--------------|-------------------|------------------|-------|--------------------|---------------------|-------------------|--------------------------|-------------------|----------------|--------------------|------------------|----------------|-----|
| 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | 25. | 26. | 27. | 28. | 29. | 30. | 31. | 32a. | 32b. | 33. | 34. | 35. | 36. | 37. | 38. |
| Field ID | Multi-Crop Code | Reported Acres | Determined Acres | Interest or Share | Risk | Type | Class | Sub-Class | Intended Use | Irr Practice | Cropping Practice | Organic Practice | Stage | Use of Acreage | Appraised Potential | Moisture % Factor | Shell % Factor, or Value | Production Pre QA | Quality Factor | Production Post QA | Uninsured Causes | Total to Count | |
| A | | | 25.0 | 1.000 | | 997 | | | | | 003 | | R | REPLANTED | 140 | | | 3500 | | 3500 | | 3500 | |
| B | | | 25.0 | 1.000 | | 997 | | | | | 003 | | NR | NOT REPLANTED | | | | | | | | | |
| 39. TOTAL | | | 50.0 | 40. Quality: TW <input type="checkbox"/> KD <input type="checkbox"/> Aflatoxin <input type="checkbox"/> Vomitoxin <input type="checkbox"/> Fumonisin <input type="checkbox"/> Garlicky <input type="checkbox"/> Dark Roast <input type="checkbox"/> Sclerotinia <input type="checkbox"/> Ergoty <input type="checkbox"/> CoFo <input type="checkbox"/> Other <input type="checkbox"/> None <input type="checkbox"/> | | | | | | | | | | | | 42. TOTALS | | 3500 | | 3500 | 3500 | | |
| 41. Mycotoxins exceed FDA, State or other health organization maximum limits? Yes <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | |

NARRATIVE (If more space is needed, attach a Special Report) The example above shows allowance when the actual cost is less than the maximum allowance. The insured's actual cost to replant was \$14.00 per acre with a price election of \$0.10 \$14.00 + \$0.10 = 140 lbs. 140 lbs. x 25 acres replanted = 3,500 lbs. Acreage was determined using wheel measurements. Maximum allowed = \$15.00 (150 lbs. x \$0.10) See attached Special Report for wheel measurements.

SECTION I – DETERMINED ACREAGE APPRAISED, PRODUCTION AND ADJUSTMENTS

| A. ACTUARIAL | | | | | | | | | | | | | | B. POTENTIAL YIELD | | | | | | | | | |
|--|-----------------|----------------|------------------|---|------|------|-------|-----------|--------------|--------------|-------------------|------------------|-------|--------------------|---------------------|-------------------|--------------------------|-------------------|----------------|--------------------|------------------|----------------|-----|
| 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | 25. | 26. | 27. | 28. | 29. | 30. | 31. | 32a. | 32b. | 33. | 34. | 35. | 36. | 37. | 38. |
| Field ID | Multi-Crop Code | Reported Acres | Determined Acres | Interest or Share | Risk | Type | Class | Sub-Class | Intended Use | Irr Practice | Cropping Practice | Organic Practice | Stage | Use of Acreage | Appraised Potential | Moisture % Factor | Shell % Factor, or Value | Production Pre QA | Quality Factor | Production Post QA | Uninsured Causes | Total to Count | |
| A | | | 25.0 | .500 | | 997 | | | | | 003 | | R | REPLANTED | 70 | | | 1750 | | 1750 | | 1750 | |
| B | | | 25.0 | .500 | | 997 | | | | | 003 | | NR | NOT REPLANTED | | | | | | | | | |
| 39. TOTAL | | | 50.0 | 40. Quality: TW <input type="checkbox"/> KD <input type="checkbox"/> Aflatoxin <input type="checkbox"/> Vomitoxin <input type="checkbox"/> Fumonisin <input type="checkbox"/> Garlicky <input type="checkbox"/> Dark Roast <input type="checkbox"/> Sclerotinia <input type="checkbox"/> Ergoty <input type="checkbox"/> CoFo <input type="checkbox"/> Other <input type="checkbox"/> None <input type="checkbox"/> | | | | | | | | | | | | 42. TOTALS | | 1750 | | 1750 | 1750 | | |
| 41. Mycotoxins exceed FDA, State or other health organization maximum limits? Yes <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | |

NARRATIVE (If more space is needed, attach a Special Report) Example above shows allowance when the actual cost is less than the maximum allowance when share is considered. Insured's actual cost to replant was \$7.00 per acre with a Price election of \$0.10. \$7.00 + \$0.10 = 70 lbs. 70 lbs. x 25 acres replanted = 1750 lbs. Maximum allowed - \$7.50 (150 lbs. x \$0.10 x 50%) See attached Special Report for wheel measurements.

10. REFERENCE MATERIAL

TABLE A - MINIMUM REPRESENTATIVE SAMPLE REQUIREMENTS

| ACRES IN FIELD | MINIMUM NO. OF SAMPLES* |
|---|-------------------------|
| *** 0.1 - 10.0 | 3 |
| *Add one additional sample for each additional 40.0 acres (or fraction thereof) in the field or subfield. | |

TABLE B - ROW WIDTH AND LENGTH TABLE

| ROW WIDTH (INCHES) | ROW LENGTH (FEET) FOR 1/100 ACRE | ROW LENGTH (FEET) FOR 1/1000 ACRE |
|--------------------|----------------------------------|-----------------------------------|
| 42 | 124.5 | 12.4 |
| 40 | 130.7 | 13.1 |
| 38 | 137.6 | 13.8 |
| 36 | 145.2 | 14.5 |
| 34 | 153.7 | 15.4 |
| 32 | 163.4 | 16.3 |
| 30 | 174.2 | 17.4 |
| 28 | 186.7 | 18.7 |
| 26 | 201.0 | 20.1 |
| 24 | 217.8 | 21.8 |
| 22 | 237.6 | 23.8 |
| 20 | 261.4 | 26.1 |
| 18 | 290.4 | 29.0 |
| 16 | 326.7 | 32.7 |
| 14 | 373.4 | 37.3 |

For row widths not listed in **TABLE B**, use the following formula:

$$\frac{43,560 \text{ sq. ft./acre} \div \left[\frac{\text{row width in inches}}{12"} \right]}{\begin{matrix} 100 \text{ ft.} & \text{or} & 1000 \text{ ft.} \\ \text{(for 1/100 acre)} & & \text{(for 1/1000 acre)} \end{matrix}}$$

EXAMPLE:

$$\frac{43,560 \text{ sq. ft./acre} \div 25"}{100 \text{ ft.}} = \frac{43,560 \text{ sq. ft.} \div 2.083}{100 \text{ ft.}} = \frac{20,912.146}{100 \text{ ft.}} = 209.121 \text{ ft. or } 209.1 \text{ ft. row length}$$

TABLE C - POPCORN STAND REDUCTION - PERCENT OF POTENTIAL REMAINING

Use from emergence through 10th leaf stage. Interpolate as necessary and round to the nearest whole percent. (DO NOT USE AFTER 10TH LEAF STAGE.)

REMAINING PLANTS IN SAMPLE (1/100) ACRE

| | 390 | 380 | 370 | 360 | 350 | 340 | 330 | 320 | 310 | 300 | 290 | 280 | 270 | 260 | 250 | 240 | 230 | 220 | 210 | 200 | 190 | 180 | 170 | 160 | 150 | 140 | 130 | 120 | 110 | 100 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|---|
| 400 | 100 | 100 | 99 | 98 | 98 | 97 | 97 | 97 | 96 | 95 | 94 | 92 | 91 | 89 | 87 | 86 | 84 | 82 | 80 | 78 | 76 | 74 | 72 | 69 | 67 | 64 | 61 | 58 | 55 | 52 | 48 | 43 | 37 | 31 | 24 | 19 | 14 | 10 | 5 | 400 | |
| 390 | 100 | 100 | 100 | 99 | 98 | 97 | 97 | 97 | 96 | 95 | 94 | 93 | 91 | 89 | 87 | 86 | 84 | 82 | 80 | 78 | 76 | 74 | 72 | 69 | 67 | 65 | 62 | 59 | 56 | 53 | 49 | 44 | 38 | 32 | 25 | 20 | 15 | 10 | 5 | 390 | |
| 380 | | 100 | 100 | 99 | 99 | 98 | 98 | 97 | 96 | 95 | 94 | 93 | 91 | 89 | 87 | 86 | 84 | 82 | 80 | 78 | 76 | 74 | 72 | 69 | 67 | 65 | 62 | 59 | 56 | 53 | 49 | 44 | 39 | 33 | 26 | 21 | 16 | 10 | 5 | 380 | |
| 370 | | | 100 | 100 | 99 | 99 | 98 | 97 | 96 | 95 | 94 | 93 | 92 | 90 | 88 | 86 | 84 | 82 | 80 | 78 | 76 | 74 | 72 | 69 | 67 | 65 | 62 | 59 | 56 | 53 | 49 | 44 | 39 | 34 | 27 | 22 | 16 | 11 | 5 | 370 | |
| 360 | | | | 100 | 100 | 99 | 99 | 98 | 97 | 96 | 94 | 93 | 93 | 91 | 89 | 87 | 85 | 83 | 81 | 78 | 76 | 74 | 72 | 69 | 67 | 65 | 62 | 59 | 56 | 53 | 50 | 46 | 41 | 35 | 28 | 22 | 17 | 11 | 6 | 360 | |
| 350 | | | | | 100 | 100 | 99 | 99 | 98 | 97 | 96 | 95 | 94 | 92 | 90 | 88 | 86 | 84 | 81 | 79 | 77 | 75 | 73 | 71 | 69 | 66 | 64 | 61 | 58 | 55 | 51 | 47 | 42 | 36 | 29 | 23 | 17 | 12 | 6 | 350 | |
| 340 | | | | | | 100 | 100 | 99 | 99 | 98 | 97 | 96 | 95 | 94 | 92 | 90 | 88 | 85 | 83 | 81 | 79 | 76 | 74 | 72 | 69 | 67 | 64 | 61 | 58 | 55 | 51 | 47 | 42 | 36 | 30 | 24 | 18 | 12 | 6 | 340 | |
| 330 | | | | | | | 100 | 100 | 99 | 98 | 97 | 96 | 95 | 94 | 92 | 91 | 89 | 86 | 84 | 82 | 80 | 78 | 75 | 73 | 70 | 68 | 65 | 62 | 59 | 55 | 51 | 47 | 42 | 37 | 31 | 25 | 19 | 12 | 6 | 330 | |
| 320 | | | | | | | | 100 | 99 | 98 | 97 | 96 | 95 | 94 | 93 | 92 | 91 | 89 | 87 | 84 | 82 | 79 | 77 | 74 | 71 | 68 | 65 | 62 | 59 | 55 | 51 | 47 | 43 | 38 | 32 | 26 | 20 | 14 | 8 | 320 | |
| 310 | | | | | | | | | 100 | 99 | 98 | 97 | 96 | 95 | 94 | 93 | 92 | 90 | 88 | 86 | 84 | 81 | 79 | 76 | 73 | 70 | 67 | 64 | 61 | 57 | 53 | 48 | 44 | 39 | 33 | 27 | 21 | 15 | 9 | 310 | |
| 300 | | | | | | | | | | 100 | 99 | 98 | 97 | 96 | 95 | 94 | 93 | 91 | 89 | 88 | 86 | 83 | 80 | 77 | 75 | 72 | 69 | 66 | 63 | 59 | 55 | 50 | 45 | 40 | 34 | 29 | 23 | 17 | 11 | 300 | |
| O 290 | | | | | | | | | | | 100 | 99 | 98 | 97 | 96 | 95 | 94 | 92 | 90 | 89 | 87 | 85 | 82 | 79 | 77 | 74 | 71 | 68 | 65 | 61 | 57 | 52 | 47 | 42 | 36 | 31 | 25 | 19 | 11 | 290 | O |
| R 280 | | | | | | | | | | | | 100 | 99 | 98 | 97 | 95 | 94 | 93 | 91 | 90 | 88 | 86 | 84 | 81 | 79 | 76 | 73 | 70 | 66 | 63 | 59 | 54 | 49 | 43 | 37 | 33 | 27 | 21 | 12 | 280 | R |
| I 270 | | | | | | | | | | | | | 100 | 99 | 97 | 96 | 95 | 94 | 93 | 91 | 90 | 88 | 86 | 84 | 82 | 79 | 76 | 72 | 69 | 65 | 60 | 55 | 50 | 45 | 39 | 34 | 28 | 22 | 13 | 270 | I |
| G 260 | | | | | | | | | | | | | | 100 | 99 | 97 | 96 | 95 | 94 | 93 | 91 | 90 | 88 | 86 | 84 | 81 | 78 | 75 | 71 | 67 | 62 | 57 | 52 | 47 | 41 | 36 | 30 | 23 | 14 | 260 | G |
| I 250 | | | | | | | | | | | | | | | 100 | 99 | 98 | 97 | 96 | 94 | 93 | 92 | 90 | 88 | 86 | 83 | 80 | 77 | 73 | 69 | 64 | 59 | 54 | 49 | 43 | 37 | 30 | 23 | 15 | 250 | I |
| N 240 | | | | | | | | | | | | | | | | 100 | 99 | 98 | 97 | 96 | 95 | 94 | 91 | 90 | 88 | 85 | 82 | 78 | 74 | 71 | 66 | 60 | 55 | 50 | 44 | 38 | 31 | 24 | 15 | 240 | N |
| A 230 | | | | | | | | | | | | | | | | | 100 | 99 | 98 | 97 | 96 | 95 | 92 | 91 | 89 | 86 | 83 | 79 | 75 | 71 | 67 | 61 | 56 | 51 | 45 | 38 | 31 | 24 | 15 | 230 | A |
| L 220 | | | | | | | | | | | | | | | | | | 100 | 99 | 98 | 97 | 96 | 93 | 92 | 90 | 87 | 84 | 80 | 76 | 72 | 67 | 62 | 57 | 52 | 46 | 40 | 33 | 25 | 16 | 220 | L |
| S 210 | | | | | | | | | | | | | | | | | | | 100 | 99 | 98 | 96 | 94 | 93 | 91 | 88 | 84 | 80 | 76 | 73 | 68 | 63 | 58 | 53 | 47 | 41 | 34 | 25 | 16 | 210 | S |
| T 200 | | | | | | | | | | | | | | | | | | | | 100 | 99 | 97 | 95 | 94 | 92 | 89 | 85 | 81 | 77 | 73 | 69 | 64 | 59 | 54 | 48 | 42 | 35 | 26 | 17 | 200 | T |
| A 190 | | | | | | | | | | | | | | | | | | | | | 100 | 98 | 96 | 95 | 93 | 90 | 86 | 83 | 79 | 75 | 70 | 65 | 60 | 55 | 49 | 43 | 36 | 27 | 17 | 190 | A |
| N 180 | | | | | | | | | | | | | | | | | | | | | | 100 | 98 | 96 | 94 | 91 | 88 | 85 | 81 | 77 | 72 | 67 | 62 | 57 | 51 | 45 | 36 | 27 | 17 | 180 | N |
| D 170 | | | | | | | | | | | | | | | | | | | | | | | 100 | 98 | 96 | 93 | 90 | 87 | 83 | 79 | 74 | 69 | 64 | 59 | 53 | 46 | 37 | 27 | 18 | 170 | D |
| 160 | | | | | | | | | | | | | | | | | | | | | | | | 100 | 98 | 95 | 92 | 89 | 85 | 81 | 76 | 71 | 66 | 61 | 55 | 46 | 38 | 28 | 18 | 160 | |
| 150 | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 97 | 95 | 92 | 88 | 84 | 79 | 74 | 69 | 64 | 58 | 47 | 38 | 28 | 18 | 150 | |
| 140 | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 97 | 94 | 90 | 86 | 82 | 77 | 72 | 67 | 61 | 48 | 39 | 29 | 19 | 140 | |
| 130 | | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 97 | 94 | 90 | 85 | 80 | 75 | 70 | 64 | 49 | 39 | 29 | 19 | 130 | |
| 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 97 | 93 | 88 | 83 | 78 | 73 | 67 | 50 | 40 | 30 | 21 | 120 | |
| 110 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 97 | 92 | 88 | 83 | 78 | 72 | 51 | 40 | 30 | 23 | 110 | |
| 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 96 | 92 | 88 | 83 | 77 | 52 | 41 | 31 | 23 | 100 | |
| 90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 96 | 92 | 87 | 81 | 53 | 41 | 31 | 24 | 90 | |
| 80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 96 | 91 | 85 | 54 | 42 | 32 | 25 | 80 | |
| 70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 96 | 91 | 55 | 42 | 32 | 26 | 70 | |
| 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 95 | 56 | 43 | 33 | 27 | 60 | |
| 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 100 | 57 | 43 | 33 | 28 | 50 | |
| | 390 | 380 | 370 | 360 | 350 | 340 | 330 | 320 | 310 | 300 | 290 | 280 | 270 | 260 | 250 | 240 | 230 | 220 | 210 | 200 | 190 | 180 | 170 | 160 | 150 | 140 | 130 | 120 | 110 | 100 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | | |

REMAINING PLANTS IN SAMPLE (1/100 ACRE)

TABLE D – HAIL STAND REDUCTION LOSS

REMAINING PLANTS IN SAMPLE (1/100) ACRE

| | 390 | 380 | 370 | 360 | 350 | 340 | 330 | 320 | 310 | 300 | 290 | 280 | 270 | 260 | 250 | 240 | 230 | 220 | 210 | 200 | 190 | 180 | 170 | 160 | 150 | 140 | 130 | 120 | 110 | 100 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|-----|
| 400 | 0 | 0 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 5 | 6 | 8 | 9 | 11 | 13 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 31 | 33 | 36 | 39 | 42 | 45 | 48 | 52 | 57 | 63 | 69 | 76 | 81 | 86 | 90 | 95 | 400 |
| 390 | 0 | 0 | 0 | 1 | 2 | 3 | 3 | 3 | 4 | 5 | 6 | 7 | 9 | 11 | 13 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 31 | 33 | 35 | 38 | 41 | 44 | 47 | 51 | 56 | 62 | 68 | 75 | 80 | 85 | 90 | 95 | 390 |
| 380 | | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 11 | 13 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 31 | 33 | 35 | 38 | 41 | 44 | 47 | 51 | 56 | 61 | 67 | 74 | 79 | 84 | 90 | 95 | 380 |
| 370 | | | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 31 | 33 | 35 | 38 | 41 | 44 | 47 | 51 | 56 | 61 | 66 | 73 | 78 | 84 | 89 | 95 | 370 |
| 360 | | | | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 6 | 7 | 7 | 9 | 11 | 13 | 15 | 17 | 19 | 22 | 24 | 26 | 28 | 31 | 33 | 35 | 38 | 41 | 44 | 47 | 50 | 54 | 59 | 65 | 72 | 78 | 83 | 89 | 94 | 360 |
| 350 | | | | | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 19 | 21 | 23 | 25 | 27 | 29 | 31 | 34 | 36 | 39 | 42 | 45 | 49 | 53 | 58 | 64 | 71 | 77 | 83 | 88 | 94 | 350 |
| 340 | | | | | | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 15 | 17 | 19 | 21 | 24 | 26 | 28 | 31 | 33 | 36 | 39 | 42 | 45 | 49 | 53 | 58 | 64 | 70 | 76 | 82 | 88 | 94 | 340 |
| 330 | | | | | | | 0 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 | 11 | 14 | 16 | 18 | 20 | 22 | 25 | 27 | 30 | 32 | 35 | 38 | 41 | 45 | 49 | 53 | 58 | 63 | 69 | 75 | 81 | 88 | 94 | 330 |
| 320 | | | | | | | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 13 | 16 | 18 | 21 | 23 | 26 | 29 | 32 | 35 | 38 | 41 | 45 | 49 | 53 | 57 | 62 | 68 | 74 | 80 | 86 | 92 | 320 |
| 310 | | | | | | | | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 14 | 16 | 19 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 43 | 47 | 52 | 56 | 61 | 67 | 73 | 79 | 85 | 91 | 310 |
| 300 | | | | | | | | | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 11 | 12 | 14 | 17 | 20 | 23 | 25 | 28 | 31 | 34 | 37 | 41 | 45 | 50 | 55 | 60 | 66 | 71 | 77 | 83 | 89 | 300 |
| O 290 | | | | | | | | | | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 11 | 13 | 15 | 18 | 21 | 23 | 26 | 29 | 32 | 35 | 39 | 43 | 48 | 53 | 58 | 64 | 69 | 75 | 81 | 89 | 290 |
| R 280 | | | | | | | | | | | | 0 | 1 | 2 | 3 | 5 | 6 | 7 | 9 | 10 | 12 | 14 | 16 | 19 | 21 | 24 | 27 | 30 | 34 | 37 | 41 | 46 | 51 | 57 | 63 | 67 | 73 | 79 | 88 | 280 |
| I 270 | | | | | | | | | | | | | 0 | 1 | 3 | 4 | 5 | 6 | 7 | 9 | 10 | 12 | 14 | 16 | 18 | 21 | 24 | 28 | 31 | 35 | 40 | 45 | 50 | 55 | 61 | 66 | 72 | 78 | 87 | 270 |
| G 260 | | | | | | | | | | | | | | 0 | 1 | 3 | 4 | 5 | 6 | 7 | 9 | 10 | 12 | 14 | 16 | 19 | 22 | 25 | 29 | 33 | 38 | 43 | 48 | 53 | 59 | 64 | 70 | 77 | 86 | 260 |
| I 250 | | | | | | | | | | | | | | | 0 | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 10 | 12 | 14 | 17 | 20 | 23 | 27 | 31 | 36 | 41 | 46 | 51 | 57 | 63 | 70 | 77 | 85 | 250 |
| N 240 | | | | | | | | | | | | | | | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 9 | 10 | 12 | 15 | 18 | 22 | 26 | 29 | 34 | 40 | 45 | 50 | 56 | 62 | 69 | 76 | 85 | 240 |
| A 230 | | | | | | | | | | | | | | | | | 0 | 1 | 2 | 3 | 4 | 5 | 8 | 9 | 11 | 14 | 17 | 21 | 25 | 29 | 33 | 39 | 44 | 49 | 55 | 62 | 69 | 76 | 85 | 230 |
| L 220 | | | | | | | | | | | | | | | | | | 0 | 1 | 2 | 3 | 4 | 7 | 8 | 10 | 13 | 16 | 20 | 24 | 28 | 33 | 38 | 43 | 48 | 54 | 60 | 67 | 75 | 84 | 220 |
| 210 | | | | | | | | | | | | | | | | | | | 0 | 1 | 2 | 4 | 6 | 7 | 9 | 12 | 16 | 20 | 24 | 27 | 32 | 37 | 42 | 47 | 53 | 59 | 66 | 75 | 84 | 210 |
| S 200 | | | | | | | | | | | | | | | | | | | | 0 | 1 | 3 | 5 | 6 | 8 | 11 | 15 | 19 | 23 | 27 | 31 | 36 | 41 | 46 | 52 | 58 | 65 | 74 | 83 | 200 |
| T 190 | | | | | | | | | | | | | | | | | | | | | 0 | 2 | 4 | 5 | 7 | 10 | 14 | 17 | 21 | 25 | 30 | 35 | 40 | 45 | 51 | 57 | 64 | 73 | 83 | 190 |
| A 180 | | | | | | | | | | | | | | | | | | | | | | 0 | 2 | 4 | 6 | 9 | 12 | 15 | 19 | 23 | 28 | 33 | 38 | 43 | 49 | 55 | 64 | 73 | 83 | 180 |
| N 170 | | | | | | | | | | | | | | | | | | | | | | | 0 | 2 | 4 | 7 | 10 | 13 | 17 | 21 | 26 | 31 | 36 | 41 | 47 | 54 | 63 | 73 | 82 | 170 |
| D 160 | | | | | | | | | | | | | | | | | | | | | | | | 0 | 2 | 5 | 8 | 11 | 15 | 19 | 24 | 29 | 34 | 39 | 45 | 54 | 62 | 72 | 82 | 160 |
| 150 | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 3 | 5 | 8 | 12 | 16 | 21 | 26 | 31 | 36 | 42 | 53 | 62 | 72 | 82 | 150 |
| 140 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 3 | 6 | 10 | 14 | 18 | 23 | 28 | 33 | 39 | 52 | 61 | 71 | 81 | 140 |
| 130 | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 3 | 6 | 10 | 15 | 20 | 25 | 30 | 36 | 51 | 61 | 71 | 81 | 130 |
| 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 3 | 7 | 12 | 17 | 22 | 27 | 33 | 50 | 60 | 70 | 79 | 120 |
| 110 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 3 | 8 | 12 | 17 | 22 | 28 | 49 | 60 | 70 | 77 | 110 |
| 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 4 | 8 | 12 | 17 | 23 | 48 | 59 | 69 | 77 | 100 |
| 90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 4 | 8 | 13 | 19 | 47 | 59 | 69 | 76 | 90 |
| 80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 4 | 9 | 15 | 46 | 58 | 68 | 75 | 80 |
| 70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 4 | 9 | 45 | 58 | 68 | 74 | 70 |
| 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 5 | 44 | 57 | 67 | 73 | 60 |
| 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 43 | 57 | 67 | 72 | 50 |
| | 390 | 380 | 370 | 360 | 350 | 340 | 330 | 320 | 310 | 300 | 290 | 280 | 270 | 260 | 250 | 240 | 230 | 220 | 210 | 200 | 190 | 180 | 170 | 160 | 150 | 140 | 130 | 120 | 110 | 100 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 | |

REMAINING PLANTS IN SAMPLE (1/100) ACRE

TABLE E - Leaf Loss

| Stage of Growth | Percent Leaf Area Destroyed | | | | | | | | | | | | | | | | | | |
|-----------------|-----------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 |
| | Percent Production Lost | | | | | | | | | | | | | | | | | | |
| 7-leaf | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 4 | 5 | 5 | 6 | 7 | 8 | 9 | 9 |
| 8-leaf | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 5 | 6 | 6 | 7 | 8 | 9 | 10 | 11 |
| 9-leaf | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 6 | 7 | 7 | 9 | 10 | 11 | 12 | 13 |
| 10-leaf | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 9 | 11 | 13 | 14 | 15 | 16 |
| 11-leaf | 0 | 0 | 1 | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 14 | 16 | 18 | 20 | 22 |
| 12-leaf | 0 | 0 | 1 | 2 | 3 | 4 | 5 | 7 | 9 | 10 | 11 | 13 | 15 | 16 | 18 | 20 | 23 | 26 | 28 |
| 13-leaf | 0 | 1 | 1 | 2 | 3 | 4 | 6 | 8 | 10 | 11 | 13 | 15 | 17 | 19 | 22 | 25 | 28 | 31 | 34 |
| 14-leaf | 0 | 1 | 2 | 3 | 4 | 6 | 8 | 10 | 13 | 15 | 17 | 20 | 22 | 25 | 28 | 32 | 36 | 40 | 44 |
| 15-leaf | 1 | 1 | 2 | 3 | 5 | 7 | 9 | 12 | 15 | 17 | 20 | 23 | 26 | 30 | 34 | 38 | 42 | 46 | 51 |
| 16-leaf | 1 | 2 | 3 | 4 | 6 | 8 | 11 | 14 | 18 | 20 | 23 | 27 | 31 | 36 | 40 | 44 | 49 | 55 | 61 |
| 17-leaf | 2 | 3 | 4 | 5 | 7 | 9 | 13 | 17 | 21 | 24 | 28 | 32 | 37 | 43 | 48 | 53 | 59 | 65 | 72 |
| 18-leaf | 2 | 3 | 5 | 7 | 9 | 11 | 15 | 19 | 24 | 28 | 33 | 38 | 44 | 50 | 56 | 62 | 69 | 76 | 84 |
| 19-21 leaf | 3 | 4 | 6 | 8 | 11 | 14 | 18 | 22 | 27 | 32 | 38 | 43 | 51 | 57 | 64 | 71 | 79 | 87 | 96 |
| Tassel | 3 | 5 | 7 | 9 | 13 | 17 | 21 | 26 | 31 | 36 | 42 | 48 | 55 | 62 | 68 | 75 | 83 | 91 | 100 |
| Silked | 3 | 5 | 7 | 9 | 12 | 16 | 20 | 24 | 29 | 34 | 39 | 45 | 51 | 58 | 65 | 72 | 80 | 88 | 97 |
| Silks brown | 2 | 4 | 6 | 8 | 11 | 15 | 18 | 22 | 27 | 31 | 36 | 41 | 47 | 54 | 60 | 66 | 74 | 81 | 90 |
| Pre-blister | 2 | 3 | 5 | 7 | 10 | 13 | 16 | 20 | 24 | 28 | 32 | 37 | 43 | 49 | 54 | 60 | 66 | 73 | 81 |
| Blister | 2 | 3 | 5 | 7 | 10 | 13 | 16 | 19 | 22 | 26 | 30 | 34 | 39 | 45 | 50 | 55 | 60 | 66 | 73 |
| Early milk | 2 | 3 | 4 | 6 | 8 | 11 | 14 | 17 | 20 | 24 | 28 | 32 | 36 | 41 | 45 | 50 | 55 | 60 | 66 |
| Milk | 1 | 2 | 3 | 5 | 7 | 9 | 12 | 15 | 18 | 21 | 24 | 28 | 32 | 37 | 41 | 45 | 49 | 54 | 59 |
| Late milk | 1 | 2 | 3 | 4 | 6 | 8 | 10 | 12 | 15 | 18 | 21 | 24 | 28 | 32 | 35 | 38 | 42 | 46 | 50 |
| Soft dough | 1 | 1 | 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 17 | 20 | 23 | 26 | 29 | 32 | 35 | 38 | 41 |
| Early dent | | 0 | 1 | 1 | 2 | 3 | 5 | 7 | 9 | 11 | 13 | 15 | 18 | 21 | 23 | 25 | 27 | 29 | 32 |
| Dent | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 10 | 12 | 14 | 15 | 17 | 19 | 20 | 21 | 23 |
| Late dent | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Nearly mature | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
| Mature | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

For percentage of production loss not on the chart, interpolate as follows:

Locate the percent leaf area destroyed directly below and above the actual percent of leaf area destroyed taken from item 19 on the appraisal worksheet. Subtract the lower number from the actual percent and divide by 5. Multiply this result by the difference between the lower and higher production lost percentages. Add this amount to the percent production lost lower number, in percent to tenths.

EXAMPLE: Stage is 18th leaf. Actual percent of leaf area destroyed is 42. 40 and 45 (percents directly below and above). $42 - 40 = 2$
 $2 \div 5 = .4$ $19 - 15 = 4$ $4 \times .4 = 1.6$ $1.6 + 15 = 16.6$ 16.6 % will be the percent damage for leaf destruction entered in item 20 on the appraisal worksheet.

TABLE F - STAGE MODIFICATION TABLE

| ACTUAL LEAVES AT DATE OF LOSS | TOTAL ACTUAL LEAVES TO BE PRODUCED (ULTIMATE NO. OF LEAVES) | | | | | | | | | | | | | |
|-------------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| | MODIFIED STAGES | | | | | | | | | | | | | |
| 5 | 11 | 10 | 9 | 8 | 8 | 7 | 6 | 5 | 5 | 5 | | | | |
| 6 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 6 | 6 | 5 | | | |
| 7 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 7 | 7 | 6 | 5 | | |
| 8 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 8 | 8 | 7 | 6 | 5 | |
| 9 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 9 | 9 | 8 | 7 | 6 | 5 |
| 10 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 10 | 10 | 9 | 8 | 7 | 6 |
| 11 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 11 | 11 | 10 | 9 | 8 | 7 |
| 12 | 19/21 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 12 | 12 | 11 | 10 | 9 | 8 |
| 13 | | 19/21 | 18 | 17 | 16 | 15 | 14 | 13 | 13 | 13 | 12 | 11 | 10 | 9 |
| 14 | | | 19/21 | 18 | 17 | 16 | 15 | 14 | 14 | 14 | 13 | 12 | 11 | 10 |
| 15 | | | | 19/21 | 18 | 17 | 16 | 15 | 15 | 15 | 14 | 13 | 12 | 11 |
| 16 | | | | | 19/21 | 18 | 17 | 16 | 16 | 16 | 15 | 14 | 13 | 12 |
| 17 | | | | | | 19/21 | 18 | 17 | 17 | 17 | 16 | 15 | 14 | 13 |
| 18 | | | | | | | 19/21 | 18 | 18 | 18 | 17 | 16 | 15 | 14 |
| 19 | | | | | | | | 19/21 | 19/21 | 19/21 | 18 | 17 | 16 | 15 |
| 20 | | | | | | | | | 19/21 | 19/21 | 19/21 | 18 | 17 | 16 |
| 21 | | | | | | | | | | 19/21 | 19/21 | 19/21 | 18 | 17 |
| 22 | | | | | | | | | | | 19/21 | 19/21 | 19/21 | 18 |
| 23 | | | | | | | | | | | | 19/21 | 19/21 | 19/21 |
| 24 | | | | | | | | | | | | | 19/21 | 19/21 |
| 25 | | | | | | | | | | | | | | 19/21 |

TABLE G - SHELLING PERCENTAGES - EAR POPCORN

| (1) Wt. of Ear Popcorn Sample: (lbs.) | (2) Wt. of Shelled Popcorn Sample: (lbs.) | (3) EAR POPCORN Shelling Percentage For Weight Method Appraisals and Gross Weight Entries in Section II, column 57 of the Production Worksheet | (4) EAR POPCORN Shelling Percentage Factor For Structural Measurement Entries |
|---|---|--|---|
| 5 | 4.4 | .88 | 1.10 |
| 5 | 4.3 | .86 | 1.08 |
| 5 | 4.2 | .84 | 1.05 |
| 5 | 4.1 | .82 | 1.03 |
| 5 | 4.0 | .80 | 1.00 |
| 5 | 3.9 | .78 | .98 |
| 5 | 3.8 | .76 | .95 |
| 5 | 3.7 | .74 | .93 |
| 5 | 3.6 | .72 | .90 |
| 5 | 3.5 | .70 | .88 |
| 5 | 3.4 | .68 | .85 |
| 5 | 3.3 | .66 | .83 |
| 5 | 3.2 | .64 | .80 |
| 5 | 3.1 | .62 | .78 |
| 5 | 3.0 | .60 | .75 |
| 5 | 2.9 | .58 | .73 |
| 5 | 2.8 | .56 | .70 |
| 5 | 2.7 | .54 | .68 |
| 5 | 2.6 | .52 | .65 |
| 5 | 2.5 | .50 | .63 |
| 5 | 2.4 | .48 | .60 |
| 5 | 2.3 | .46 | .58 |
| 5 | 2.2 | .44 | .55 |
| 5 | 2.1 | .42 | .53 |
| 5 | 2.0 | .40 | .50 |

TABLE H - POPCORN MOISTURE ADJUSTMENT FACTORS

| WHOLE PERCENT MOISTURE | TENTHS OF PERCENT - MOISTURE | | | | | | | | | |
|------------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | .0 | .1 | .2 | .3 | .4 | .5 | .6 | .7 | .8 | .9 |
| 15 | 1.0000 | .9988 | .9976 | .9664 | .9952 | .9940 | .9928 | .9916 | .9904 | .9892 |
| 16 | .9880 | .9868 | .9856 | .9844 | .9832 | .9820 | .9808 | .9796 | .9784 | .9772 |
| 17 | .9760 | .9748 | .9736 | .9724 | .9712 | .9700 | .9688 | .9676 | .9664 | .9652 |
| 18 | .9640 | .9628 | .9616 | .9604 | .9592 | .9580 | .9568 | .9556 | .9544 | .9532 |
| 19 | .9520 | .9508 | .9496 | .9484 | .9472 | .9460 | .9448 | .9436 | .9424 | .9412 |
| 20 | .9400 | .9388 | .9376 | .9364 | .9352 | .9340 | .9328 | .9316 | .9304 | .9292 |
| 21 | .9280 | .9268 | .9256 | .9244 | .9232 | .9220 | .9208 | .9196 | .9184 | .9172 |
| 22 | .9160 | .9148 | .9136 | .9124 | .9112 | .9100 | .9088 | .9076 | .9064 | .9052 |
| 23 | .9040 | .9028 | .9016 | .9004 | .8992 | .8980 | .8968 | .8956 | .8944 | .8932 |
| 24 | .8920 | .8908 | .8896 | .8884 | .8872 | .8860 | .8848 | .8836 | .8824 | .8812 |
| 25 | .8800 | .8788 | .8776 | .8764 | .8752 | .8740 | .8728 | .8716 | .8704 | .8692 |
| 26 | .8680 | .8668 | .8656 | .8644 | .8632 | .8620 | .8608 | .8596 | .8584 | .8572 |
| 27 | .8560 | .8548 | .8536 | .8524 | .8512 | .8500 | .8488 | .8476 | .8464 | .8452 |
| 28 | .8440 | .8428 | .8416 | .8404 | .8392 | .8380 | .8368 | .8356 | .8344 | .8332 |
| 29 | .8320 | .8308 | .8296 | .8284 | .8272 | .8260 | .8248 | .8236 | .8224 | .8212 |
| 30 | .8200 | .8188 | .8176 | .8164 | .8152 | .8140 | .8128 | .8116 | .8104 | .8092 |
| 31 | .8080 | .8068 | .8056 | .8044 | .8032 | .8020 | .8008 | .7996 | .7984 | .7972 |
| 32 | .7960 | .7948 | .7936 | .7924 | .7912 | .7900 | .7888 | .7876 | .7864 | .7852 |
| 33 | .7840 | .7828 | .7816 | .7804 | .7792 | .7780 | .7768 | .7756 | .7744 | .7732 |
| 34 | .7720 | .7708 | .7696 | .7684 | .7672 | .7660 | .7648 | .7636 | .7624 | .7612 |
| 35 | .7600 | .7588 | .7576 | .7564 | .7552 | .7540 | .7528 | .7516 | .7504 | .7492 |
| 36 | .7480 | .7468 | .7456 | .7444 | .7432 | .7420 | .7408 | .7396 | .7384 | .7372 |
| 37 | .7360 | .7348 | .7336 | .7324 | .7312 | .7300 | .7288 | .7276 | .7264 | .7252 |
| 38 | .7240 | .7228 | .7216 | .7204 | .7192 | .7180 | .7168 | .7156 | .7144 | .7132 |
| 39 | .7120 | .7108 | .7096 | .7084 | .7072 | .7060 | .7048 | .7036 | .7024 | .7012 |
| 40 | .7000 | .6988 | .6976 | .6964 | .6952 | .6940 | .6928 | .6916 | .6904 | .6892 |

TABLE I – POPCORN – COMBINED TEST WEIGHT AND PACK FACTORS

| Test Weight | Less Than 255 Sq. Ft. - | 255 Sq. Ft. to 461 Sq. Ft. - | 462 Sq. Ft. to 767 Sq. Ft. - | 768 Sq. Ft. to 1384 Sq. Ft. - | 1385 Sq. Ft. to 2289 Sq. Ft. - | 2290 or Over Sq. Ft. - |
|-------------|-------------------------|------------------------------|------------------------------|-------------------------------|--------------------------------|------------------------|
| 30.0 | 0.587 | 0.594 | 0.603 | 0.610 | 0.610 | 0.610 |
| 30.5 | 0.596 | 0.603 | 0.612 | 0.619 | 0.619 | 0.619 |
| 31.0 | 0.605 | 0.612 | 0.622 | 0.628 | 0.628 | 0.628 |
| 31.5 | 0.614 | 0.621 | 0.631 | 0.638 | 0.638 | 0.638 |
| 32.0 | 0.623 | 0.630 | 0.640 | 0.647 | 0.647 | 0.647 |
| 32.5 | 0.632 | 0.639 | 0.649 | 0.656 | 0.656 | 0.656 |
| 33.0 | 0.641 | 0.648 | 0.658 | 0.665 | 0.665 | 0.665 |
| 33.5 | 0.649 | 0.657 | 0.667 | 0.674 | 0.674 | 0.674 |
| 34.0 | 0.658 | 0.665 | 0.676 | 0.684 | 0.684 | 0.684 |
| 34.5 | 0.667 | 0.674 | 0.685 | 0.693 | 0.693 | 0.693 |
| 35.0 | 0.676 | 0.683 | 0.694 | 0.702 | 0.702 | 0.702 |
| 35.5 | 0.684 | 0.692 | 0.703 | 0.711 | 0.711 | 0.711 |
| 36.0 | 0.693 | 0.701 | 0.712 | 0.720 | 0.720 | 0.720 |
| 36.5 | 0.702 | 0.709 | 0.721 | 0.729 | 0.729 | 0.729 |
| 37.0 | 0.710 | 0.718 | 0.730 | 0.738 | 0.738 | 0.738 |
| 37.5 | 0.719 | 0.727 | 0.739 | 0.747 | 0.747 | 0.747 |
| 38.0 | 0.727 | 0.736 | 0.748 | 0.756 | 0.756 | 0.756 |
| 38.5 | 0.736 | 0.744 | 0.757 | 0.765 | 0.765 | 0.765 |
| 39.0 | 0.744 | 0.753 | 0.765 | 0.774 | 0.774 | 0.774 |
| 39.5 | 0.753 | 0.761 | 0.774 | 0.783 | 0.783 | 0.783 |
| 40.0 | 0.761 | 0.770 | 0.783 | 0.791 | 0.791 | 0.791 |
| 40.5 | 0.770 | 0.779 | 0.792 | 0.800 | 0.800 | 0.800 |
| 41.0 | 0.778 | 0.787 | 0.800 | 0.809 | 0.809 | 0.809 |
| 41.5 | 0.787 | 0.796 | 0.809 | 0.818 | 0.818 | 0.818 |
| 42.0 | 0.795 | 0.804 | 0.818 | 0.841 | 0.853 | 0.871 |
| 42.5 | 0.803 | 0.812 | 0.826 | 0.849 | 0.861 | 0.879 |
| 43.0 | 0.812 | 0.821 | 0.835 | 0.857 | 0.869 | 0.887 |
| 43.5 | 0.820 | 0.829 | 0.843 | 0.865 | 0.877 | 0.895 |
| 44.0 | 0.828 | 0.838 | 0.852 | 0.873 | 0.885 | 0.903 |
| 44.5 | 0.836 | 0.846 | 0.860 | 0.881 | 0.893 | 0.911 |
| 45.0 | 0.845 | 0.854 | 0.869 | 0.889 | 0.901 | 0.919 |
| 45.5 | 0.853 | 0.862 | 0.877 | 0.897 | 0.909 | 0.927 |
| 46.0 | 0.861 | 0.871 | 0.886 | 0.905 | 0.917 | 0.935 |
| 46.5 | 0.869 | 0.879 | 0.894 | 0.913 | 0.925 | 0.943 |
| 47.0 | 0.877 | 0.887 | 0.902 | 0.921 | 0.933 | 0.951 |
| 47.5 | 0.885 | 0.895 | 0.911 | 0.929 | 0.941 | 0.959 |
| 48.0 | 0.893 | 0.903 | 0.919 | 0.937 | 0.949 | 0.967 |
| 48.5 | 0.901 | 0.912 | 0.927 | 0.945 | 0.957 | 0.975 |
| 49.0 | 0.909 | 0.920 | 0.935 | 0.953 | 0.965 | 0.983 |
| 49.5 | 0.917 | 0.928 | 0.944 | 0.961 | 0.973 | 0.991 |

**TABLE I – POPCORN – COMBINED TEST WEIGHT AND PACK FACTORS
(CONTINUED)**

| Test Weight | Less Than 255 Sq. Ft. - | 255 Sq. Ft. to 461 Sq. Ft. - | 462 Sq. Ft. to 767 Sq. Ft. - | 768 Sq. Ft. to 1384 Sq. Ft. - | 1385 Sq. Ft. to 2289 Sq. Ft. - | 2290 or Over Sq. Ft. - |
|-------------|-------------------------|------------------------------|------------------------------|-------------------------------|--------------------------------|------------------------|
| 50.0 | 0.925 | 0.936 | 0.952 | 0.969 | 0.981 | 0.999 |
| 50.5 | 0.933 | 0.944 | 0.960 | 0.978 | 0.990 | 1.009 |
| 51.0 | 0.941 | 0.952 | 0.968 | 0.986 | 0.998 | 1.017 |
| 51.5 | 0.949 | 0.960 | 0.976 | 0.994 | 1.006 | 1.025 |
| 52.0 | 0.956 | 0.968 | 0.984 | 1.003 | 1.015 | 1.034 |
| 52.5 | 0.964 | 0.975 | 0.992 | 1.011 | 1.024 | 1.043 |
| 53.0 | 0.972 | 0.983 | 1.000 | 1.019 | 1.032 | 1.051 |
| 53.5 | 0.980 | 0.991 | 1.008 | 1.027 | 1.040 | 1.059 |
| 54.0 | 0.987 | 0.999 | 1.016 | 1.036 | 1.049 | 1.069 |
| 54.5 | 0.995 | 1.007 | 1.024 | 1.044 | 1.057 | 1.077 |
| 55.0 | 1.003 | 1.015 | 1.032 | 1.052 | 1.065 | 1.085 |
| 55.5 | 1.010 | 1.022 | 1.040 | 1.060 | 1.073 | 1.094 |
| 56.0 | 1.018 | 1.030 | 1.048 | 1.068 | 1.081 | 1.102 |
| 56.5 | 1.026 | 1.038 | 1.056 | 1.076 | 1.089 | 1.110 |
| 57.0 | 1.033 | 1.045 | 1.064 | 1.084 | 1.097 | 1.118 |
| 57.5 | 1.041 | 1.053 | 1.071 | 1.092 | 1.105 | 1.126 |
| 58.0 | 1.048 | 1.061 | 1.079 | 1.100 | 1.113 | 1.134 |
| 58.5 | 1.056 | 1.068 | 1.087 | 1.108 | 1.122 | 1.143 |
| 59.0 | 1.063 | 1.076 | 1.095 | 1.116 | 1.130 | 1.151 |
| 59.5 | 1.070 | 1.083 | 1.102 | 1.123 | 1.138 | 1.160 |
| 60.0 | 1.078 | 1.091 | 1.110 | 1.131 | 1.146 | 1.168 |
| 60.5 | 1.085 | 1.098 | 1.118 | 1.139 | 1.153 | 1.175 |
| 61.0 | 1.093 | 1.106 | 1.125 | 1.147 | 1.161 | 1.183 |
| 61.5 | 1.100 | 1.113 | 1.133 | 1.155 | 1.169 | 1.191 |
| 62.0 | 1.107 | 1.120 | 1.140 | 1.163 | 1.177 | 1.199 |
| 62.5 | 1.114 | 1.127 | 1.147 | 1.171 | 1.185 | 1.207 |
| 63.0 | 1.121 | 1.134 | 1.154 | 1.179 | 1.193 | 1.215 |
| 63.5 | 1.128 | 1.141 | 1.161 | 1.187 | 1.201 | 1.223 |
| 64.0 | 1.135 | 1.148 | 1.168 | 1.195 | 1.209 | 1.231 |

Applicable only to shelled corn. If the actual test weight is not shown on the chart, refer to subsection 9B, Section II, **column 60b** for instructions.

EXHIBIT 1

POPCORN STAGE DEFINITIONS

| Stage of Growth (Leaf is 40 to 50 percent exposed) and is usually the uppermost leaf tip pointing below a horizontal line) | Average Time Interval From This Stage to Next Stage | CHARACTERISTICS | | Percent of Leaf Area Exposed |
|--|---|--|-----------------------------|------------------------------|
| | | Collar of This Leaf is Visible | Tip of This Leaf is Visible | |
| 7 Leaf | 3 days | 5th | 9th | 6 |
| 8 Leaf | 3 days | 6th | 10th | 10 |
| 9 Leaf | 3 days | 7th | 11th | 16 |
| 10 Leaf | 3 days | 7th | 12th | 23 |
| 11 Leaf | 3 days | 8th | 13th | 31 |
| 12 Leaf | 3 days | 9th | 14th | 41 |
| 13 Leaf | 3 days | 10th | 15th | 50 |
| 14 Leaf | 3 days | 11th | 16th | 60 |
| 15 Leaf | 3 days | 12th | 17th | 69 |
| 16 Leaf | 3 days | 13th | 18th | 77 |
| 17 Leaf | 3 days | 14th | -- | 84 |
| 18 Leaf | 2 days | 15th | -- | 94 |
| 19-21 Leaf | 2 days | Tassel and ear shoot emerging but not fully extended. Removal of husks will show the silk to be shorter than cob. The last leaves of the plant are in the process of becoming fully extended. Elongation of upper nodes is not complete. | | 94 + |
| Tasseled | 4 days | Tassel fully extended; ear shoot exposed but no silk showing. Husks opened on the ear shoot would show the silk longer than the cob. No pollen evident. Plant has reached maximum size. | | 99 |
| Silked | 4 days | Pollination period. Silks have emerged. Tassel is shedding pollen. | | 100 |
| Silks Brown | 5 days | Pollination period almost complete. Seventy-five percent of silks on ear shoot showing a purple to brown color. Silks are not dry to the touch even though the color has changed to purplish brown. | | |
| Blister | 4 days | Kernels on cob appear as watery blisters. Kernel is white and fluid is colorless. Removal of fluid from kernel would leave only hull. | | |

EXHIBIT 1

POPCORN STAGE DEFINITIONS (CONTINUED)

| Name of Stage | Average Time Interval From This Stage to Next Stage | Characteristics | Percent of Leaf Area Exposed |
|-------------------|---|--|------------------------------|
| Pre - Blister | 4 days | Pollination period is complete. Silks are brown but not dry. No fluid in seed coat and kernel has appearance of a pimple. | |
| Early Milk | 4 days | Kernels changing in color from translucent to yellow. Kernels of seed coat starting to show slight yellow appearance. Thin chalky or milky substance in kernels. | |
| Milk | 5 days | Full yellow color. Cob has reached its maximum length. Milky fluid in kernel, no solid substance. | |
| Late Milk | 4 days | Milky fluid thickening and solids forming at the end opposite tip of kernel. Crush kernel to determine existence of vitreous (glassy) starch deposits. | |
| Soft Dough | 5 days | Pasty or semi-solid. Deposits of dense or horny endosperm give the impression of a small lens or incomplete cap to the kernel. Kernels still produce a milky substance when squeezed. | |
| 25 percent Stage | 5 days | Thick gummy substance will be evident when kernel is squeezed but kernels will still squirt some milk when mashed. Glazing or (capping) evident near the butt end of the ear. | |
| 50 percent Stage | 5 days | Capping evident in most kernels. While most kernels will not squirt milk when squeezed, there will be evidence of milk in the top of some kernels. the endosperm has shown signs of hardening. | |
| 75 percent Stage | 5 days | All kernels are capped. Kernels showing distinct brown coloration. Drying of the husks. | |
| 95 percent stage | 5 days | Kernels have full coloration. Dry matter has accumulated in all but the tips of the kernels. | |
| 100 percent stage | - - | Physiological maturity and the point of maximum grain dry matter has been reached. Loss in weight from this point to full maturity (15 percent moisture) reflects reduction in moisture from approximately 40 percent to 15 percent. | |

ALL STAGES ARE BASED ON 50 PERCENT OF THE PLANTS BEING AT OR BEYOND A GIVEN PHASE OF DEVELOPMENT.

Modifications to the late reproductive stage characteristics of popcorn provided by E. J. Stevens, S. J. Stevens, A. D. Flowerday. University of Nebraska - Lincoln.

EXHIBIT 2

POPCORN PLANT AND KERNEL CHARACTERISTICS

FIGURE A

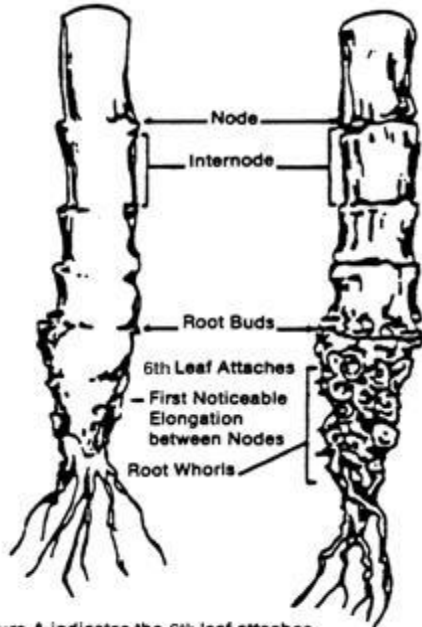


Figure A indicates the 6th leaf attaches at the first noticeable elongation between nodes starting at the root end.

FIGURE B

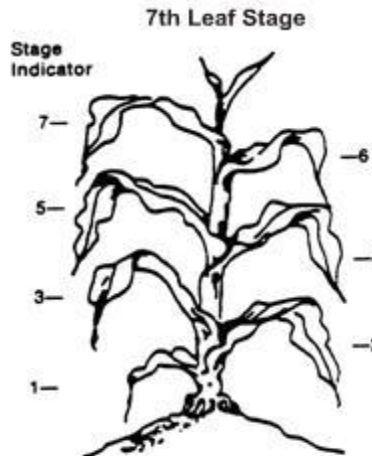
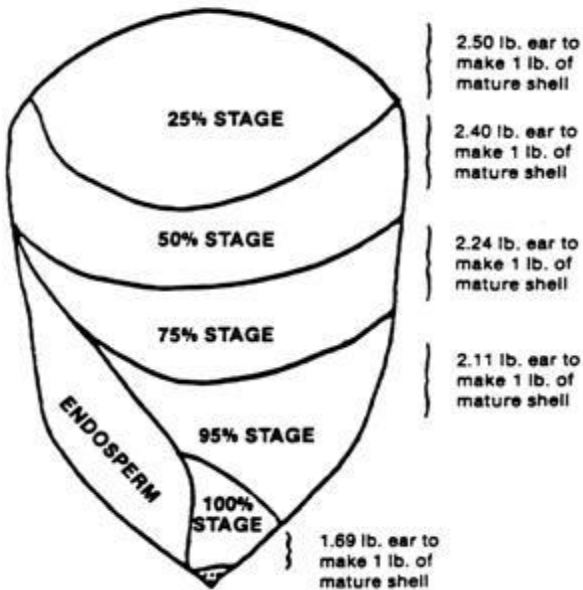


Figure B indicates that the stage indicator leaf is that leaf which is 40 to 50 percent exposed and is usually the uppermost leaf that is pointing below a horizontal line.

FIGURE C



FULL MATURITY

Figure C indicates the stages of maturity by determining in which quarter of the kernel that the line separating the solids and the milk is located.