

United States
Department of
Agriculture



Federal Crop
Insurance
Corporation



Product
Development
Division

FCIC-25240 (12-97)
FCIC-25240-1 (7-98)

HYBRID SEEDS LOSS ADJUSTMENT STANDARDS HANDBOOK

1998 and Succeeding Crop Years

Includes Hybrid Corn and Hybrid Sorghum

1998 HYBRID SEEDS LOSS ADJUSTMENT STANDARDS HANDBOOK

SUMMARY OF CHANGES/CONTROL CHART

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

1 Changes for July 1998 issuance: (FCIC-25240-1)

The maturity line chart factors were deleted from handbook. The factor per stage has been incorporated into the appraisal worksheet.

Control Chart For: Hybrid Seeds Loss Adjustment Standards Handbook FCIC-25240						
	SC Page(s)	TC Page(s)	Text Page(s)	Exhibit(s)	Date	FCIC Number
Remove	1-2		1-2 25-30 33-34 55-62		12-97 12-97 12-97 12-97	FCIC-25240 FCIC-25240 FCIC-25240 FCIC-25240
Insert	1-2		1-2 25-30 33-34 55-62		7-98 7-98 7-98 7-98	FCIC-25240-1 FCIC-25240-1 FCIC-25240-1 FCIC-25240-1
Current Index	1-2	1-2	1-2 3-24 25-30 31-32 33-34 35-54 55-62 63-96	1(97) 2(98) 3(99) 4(99) 5(100-101) 6(102) 7(103)	7-98 12-97 7-98 12-97 7-98 12-97 7-98 12-97 12-97 12-97 12-97 12-97 12-97 12-97	FCIC-25240-1 FCIC-25240 FCIC-25240-1 FCIC-25240 FCIC-25240-1 FCIC-25240 FCIC-25240-1 FCIC-25240 FCIC-25240 FCIC-25240 FCIC-25240 FCIC-25240 FCIC-25240 FCIC-25240

1998 HYBRID SEEDS LOSS ADJUSTMENT STANDARDS HANDBOOK

SUMMARY OF CHANGES/CONTROL CHART (con't)

(RESERVED)

HYBRID SEEDS LOSS ADJUSTMENT STANDARDS HANDBOOK

CORN AND SORGHUM

TABLE OF CONTENTS

PART 1 GENERAL

Page

1	Purpose	1
2	Special Instructions	1
3	Operating Policy	1
4	Abbreviations	2
5	Forms and Procedures	2
6	Definitions	2
7	Responsibilities	2
8	Insurance Contract Information	3
9	(Reserved)	6

PART 2 HYBRID SEEDS APPRAISALS

10	General Appraisal Standards	7
11	Sample Selection Standards	7
12	Stages of Growth	10
13	Appraisal Methods	20
14	Appraisal Form Entries and Completion Standards	42
15	Appraisal Calculation Standards	63
16	Appraisal Modification and Deviation Standards	63
17	(Reserved)	68
18	(Reserved)	69
19	(Reserved)	70

PART 3 HYBRID SEEDS CLAIMS

20	Claim Form Production Entries and Calculation Standards	71
21	(Reserved)	93
22	(Reserved)	93

EXHIBITS

1	Moisture Adjustment Table Hybrid "Corn" Seed	97
2	Moisture Adjustment Table Hybrid "Sorghum" Seed	98
3	High Moisture Ear Corn to Bushel of Shelled Hybrid "Corn" Seed Factor Table	99
4	Test Weight Factor Table For Computing Net Bushels "Corn" "Sorghum"	99
5	Hybrid Corn Seed Terminology	100
6	Hybrid Seed Approval Yield Form Sample "Corn"	102
7	Hybrid Seed Approval Yield Form Sample "Sorghum"	103

(RESERVED)

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

FEDERAL CROP INSURANCE HANDBOOK	NUMBER: 25240 (12-97) 25240-1 (7-98)
SUBJECT: HYBRID SEEDS LOSS ADJUSTMENT STANDARDS HANDBOOK 1998 AND SUCCEEDING CROP YEARS	DATE: July 30, 1998
	OPI: Product Development Division
	APPROVED: /s/ R. E. Waggoner for Tim B. Witt Deputy Administrator, Research and Development Division

PART 1 GENERAL

1 PURPOSE

This handbook identifies the crop-specific standards (requirements) for adjusting Multiple Peril Crop Insurance (MPCI) hybrid seeds (corn and sorghum) losses in a uniform and timely manner. These standards, which include crop appraisal methods and claims completion instructions, supplement the general (not crop-specific) standards for loss adjustment identified in the FCIC-25010, Loss Adjustment Manual (LAM).

2 SPECIAL INSTRUCTIONS

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

FCIC-25240 (12/97) is the initial loss adjustment standards handbook issued for hybrid seeds. FCIC-25240-1 (7/98) is the amendment pages to the loss adjustment standards handbook for hybrid seeds.

3 OPERATING POLICY

A Insurance Providers. Insurance providers must use this handbook as a basis for developing any appropriate loss adjustment procedures and training consistent with these standards in this handbook. Insurance providers may find it necessary to provide additional internal guidelines or procedures for adjusting losses on their insurance contracts. Any additional guidelines or procedures will require FCIC approval unless otherwise provided in writing by FCIC.

B Specific Entry Standards. Where these standards are entry-specific to generic forms, insurance providers' forms and procedures are to comply with the FCIC standards in at least an equivalent manner.

4 ABBREVIATIONS

APH	Actual Production History
CAT	Catastrophic Risk Protection
CIH	Crop Insurance Handbook
FSA	Farm Service Agency
FCIC	Federal Crop Insurance Corporation
GLAS	General Loss Adjustment Standards (also LAM)
LAM	Loss Adjustment Manual (also GLAS)
MPCI	Multiple Peril Crop Insurance
RMA	Risk Management Agency
RSO	Regional Service Office
USDA	United States Department of Agriculture

5 FORMS AND PROCEDURES

- A Insurance Providers. Insurance providers are to use FCIC-approved standard procedures in developing procedures, training, forms and completion instructions. All procedures, forms and completion instructions must be submitted for approval in accordance with the FCIC-24030 Submission Standards Handbook.
- B General Forms and Manuals. General forms and manuals (or their equivalent) necessary for loss adjustment are identified in the LAM.
- C Distribution. One legible copy to the insured. The original and all remaining copies as instructed by the insurance provider.

NOTE: It is the insurance provider's responsibility to maintain original insurance documents relative to policyholder servicing as designated in the approved plan of operations.

6 DEFINITIONS

- A General. Terms and definitions that are general (not crop specific) to loss adjustment are identified in the LAM.
- B Specific. Terms and definitions specific to hybrid seeds loss adjustment and this handbook, which are not defined in this section, are defined as they appear in the text.

7 RESPONSIBILITIES

- A FCIC Product Development Division
- (1) Establish the minimum standards and guidelines for loss adjustment.

- (2) Unless otherwise specified, review and approve all insurance provider loss adjustment procedures and forms prior to their use.
- (3) Provide guidance and clarification, as needed, regarding these standards.

B Insurance Providers

- (1) Comply with and implement the loss adjustment standards (requirements) established by FCIC, through procedures and forms approved by the Product Development Division, or as otherwise specified in writing by FCIC.
- (2) Ensure that all documentation, determinations, and calculations are completed as specified in these standards.
- (3) Provide input to FCIC regarding the loss adjustment standards.
- (4) Advise FCIC of impending situations which may necessitate the development of procedures, forms, or calculations that are different than those identified in the standards issued by FCIC.
- (5) Comply with other requirements issued by FCIC in the administration of contracts between the insurance provider and FCIC.
- (6) Ensure that the required information is provided on the specific forms, printouts, or on a Special Report attached to the appropriate form, specified in approved standards and procedures.
- (7) In addition to the responsibilities identified in the LAM, determine whether contract provisions or requirements for hybrid seeds (corn or sorghum) apply to the insured, and if so, whether they have been complied with by the insured.

8 **INSURANCE CONTRACT INFORMATION**

The insurance provider is to determine that the insured has complied with all policy provisions of the insurance contract. Hybrid Corn Seed or Hybrid Sorghum Seed provisions which are to be considered in this determination include (but are not limited to):

A Insurability

- (1) Grower Contract:
 - (a) For insurance to attach, a **seed processor** contract with a seed company must be in force.

- (b) Noncompliance with provisions of the **seed processor** contract causing subsequent rejection of the corn or sorghum for seed is considered seed lost through uninsured causes.
- (2) Seed Quality:
- (a) Production accepted by the seed company is considered seed. If germination is **below 80 percent**, the seed company can "condition" the grain and accept only that portion which meets its standards. The rejected grain will be considered non-seed for insurance purposes.
 - (b) Production is **considered** acceptable as seed if a cleaned sample ("Corn" or "Sorghum") has 80 percent or more germination (by warm certified seed test) at the time of delivery to the seed company. Costs of germination testing will be borne by the Insurance Provider, if authorized by Insurance Provider authorized representative and an acceptable test is **not** timely provided by the seed company.
 - (c) Production rejected by the seed company (including that described in (a), above) not qualifying as seed by (b), above, will be considered as regular (non-seed) corn or sorghum. The price of such corn or sorghum will be the market price, taking into account any reduction in value due to insurable causes (including mycotoxin). The cumulative value of all seed and non-seed will be totaled in determining production to count.
- (3) Dollar Amount of Insurance:
- (a) Subtract the minimum payment (in bushels) provided by the seed company from the selected coverage level's county yield established by the RMA. Multiply the total by the selected price election.

If the minimum payment provided by the seed company is stated as a dollar amount, it will be converted to a bushel equivalent by dividing the dollar amount by the selected price election.
 - (b) If hail and fire coverage **has been excluded** from the MPCCI policy, and the crop is damaged by hail or fire, an appraisal for uninsured causes will be made for the amount which exceeds the "deductible". See the LAM.

NOTE: Late and Prevented Planting guarantees are reduced as provided in the insurance contract. No replanting payment will be made, but any acreage damaged prior to the final planting date must be replanted unless replanting is not practical.

B Quality Adjustment

- (1) Moisture adjustment is applied prior to any qualifying quality adjustment factor such as test weight, kernel damage, etc. The Hybrid Seed ("Corn" or "Sorghum") moisture adjustment charts are found in **Exhibit 1 and 2**.

C General Provisions not Applicable to Catastrophic Risk Protection (CAT).

These general provisions do not apply to CAT.

- (1) Optional Units.
- (2) Written Agreements.
- (3) Hail and Fire Exclusion provisions (also not applicable to limited buy-up).

D (Reserved)E Mycotoxins

- (1) There is no specific "threshold" level of mycotoxin presence for grain to qualify for quality adjustment. Grain price reduction due to mycotoxin presence will be allowed if the mycotoxin presence results in a reduction in value for the damaged grain and if the damage is due to an insured cause.
- (2) The insured is required to furnish the cause(s) of loss incurred; therefore, it is the insured's responsibility to request any mycotoxin testing. A test for mycotoxins must be conducted by the FGIS or other recognized laboratory not directly involved in the marketing of the damaged grain. The testing laboratory must select their samples and analyze the mycotoxins in accordance with certified procedures. The **insurance provider**, at its discretion, may pay reasonable costs of mycotoxin testing, if its presence is suspected.

Additional testing costs may be paid by the insurance provider if such testing is necessary to establish a market value for the affected grain.

- (3) See the LAM for additional information.

F Replanting Payment Standards. **No Replant payment will be made for Hybrid Seeds (Corn or Sorghum). Any acreage damaged prior to the final planting date must be replanted unless it is not practical to replant.**

G Late and Prevented Planting Standards. See the Special Provisions for the insured crop in the county, Crop Insurance Policy, LAM, and any applicable supplemental instructions issued for late planting and prevented planting.

9 (RESERVED)

PART 2 - HYBRID SEEDS (CORN OR SORGHUM) APPRAISALS

10 GENERAL APPRAISAL STANDARDS

A General Instructions

- (1) The following are directions for appraising potential production of hybrid seeds according to growth stages through maturity.
- (2) **Any deviations in the appraisal methods require FCIC written authorization** (as described in the **LAM**).

B As specified in the LAM, appraisals are to be made:

- (1) For uninsured causes of loss. Such appraisals will NOT be used for actual production history (APH) purposes. For additional instructions see the CIH.
- (2) For damage such as hail, flooding, etc. Defer such appraisals to a later date in order to assess crop recovery and to obtain more accurate appraisals. See the **LAM** for further instruction on deferred appraisals.

11 SAMPLE SELECTION STANDARDS

A Selecting Representative Samples for Appraisals

- (1) Determine the number of recommended 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 subfield must be appraised separately.
- (4) Take as many samples as necessary for an accurate appraisal. When fewer than the recommended minimum number of samples shown in **Subparagraph B** minimum sample table, must be explained in the remarks section of the appraisal form.

B Minimum Sample Table

MINIMUM SAMPLE RECOMMENDATIONS FOR REPRESENTATIVE SAMPLES

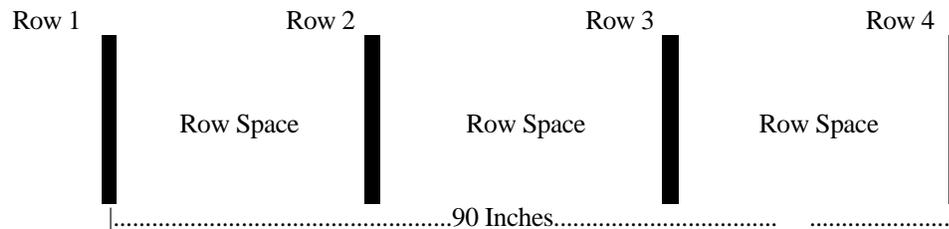
ACRES IN FIELD	MINIMUM NO. OF SAMPLES
0.1 - 10.0	3
10.1 - 40.0	4
Add one additional sample for each additional 40.0 acres (or fraction thereof) in the field or subfield.	

C Measuring Row Width for Sample Selection

Use these instructions for all appraisal methods.

- (1) Use a measuring tape marked in inches or convert a tape marked in tenths, to inches, to measure row width (see **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 in whole inches.

Example:



$$90 \text{ inches} \div 3 \text{ row spaces} = 30 \text{ in. average row width}$$

- (3) Apply the average row width to the table in **Subparagraph E**, to determine the sample row length required for the sample row.
- (4) Refer to **Subparagraph D** for row length sample requirements, determine sample length and select representative area in the field for sampling.

D Sampling Procedure Standards

- (1) Determine average hybrid seeds (corn and sorghum) growth stage in selected representative samples.

- (2) Establish the stage of growth as the most advanced stage of development which at least 50% of the plants in the representative sample have reached.
- (3) Use the stage of growth at the date of adjustment (the date when the adjuster first appraises crop damage) when determining yield loss.

NOTE: The correct timing of crop damage appraisals is important to establish growth stage and cause of damage before regrowth occurs.

CORN -- When selecting the sample, make note of the planting pattern (i.e., 2 male rows, 4 female rows, 2 male rows, etc.). The critical dependence upon the male pollinator rows for adequate pollination makes it very important that the sample be representative of all female rows in the planting pattern. **Hybrid Corn Seed samples consist of 1/100 acre.**

E Row Width and Length Chart

<u>Row Width</u>	<u>1/100 Acre</u>	<u>1/1000 Acre</u>
42"	125'	12.5'
40	131	13.1
38	138	13.8
36	145	14.5
34	154	15.4
32	163	16.3
30	174	17.4
28	187	18.7
26	202	20.2
24	218	21.8
22	238	23.8
20	262	26.2
18	290	29.0
16	326	32.6
14	374	37.4

When 2 or more rows are used for a pattern, divide the length of a single row pattern by the number of rows in the pattern. The combined length of all rows must equal the single row length.

12 STAGES OF GROWTH

Hybrid Seeds (corn and sorghum) growth stages identifies time interval to next stage in relation to appraisal methods.

A Stages of Growth for Corn

- (1) 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 50 percent exposed. It is usually 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 (see **Subparagraph C, Figure A**):
 - 1 Pull up the entire plant and carefully split stalk to expose stalk nodes and root whorls.
 - 2 The **FIFTH** leaf attaches to the top of the first noticeable elongation between the stalk nodes (an internode).
 - 3 After the fifth 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 stage seven or eight, the internode elongation should be easily found.
- (2) Ear development is used to determine stage of growth from tassel to maturity (**Subparagraph B**).
- (3) Stage Definitions. The definitions listed below are based on normal or average conditions in the Corn Belt Area for 120-day or full season corn. There are approximately 7 days from planting to emergence, and 21 days from emergence to the 7th actual leaf stage.

B Corn Characteristics

Stage of Growth
(Leaf is 40 to
50 percent exposed
and is usually the
uppermost leaf tip
pointing below a
horizontal line.) _

	<u>Average Time Interval (this Stage to Next)</u>	<u>Collar of this Leaf is Visible</u>	<u>Tip of this Leaf is Visible</u>	<u>Percent of Leaf Area Exposed</u>
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			96

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.

<u>Stage of Growth</u>	Average Time Interval (this Stage to Next)	<u>Corn Characteristics</u>	Percent of Leaf Area Exposed
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 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.	
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.	
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.	
Early Milk	4 days	Beginning of roasting ear stage. Kernels changing in color from white to yellow. Kernels of seed coat starting to show slight yellow appearance. Thin chalky or milky substance in kernels.	
Milk	5 days	Prime roasting ear stage. 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 point of kernel.	

<u>Stage of Growth</u>	<u>Average Time Interval (this Stage to Next)</u>	<u>Corn Characteristics</u>
Soft Dough	5 days	Past prime roasting ear stage. Pasty or semi-solid. First few dents are showing near butt end. Kernels still produce a milky substance when squeezed.
Early Dent	5 days	Kernels along entire ear beginning to dent. Thick gummy substance will be evident when kernel is squeezed but kernels will squirt milk when mashed.
Dent	5 days	Most kernels dented or denting. Kernel can be cut easily with fingernail. While most kernels will not squirt milk when squeezed, there will be evidence of milk in the top of some kernels.
Late Dent	5 days	All kernels are dented. The kernels are drying down from the top where a small hard white layer of starch is forming.
Nearly Mature	5 days	Hull on opposite side of embryo has a shiny hardened appearance nearly halfway to cob. Kernel is not hard or brittle.
Mature	-----	Physiological maturity has been reached and the moisture level is below 40 percent on most corn belt hybrids. Shiny hardened appearance of hull on opposite side of embryo has extended to the cob. Dry matter accumulation has ceased.

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

C Figure A, B, and C Descriptive Pictures of Corn Plant.

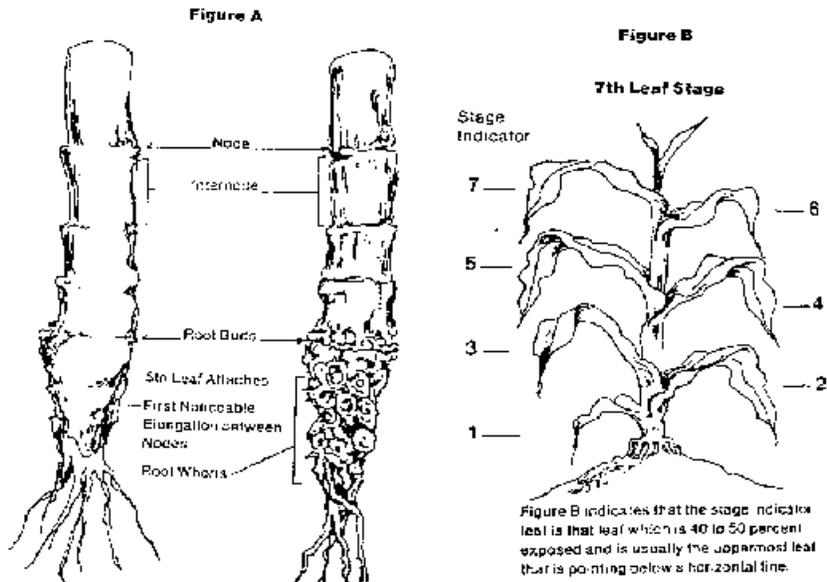
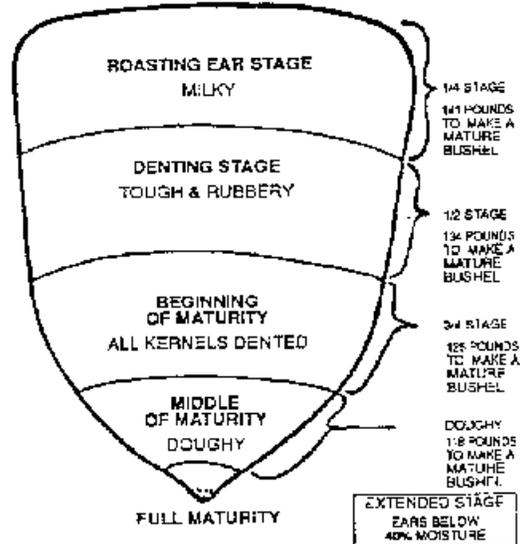


Figure A indicates the 5th leaf attaches at the first noticeable elongation between nodes starting at the root end.

FIGURE C
Side Opposite: Germ Area



D Stages of Growth for Sorghum

- (1) Actual leaf count is used to determine the stage of growth until all the leaves are exposed.
 - (a) Starting with the rounded tip leaf, count all leaves developed up to, and including the stage indicator leaf. The stage indicator is that leaf which is at least 50 percent exposed. It is usually the uppermost leaf tip that is pointing below a horizontal line.
 - (b) If the rounded tip leaf cannot be determined, the node identification system (**Subparagraph G, Figure A**) will be used:
 - 1 Pull up the entire plant and carefully split the stalk to expose stalk nodes and root whorls.
 - 2 The **SEVENTH** leaf attaches to the top of the first noticeable elongation between the nodes (an internode).
 - 3 After the seventh leaf node is identified, count upward to the stage indicator leaf.
 - 4 In the early stages of the plant's development, the nodes are very compact and difficult to distinguish; by stage nine or ten, the internode elongation should be easily found.
- (2) The development of the head determines the stage of growth after the boot stage (refer to Sorghum Stage Characteristics (Heading through Maturity)).
- (3) Stage Definitions. The definitions listed below are based on the average normal conditions for a 20-leaf, 115-day plant.

E Sorghum Stage Characteristics (Emergence through Boot)

<u>Name of Stage (one-half of the actual leaf is exposed)</u>	<u>Average Time Interval</u>	<u>Collar of this leaf is visible</u>	<u>Tip of this leaf is visible</u>	<u>Percent of total leaf area exposed</u>
Emergence to 11th Leaf	32 days	---	---	---
11th Leaf	4 days	9th	13th	12
12th Leaf	4 days	10th	14th	20
13th Leaf	3 days	11th	15th	28
14th Leaf	3 days	12th	16th	39
15th Leaf	3 days	13th	17th	50
16th Leaf	3 days	14th	18th	62
17th Leaf	3 days	15th	19th	72
18th Leaf	2 days	16th	20th (flag leaf)	79
19th Leaf	2 days	17th	Part of 20th (flag) leaf is visible	85
20th	3 days	---	---	92
Full Leaf Develop- ment (Early Boot)	3 days	All leaves fully extended and exposed. Head has started to swell and is extended to just below the flag leaf.		100
Boot	2 days	Head has reached almost full size and has started to emerge from the sheath of the flag leaf.		

F Sorghum Stage Characteristics (Heading through Maturity)

<u>Name of Stage</u>	<u>Average Time</u>	<u>Characteristics</u>
Just Headed	2 days	50 percent of the heads emerged from the boot. No blooms showing.
Bloom	5 days	All heads emerged from the boot and 50 percent are showing yellow pollen tubes over 50 percent of each head.
Blister	4 days	Grain is in a watery form and only partially formed--no color to liquid.
Early Milk	6 days	Grain is fully formed. Substance is clear to slightly white, milky liquid. Removal of fluid would leave only the grain hull.
Milk	7 days	Substance is thick milky liquid, no solids.
Late Milk	7 days	Grain has reached a semi-solid form.
Soft Dough	6 days	Grain can be crushed and a white substance emerges in a semi-solid form.
Dough	5 days	Grain can be crushed and a white substance emerges in an almost solid form.
Hard Dough	6 days	Grain is firm enough that when crushed there is no emergence.
Mature	---	Physiological maturity has been reached. Less than 40 percent moisture content.

NOTE: **Subparagraph F** is helpful in determining **the stage of growth**.

All stages are based on 50 percent of the plants in the sample at or beyond a given phase of development.

Figure A

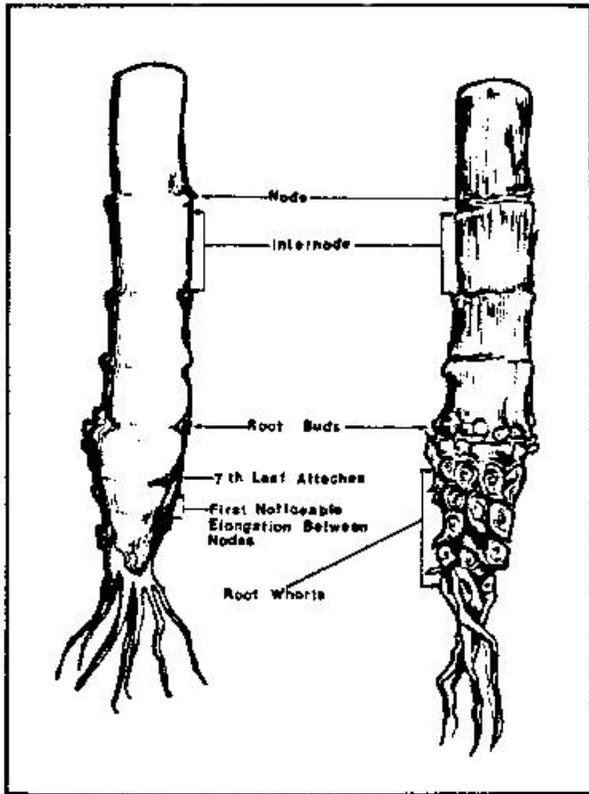


Figure B

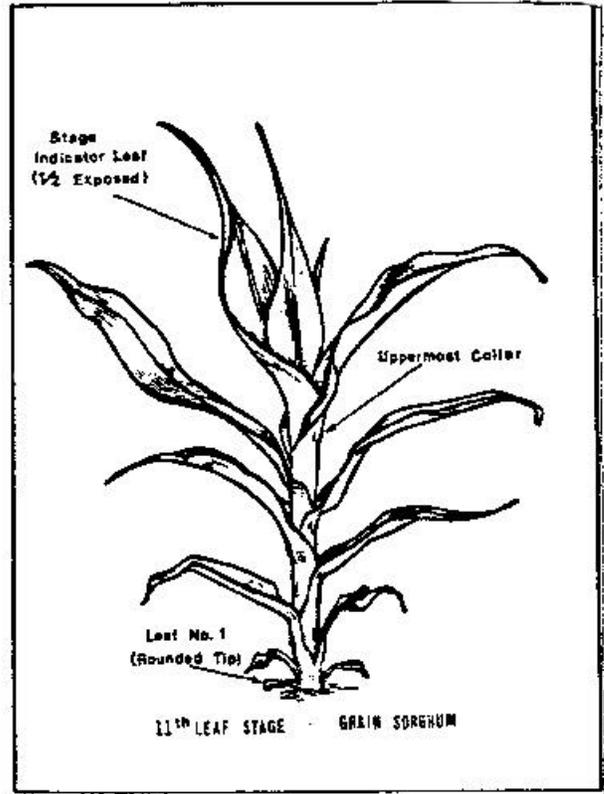
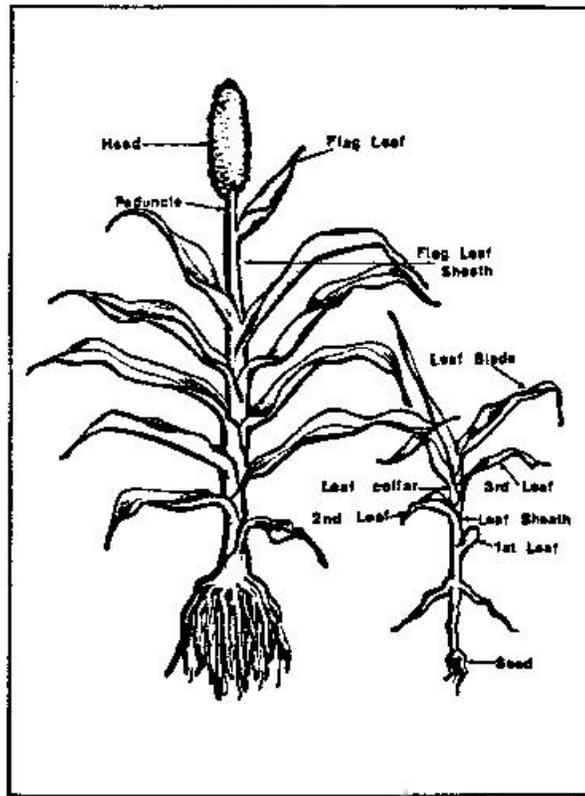


Figure C



(RESERVED)

13 APPRAISAL METHODS

A **Corn Appraisal Stand Reduction Method.** Use the Stand Reduction Appraisal Worksheet for all appraisals from emergence to the milk stage (stand reduction appraisals for hail damage begin with the 7th leaf stage).

- (1) This method is based on the number of surviving plants in a designated sample row length.
- (2) Surviving plant counts, at the time of appraisal, are converted to bushels 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 "Hybrid Seed Approved Yield" form or the APH form, as appropriate.
- (3) Prior to the 11th leaf stage, the "Stand Reduction Chart" is used to determine the percent of potential remaining (**Subparagraph B**).
- (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.
- (6) **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 the frost date listed in the actuarial table.

- (a) Determine normal plant population by counting all potential (living, dead, missing, or non-emerged) plants in a length of row equivalent to 1/100 acre and enter in item 11.
- (b) Determine stage of growth for **early-germinating** corn and record in item 19.
- (c) Determine the stage of growth for **each late-germinating** corn plant and record in item 23 ("**notes and calculations**" section):
 - 1 The stage of each plant; and 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 frost date (**as listed in the actuarial table for hybrid corn seed**) and show calculation in item 23.

- (e) Count and record in item 12 as "surviving," those plants which will reach the milk stage before the frost date (include early-germinated plants).
- (f) The percent of potential, item 15, is equal to the percent of "surviving" plants ("surviving" plant number divided by original plant population).
- (g) Percent of potential (item 15) multiplied by the applicable base yield is the per-acre appraisal.

EXAMPLE:

Some plants are in the 5th, 8th, and 10th leaf stages. Date of the appraisal is July 24. Average killing 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

B Corn Stand Reduction Chart - Percent of Potential Production 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 Ac.)																Normal
320	310	300	290	280	270	260	250	240	230	220	210	200	190	180	170	Stand
100	99	98	97	96	95	94	93	92	91	89	87	84	82	79	77	320
	100	99	98	97	96	95	94	93	92	90	88	86	84	81	79	310
		100	99	98	97	96	95	94	93	91	89	88	86	83	80	300
			<u>100</u>	<u>99</u>	<u>98</u>	<u>97</u>	<u>96</u>	<u>95</u>	<u>94</u>	<u>92</u>	<u>90</u>	<u>89</u>	<u>87</u>	<u>85</u>	<u>82</u>	<u>290</u>
				100	99	98	97	95	94	93	91	90	88	86	84	280
*EXAMPLE:					100	99	97	96	95	94	93	91	90	88	86	270
						100	99	97	96	95	94	93	91	90	88	260
To interpolate for 39							<u>100</u>	<u>99</u>	<u>98</u>	<u>97</u>	<u>96</u>	<u>94</u>	<u>93</u>	<u>92</u>	<u>90</u>	<u>250</u>
remaining plants and 240								100	99	98	97	96	95	94	91	240
original plants: 39 is .9 of									100	99	98	97	96	95	92	230
difference between 30 and 40;										100	99	98	97	96	93	220
.9 x 7 (38-31) = 6.3											<u>100</u>	<u>99</u>	<u>98</u>	<u>96</u>	<u>94</u>	<u>210</u>
31 plus 6.3 = 37.3 (rounded to 37)												100	99	97	95	200
100 minus 37 = 63% damage (37 is													100	98	96	190
subtracted from 100 because 37%														100	98	180
<u>POTENTIAL REMAINING = 63% DAMAGE).</u>															<u>100</u>	<u>170</u>

Remaining plants in sample (1/100 Ac.)																Normal	
160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	0	Stand
74	71	68	65	62	59	55	51	47	42	37	32	26	20	14	8	0	320
76	73	70	67	64	61	57	53	48	43	38	33	27	21	15	9	0	310
77	75	72	69	66	63	59	55	50	45	40	35	29	23	17	11	0	300
<u>79</u>	<u>77</u>	<u>74</u>	<u>71</u>	<u>68</u>	<u>65</u>	<u>61</u>	<u>57</u>	<u>52</u>	<u>47</u>	<u>42</u>	<u>37</u>	<u>31</u>	<u>25</u>	<u>19</u>	<u>11</u>	<u>0</u>	<u>290</u>
81	79	76	73	70	66	63	59	54	49	44	39	33	27	21	12	0	280
84	82	79	76	72	69	65	60	55	50	45	40	34	28	22	13	0	270
86	84	81	78	75	71	67	62	57	52	47	42	36	30	23	14	0	260
<u>88</u>	<u>86</u>	<u>83</u>	<u>80</u>	<u>77</u>	<u>73</u>	<u>69</u>	<u>64</u>	<u>59</u>	<u>54</u>	<u>49</u>	<u>43</u>	<u>37</u>	<u>30</u>	<u>23</u>	<u>15</u>	<u>0</u>	<u>250</u>
90	88	85	82	78	74	71	66	60	55	50	44	38	31	24	15	0	240
91	89	86	83	79	75	71	67	61	56	50	44	38	31	24	15	0	230
92	90	87	84	80	76	72	67	62	57	52	46	40	33	25	16	0	220
<u>93</u>	<u>91</u>	<u>88</u>	<u>84</u>	<u>80</u>	<u>76</u>	<u>73</u>	<u>68</u>	<u>63</u>	<u>58</u>	<u>53</u>	<u>47</u>	<u>41</u>	<u>34</u>	<u>25</u>	<u>16</u>	<u>0</u>	<u>210</u>
94	92	89	85	81	77	73	69	64	59	54	48	42	35	26	17	0	200
95	93	90	86	83	79	75	70	65	60	55	49	43	36	27	17	0	190
96	94	91	88	85	81	77	72	67	62	57	51	45	36	27	17	0	180
<u>98</u>	<u>96</u>	<u>93</u>	<u>90</u>	<u>87</u>	<u>83</u>	<u>79</u>	<u>74</u>	<u>69</u>	<u>64</u>	<u>59</u>	<u>53</u>	<u>46</u>	<u>37</u>	<u>27</u>	<u>18</u>	<u>0</u>	<u>170</u>
100	98	95	92	89	85	81	76	71	66	61	55	46	38	28	18	0	160
	100	97	94	92	88	85	79	74	69	63	57	47	38	28	18	0	150
		100	97	94	90	85	80	77	72	66	59	48	39	29	19	0	140
			<u>100</u>	<u>97</u>	<u>94</u>	<u>90</u>	<u>85</u>	<u>80</u>	<u>75</u>	<u>69</u>	<u>61</u>	<u>49</u>	<u>39</u>	<u>29</u>	<u>19</u>	<u>0</u>	<u>130</u>
				100	97	93	88	83	78	72	63	50	40	30	21	0	120
					100	97	92	88	83	74	65	51	40	30	23	0	110
						100	96	92	86	79	67	52	41	31	23	0	100
							100	96	91	88	69	53	41	31	24	0	90
								<u>100</u>	<u>97</u>	<u>91</u>	<u>70</u>	<u>54</u>	<u>42</u>	<u>32</u>	<u>25</u>	<u>0</u>	<u>80</u>

C Hail Stand Reduction Loss Chart - Corn

		REMAINING PLANTS - 1/100 ACRE																									
		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	
		PERCENT OF DAMAGE																									
O	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	
R	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	
I	300			0	1	2	3	4	5	6	7	9	11	12	14	17	20	23	25	29	31	34	37	41	45	50	
G.	290				0	1	2	3	4	5	6	8	10	11	13	15	18	21	23	26	29	32	35	39	43	48	
	280					0	1	2	3	5	6	7	9	10	12	14	16	19	21	24	27	30	34	37	41	46	
P	270						0	1	3	4	5	6	7	9	10	12	14	16	18	21	24	28	31	35	40	45	
L	260							0	1	3	4	5	6	7	9	10	12	14	16	19	22	25	29	33	38	43	
A	250								0	1	2	3	4	6	7	8	10	12	14	17	20	23	27	31	36	41	
N	240									0	1	2	3	4	5	6	9	10	12	15	18	22	26	29	34	40	
T	230										0	1	2	3	4	5	8	9	11	14	17	21	25	29	33	39	
S	220											0	1	2	3	4	7	8	10	13	16	20	24	28	33	39	
	210												0	1	2	4	6	7	9	12	16	20	24	27	32	37	
I	200													0	1	3	5	6	8	11	15	19	23	27	31	36	
N	190															0	2	4	5	7	10	14	17	21	25	30	35
	180																0	2	4	6	9	12	15	19	23	28	33
1	170																	0	2	4	7	10	13	17	21	26	31
/	160																		0	2	5	8	11	15	19	24	29
1	150																			0	3	5	8	12	16	21	26
0	140																				0	3	6	10	14	18	23
0	130																					0	3	6	10	15	20
	120																						0	3	7	12	17
A	110																							0	3	8	12
C	100																								0	4	8
R	90																									0	4
E	80																										0

EXAMPLE: To interpolate for 89 remaining plants and 240 original plants: 89 is .1 of difference between 90 and 80;
 $.1 \times 6(40 - 34) = .6$ 34 plus .6 = 34.6 (rounded to 35)

NOTE: For less than 80 plants per 1/100 acre remaining, use Stand Reduction Chart "B" and enter the remainder of 100 minus the percent of potential.

D Leaf Loss Chart - corn

Production percent loss for leaf area destroyed at stage of growth.

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	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

E Stage Modification Chart - corn

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 STAGE													
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

F-J (Reserved)

(Page 26-30 Reserved)

G Corn - Maturity Line Chart for Converting Pounds to Bushels (Continued)

Lbs. in Sample	Bushels Per Acre from 1/100 Acre Sample - 1/2 Stage (Factor .7463)									
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0	0	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7
1	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.3	1.4
2	1.5	1.6	1.7	1.8	1.9	1.9	1.9	2.0	2.1	2.2
3	2.2	2.3	2.4	2.5	2.5	2.6	2.7	2.8	2.8	2.9
4	3.0	3.1	3.1	3.2	3.3	3.4	3.4	3.5	3.6	3.7
5	3.7	3.8	3.9	4.0	4.0	4.1	4.2	4.3	4.3	4.4
6	4.5	4.6	4.6	4.7	4.8	4.8	4.9	5.0	5.1	5.1
7	5.2	5.3	5.4	5.4	5.5	5.6	5.7	5.7	5.8	5.9
8	6.0	6.0	6.1	6.2	6.3	6.4	6.4	6.5	6.6	6.6
9	6.7	6.8	6.9	6.9	7.0	7.1	7.2	7.2	7.3	7.4
10	7.5	7.5	7.6	7.7	7.8	7.8	7.9	8.0	8.1	8.1
11	8.2	8.3	8.4	8.4	8.5	8.6	8.7	8.7	8.8	8.9
12	9.0	9.0	9.1	9.2	9.3	9.3	9.4	9.5	9.6	9.6
13	9.7	9.8	9.8	9.9	10.0	10.1	10.1	10.2	10.3	10.4
14	10.4	10.5	10.6	10.7	10.7	10.8	10.9	11.0	11.0	11.1
15	11.2	11.3	11.3	11.4	11.5	11.6	11.6	11.7	11.8	11.9
16	12.0	12.0	12.1	12.2	12.2	12.3	12.4	12.5	12.5	12.6
17	12.7	12.8	12.8	12.9	13.0	13.1	13.1	13.2	13.3	13.4
18	13.4	13.5	13.6	13.7	13.7	13.8	13.9	14.0	14.0	14.1
19	14.2	14.3	14.3	14.4	14.5	14.6	14.6	14.7	14.8	14.8
20	14.9	15.0	15.1	15.1	15.2	15.3	15.4	15.4	15.5	15.6
21	15.7	15.7	15.8	15.9	16.0	16.0	16.1	16.2	16.3	16.3
22	16.4	16.5	16.6	16.6	16.7	16.8	16.9	16.9	17.0	17.1
23	17.2	17.2	17.3	17.4	17.5	17.5	17.6	17.7	17.8	17.8
24	17.9	18.0	18.1	18.1	18.2	18.3	18.4	18.4	18.5	18.6
25	18.7	18.7	18.8	19.0	19.0	19.0	19.1	19.2	19.3	19.3
26	19.4	19.5	19.6	19.6	19.7	19.8	19.8	19.9	20.0	20.1
27	20.1	20.2	20.3	20.4	20.4	20.5	20.6	20.7	20.7	20.8
28	20.9	21.0	21.0	21.1	21.2	21.3	21.3	21.4	21.5	21.6
29	21.6	21.7	21.8	21.9	21.9	22.0	22.1	22.2	22.2	22.3
30	22.4	22.5	22.5	22.6	22.7	22.8	22.8	22.9	23.0	23.1
31	23.1	23.2	23.3	23.4	23.4	23.5	23.6	23.7	23.7	23.8
32	23.9	24.0	24.0	24.1	24.2	24.3	24.3	24.4	24.5	24.6
33	24.6	24.7	24.8	24.9	24.9	25.0	25.1	25.2	25.2	25.3
34	25.4	25.4	25.5	25.6	25.7	25.7	25.8	25.9	26.0	26.0
35	26.1	26.2	26.3	26.3	26.4	26.5	26.6	26.6	26.7	26.8
36	26.9	26.9	27.0	27.1	27.2	27.2	27.3	27.4	27.5	27.5
37	27.6	27.7	27.8	27.8	27.9	28.0	28.1	28.2	28.3	28.4
38	28.4	28.5	28.6	28.7	28.7	28.8	28.9	28.9	29.0	29.1
39	29.2	29.3	29.3	29.4	29.5	29.6	29.6	29.7	29.8	29.8
40	29.9	30.0	30.1	30.1	30.2	30.3	30.4	30.4	30.5	30.6

H Corn - Maturity Line Chart for Converting Pounds to Bushels (Continued)

Lbs. in Sample	Bushels Per Acre from 1/100 Acre Sample - 3/4 Stage (Factor .8000)									
	<u>0.0</u>	<u>0.1</u>	<u>0.2</u>	<u>0.3</u>	<u>0.4</u>	<u>0.5</u>	<u>0.6</u>	<u>0.7</u>	<u>0.8</u>	<u>0.9</u>
0	0	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.6	0.7
1	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.4	1.5
<u>2</u>	<u>1.6</u>	<u>1.7</u>	<u>1.8</u>	<u>1.8</u>	<u>1.9</u>	<u>2.0</u>	<u>2.1</u>	<u>2.2</u>	<u>2.2</u>	<u>2.3</u>
3	2.4	2.5	2.6	2.6	2.7	2.8	2.9	3.0	3.0	3.1
4	3.2	3.3	3.4	3.4	3.5	3.6	3.7	3.8	3.8	3.9
<u>5</u>	<u>4.0</u>	<u>4.1</u>	<u>4.2</u>	<u>4.2</u>	<u>4.3</u>	<u>4.4</u>	<u>4.5</u>	<u>4.6</u>	<u>4.6</u>	<u>4.7</u>
6	4.8	4.9	5.0	5.0	5.1	5.2	5.3	5.4	5.4	5.5
7	5.6	5.7	5.8	5.8	5.9	6.0	6.1	6.2	6.2	6.3
<u>8</u>	<u>6.4</u>	<u>6.5</u>	<u>6.6</u>	<u>6.6</u>	<u>6.7</u>	<u>6.8</u>	<u>6.9</u>	<u>7.0</u>	<u>7.0</u>	<u>7.1</u>
9	7.2	7.3	7.4	7.4	7.5	7.6	7.7	7.8	7.8	7.9
10	8.0	8.1	8.2	8.2	8.3	8.4	8.5	8.6	8.6	8.7
<u>11</u>	<u>8.8</u>	<u>8.9</u>	<u>9.0</u>	<u>9.0</u>	<u>9.1</u>	<u>9.2</u>	<u>9.3</u>	<u>9.4</u>	<u>9.4</u>	<u>9.5</u>
12	9.6	9.7	9.8	9.8	9.9	10.0	10.1	10.2	10.2	10.3
13	10.4	10.5	10.6	10.6	10.7	10.8	10.9	11.0	11.0	11.1
<u>14</u>	<u>11.2</u>	<u>11.3</u>	<u>11.4</u>	<u>11.4</u>	<u>11.5</u>	<u>11.6</u>	<u>11.7</u>	<u>11.8</u>	<u>11.8</u>	<u>11.9</u>
15	12.0	12.1	12.2	12.2	12.3	12.4	12.5	12.6	12.6	12.7
16	12.8	12.9	13.0	13.0	13.1	13.2	13.3	13.4	13.4	13.5
<u>17</u>	<u>13.6</u>	<u>13.7</u>	<u>13.8</u>	<u>13.8</u>	<u>13.9</u>	<u>14.0</u>	<u>14.1</u>	<u>14.2</u>	<u>14.2</u>	<u>14.3</u>
18	14.4	14.5	14.6	14.6	14.7	14.8	14.9	15.0	15.0	15.1
19	15.2	15.3	15.4	15.4	15.5	15.6	15.7	15.8	15.8	15.9
<u>20</u>	<u>16.0</u>	<u>16.1</u>	<u>16.2</u>	<u>16.2</u>	<u>16.3</u>	<u>16.4</u>	<u>16.5</u>	<u>16.6</u>	<u>16.6</u>	<u>16.7</u>
21	16.8	16.9	17.0	17.0	17.1	17.2	17.3	17.4	17.4	17.5
22	17.6	17.7	17.8	17.8	17.9	18.0	18.1	18.2	18.2	18.3
<u>23</u>	<u>18.4</u>	<u>18.5</u>	<u>18.6</u>	<u>18.6</u>	<u>18.7</u>	<u>18.8</u>	<u>18.9</u>	<u>19.0</u>	<u>19.0</u>	<u>19.1</u>
24	19.2	19.3	19.4	19.4	19.5	19.6	19.7	19.8	19.8	19.9
25	20.0	20.1	20.2	20.2	20.3	20.4	20.5	20.6	20.6	20.7
<u>26</u>	<u>20.8</u>	<u>20.9</u>	<u>21.0</u>	<u>21.0</u>	<u>21.1</u>	<u>21.2</u>	<u>21.3</u>	<u>21.4</u>	<u>21.4</u>	<u>21.5</u>
27	21.6	21.7	21.8	21.8	21.9	22.0	22.1	22.2	22.2	22.3
28	22.4	22.5	22.6	22.6	22.7	22.8	22.9	23.0	23.0	23.1
<u>29</u>	<u>23.2</u>	<u>23.3</u>	<u>23.4</u>	<u>23.4</u>	<u>23.5</u>	<u>23.6</u>	<u>23.7</u>	<u>23.8</u>	<u>23.8</u>	<u>23.9</u>
30	24.0	24.1	24.2	24.2	24.3	24.4	24.5	24.6	24.6	24.7
31	24.8	24.9	25.0	25.0	25.1	25.2	25.3	25.4	25.4	25.5
<u>32</u>	<u>25.6</u>	<u>25.7</u>	<u>25.8</u>	<u>25.8</u>	<u>25.9</u>	<u>26.0</u>	<u>26.1</u>	<u>26.2</u>	<u>26.2</u>	<u>26.3</u>
33	26.4	26.5	26.6	26.6	26.7	26.8	26.9	27.0	27.0	27.1
34	27.2	27.3	27.4	27.4	27.5	27.6	27.7	27.8	27.8	27.9
<u>35</u>	<u>28.0</u>	<u>28.1</u>	<u>28.2</u>	<u>28.2</u>	<u>28.3</u>	<u>28.4</u>	<u>28.5</u>	<u>28.6</u>	<u>28.6</u>	<u>28.7</u>
36	28.8	28.9	29.0	29.0	29.1	29.2	29.3	29.4	29.4	29.5
37	29.6	29.7	29.8	29.8	29.9	30.0	30.1	30.2	30.2	30.3
<u>38</u>	<u>30.4</u>	<u>30.5</u>	<u>30.6</u>	<u>30.6</u>	<u>30.7</u>	<u>30.8</u>	<u>30.9</u>	<u>31.0</u>	<u>31.0</u>	<u>31.1</u>
39	31.2	31.3	31.4	31.4	31.5	31.6	31.7	31.8	31.8	31.9
40	32.0	32.1	32.2	32.2	32.3	32.4	32.5	32.6	32.6	32.7

I Corn - Maturity Line Chart for Converting Pounds to Bushels (Continued)

Lbs. in Sample	Bushels Per Acre from 1/100 Acre Sample - Doughy Stage (Factor .8475)									
	<u>0.0</u>	<u>0.1</u>	<u>0.2</u>	<u>0.3</u>	<u>0.4</u>	<u>0.5</u>	<u>0.6</u>	<u>0.7</u>	<u>0.8</u>	<u>0.9</u>
0	0	0.1	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.8
1	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.4	1.5	1.6
<u>2</u>	<u>1.7</u>	<u>1.8</u>	<u>1.9</u>	<u>1.9</u>	<u>2.0</u>	<u>2.1</u>	<u>2.2</u>	<u>2.3</u>	<u>2.4</u>	<u>2.5</u>
3	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.1	3.2	3.3
4	3.4	3.5	3.6	3.6	3.7	3.8	3.9	4.0	4.1	4.2
<u>5</u>	<u>4.2</u>	<u>4.3</u>	<u>4.4</u>	<u>4.5</u>	<u>4.6</u>	<u>4.7</u>	<u>4.7</u>	<u>4.8</u>	<u>4.9</u>	<u>5.0</u>
6	5.1	5.1	5.3	5.3	5.4	5.5	5.6	5.7	5.8	5.8
7	5.9	6.0	6.1	6.2	6.3	6.4	6.4	6.5	6.6	6.7
<u>8</u>	<u>6.8</u>	<u>6.9</u>	<u>6.9</u>	<u>7.0</u>	<u>7.1</u>	<u>7.2</u>	<u>7.3</u>	<u>7.4</u>	<u>7.5</u>	<u>7.5</u>
9	7.6	7.7	7.8	7.9	8.0	8.0	8.1	8.2	8.3	8.4
10	8.5	8.6	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.2
<u>11</u>	<u>9.3</u>	<u>9.4</u>	<u>9.5</u>	<u>9.6</u>	<u>9.7</u>	<u>9.7</u>	<u>9.8</u>	<u>9.9</u>	<u>10.0</u>	<u>10.1</u>
12	10.2	10.3	10.3	10.4	10.5	10.6	10.7	10.8	10.8	10.9
13	11.0	11.1	11.2	11.3	11.4	11.4	11.5	11.6	11.7	11.8
<u>14</u>	<u>11.9</u>	<u>11.9</u>	<u>12.0</u>	<u>12.1</u>	<u>12.2</u>	<u>12.3</u>	<u>12.4</u>	<u>12.5</u>	<u>12.5</u>	<u>12.6</u>
15	12.7	12.8	12.9	13.0	13.0	13.1	13.2	13.3	13.4	13.5
16	13.6	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.2	14.3
<u>17</u>	<u>14.4</u>	<u>14.5</u>	<u>14.6</u>	<u>14.7</u>	<u>14.7</u>	<u>14.8</u>	<u>14.9</u>	<u>15.0</u>	<u>15.1</u>	<u>15.2</u>
18	15.3	15.3	15.4	15.5	15.6	15.7	15.8	15.8	15.9	16.0
19	16.1	16.2	16.3	16.4	16.4	16.5	16.6	16.7	16.8	16.9
<u>20</u>	<u>16.9</u>	<u>17.0</u>	<u>17.1</u>	<u>17.2</u>	<u>17.3</u>	<u>17.4</u>	<u>17.5</u>	<u>17.5</u>	<u>17.6</u>	<u>17.7</u>
21	17.8	17.9	18.0	18.0	18.1	18.2	18.3	18.4	18.5	18.6
22	18.6	18.7	18.8	18.9	19.0	19.1	19.2	19.2	19.3	19.4
<u>23</u>	<u>19.5</u>	<u>19.6</u>	<u>19.7</u>	<u>19.7</u>	<u>19.8</u>	<u>19.9</u>	<u>20.0</u>	<u>20.1</u>	<u>20.2</u>	<u>20.3</u>
24	20.3	20.4	20.5	20.6	20.7	20.8	20.8	20.9	21.0	21.1
25	21.2	21.3	21.4	21.4	21.5	21.6	21.7	21.8	21.9	21.9
<u>26</u>	<u>22.0</u>	<u>22.1</u>	<u>22.2</u>	<u>22.3</u>	<u>22.4</u>	<u>22.5</u>	<u>22.5</u>	<u>22.6</u>	<u>22.7</u>	<u>22.8</u>
27	22.9	23.0	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.6
28	23.7	23.8	23.9	24.0	24.1	24.2	24.2	24.3	24.4	24.5
<u>29</u>	<u>24.6</u>	<u>24.7</u>	<u>24.7</u>	<u>24.8</u>	<u>24.9</u>	<u>25.0</u>	<u>25.1</u>	<u>25.2</u>	<u>25.2</u>	<u>25.3</u>
30	25.4	25.5	25.6	25.7	25.8	25.8	25.9	26.0	26.1	26.2
31	26.3	26.4	26.4	26.5	26.6	26.7	26.8	26.9	26.9	27.0
<u>32</u>	<u>27.1</u>	<u>27.2</u>	<u>27.3</u>	<u>27.4</u>	<u>27.5</u>	<u>27.5</u>	<u>27.6</u>	<u>27.7</u>	<u>27.8</u>	<u>27.9</u>
33	28.0	28.1	28.1	28.2	28.3	28.4	28.5	28.6	28.6	28.7
34	28.8	28.9	29.0	29.1	29.2	29.2	29.3	29.4	29.5	29.6
<u>35</u>	<u>29.7</u>	<u>29.7</u>	<u>29.8</u>	<u>29.9</u>	<u>30.0</u>	<u>30.1</u>	<u>30.2</u>	<u>30.3</u>	<u>30.3</u>	<u>30.4</u>
36	30.5	30.6	30.7	30.8	30.8	30.9	31.0	31.1	31.2	31.3
37	31.4	31.4	31.5	31.6	31.7	31.8	31.9	31.9	32.0	32.1
<u>38</u>	<u>32.2</u>	<u>32.3</u>	<u>32.4</u>	<u>32.5</u>	<u>32.5</u>	<u>32.6</u>	<u>32.7</u>	<u>32.8</u>	<u>32.9</u>	<u>33.0</u>
39	33.1	33.1	33.2	33.3	33.4	33.5	33.6	33.6	33.7	33.8
40	33.9	34.0	34.1	34.2	34.2	34.3	34.4	34.5	34.6	34.7

J Corn - Maturity Line Chart for Converting Pounds to Bushels (Continued)

Lbs. in Sample	Bushels Per Acre from 1/100 Acre Sample - Extended Stage (Factor 1.0638)									
	<u>0.0</u>	<u>0.1</u>	<u>0.2</u>	<u>0.3</u>	<u>0.4</u>	<u>0.5</u>	<u>0.6</u>	<u>0.7</u>	<u>0.8</u>	<u>0.9</u>
0	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.9	1.0
1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
<u>2</u>	<u>2.1</u>	<u>2.2</u>	<u>2.3</u>	<u>2.4</u>	<u>2.6</u>	<u>2.7</u>	<u>2.8</u>	<u>2.9</u>	<u>3.0</u>	<u>3.1</u>
3	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1
4	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2
<u>5</u>	<u>5.3</u>	<u>5.4</u>	<u>5.5</u>	<u>5.6</u>	<u>5.7</u>	<u>5.9</u>	<u>6.0</u>	<u>6.1</u>	<u>6.2</u>	<u>6.3</u>
6	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3
7	7.4	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4
<u>8</u>	<u>8.5</u>	<u>8.6</u>	<u>8.7</u>	<u>8.8</u>	<u>8.9</u>	<u>9.0</u>	<u>9.1</u>	<u>9.3</u>	<u>9.4</u>	<u>9.5</u>
9	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5
10	10.6	10.7	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6
<u>11</u>	<u>11.7</u>	<u>11.8</u>	<u>11.9</u>	<u>12.0</u>	<u>12.1</u>	<u>12.2</u>	<u>12.3</u>	<u>12.4</u>	<u>12.6</u>	<u>12.7</u>
12	12.8	12.9	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7
13	13.8	13.9	14.0	14.1	14.3	14.4	14.5	14.6	14.7	14.8
<u>14</u>	<u>14.9</u>	<u>15.0</u>	<u>15.1</u>	<u>15.2</u>	<u>15.3</u>	<u>15.4</u>	<u>15.5</u>	<u>15.6</u>	<u>15.7</u>	<u>15.9</u>
15	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9
16	17.0	17.1	17.2	17.3	17.4	17.6	17.7	17.8	17.9	18.0
<u>17</u>	<u>18.1</u>	<u>18.2</u>	<u>18.3</u>	<u>18.4</u>	<u>18.5</u>	<u>18.6</u>	<u>18.7</u>	<u>18.8</u>	<u>18.9</u>	<u>19.0</u>
18	19.1	19.3	19.4	19.5	19.6	19.7	19.8	19.9	20.0	20.1
19	20.2	20.3	20.4	20.5	20.6	20.7	20.8	21.0	21.1	21.2
<u>20</u>	<u>21.3</u>	<u>21.4</u>	<u>21.5</u>	<u>21.6</u>	<u>21.7</u>	<u>21.8</u>	<u>21.9</u>	<u>22.0</u>	<u>22.1</u>	<u>22.2</u>
21	22.3	22.4	22.6	22.7	22.8	22.9	23.0	23.1	23.2	23.3
22	23.4	23.5	23.6	23.7	23.8	23.9	24.0	24.1	24.3	24.4
<u>23</u>	<u>24.5</u>	<u>24.6</u>	<u>24.7</u>	<u>24.8</u>	<u>24.9</u>	<u>25.0</u>	<u>25.1</u>	<u>25.2</u>	<u>25.3</u>	<u>25.4</u>
24	25.5	25.6	25.7	25.8	26.0	26.1	26.2	26.3	26.4	26.5
25	26.6	26.7	26.8	26.9	27.0	27.1	27.2	27.3	27.4	27.6
<u>26</u>	<u>27.7</u>	<u>27.8</u>	<u>27.9</u>	<u>28.0</u>	<u>28.1</u>	<u>28.2</u>	<u>28.3</u>	<u>28.4</u>	<u>28.5</u>	<u>28.6</u>
27	28.7	28.8	28.9	29.0	29.0	29.1	29.3	29.4	29.5	29.6
28	29.7	29.8	29.9	30.0	30.1	30.2	30.3	30.4	30.5	30.6
<u>29</u>	<u>30.7</u>	<u>30.8</u>	<u>31.0</u>	<u>31.1</u>	<u>31.2</u>	<u>31.3</u>	<u>31.4</u>	<u>31.5</u>	<u>31.6</u>	<u>31.7</u>
30	31.8	31.9	32.0	32.1	32.2	32.3	32.4	32.6	32.7	32.8
31	32.9	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8
<u>32</u>	<u>33.9</u>	<u>34.0</u>	<u>34.1</u>	<u>34.3</u>	<u>34.4</u>	<u>34.5</u>	<u>34.6</u>	<u>34.7</u>	<u>34.8</u>	<u>34.9</u>
33	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	36.0
34	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	37.0
<u>35</u>	<u>37.1</u>	<u>37.2</u>	<u>37.3</u>	<u>37.4</u>	<u>37.6</u>	<u>37.7</u>	<u>37.8</u>	<u>37.9</u>	<u>38.0</u>	<u>38.1</u>
36	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	39.0	39.1
37	39.3	39.4	39.5	39.6	39.7	39.8	39.9	40.0	40.1	40.2
<u>38</u>	<u>40.3</u>	<u>40.4</u>	<u>40.5</u>	<u>40.6</u>	<u>40.7</u>	<u>40.8</u>	<u>41.0</u>	<u>41.1</u>	<u>41.2</u>	<u>41.3</u>
39	41.4	41.5	41.6	41.7	41.8	41.9	42.0	42.1	42.2	42.3
40	42.4	42.6	42.7	42.8	42.9	43.0	43.1	43.2	43.3	43.4

K Shelling Percentage Factors - Ear Corn

<u>Wgt. of Ear Corn Sample: (Lbs..)</u>	<u>Wgt. of Shelled Corn Sample: (Lbs..)</u>	<u>Shelling Percentage Factor</u>
5	4.4	1.10
5	4.3	1.08
5	4.2	1.05
5	4.1	1.03
5	4.0	1.00
5	3.9	.98
5	3.8	.95
5	3.7	.93
5	3.6	.90
5	3.5	.88
5	3.4	.85
5	3.3	.83
5	3.2	.80
5	3.1	.78
5	3.0	.75
5	2.9	.73
5	2.8	.70
5	2.7	.68
5	2.6	.65
5	2.5	.63
5	2.4	.60
5	2.3	.58
5	2.2	.55
5	2.1	.53
5	2.0	.50

L Corn - Hail Damage Method. Use the Hail Damage Appraisal Worksheet for hail-damaged corn appraisals beginning with the 7th leaf stage and until the corn reaches the milk stage.

- (1) This method is based on the calculation of direct and indirect damage from hail to determine percent of potential remaining, converted to a bushel-per-acre appraisal.
- (2) For damage due to hail, inspections shall be delayed 7 to 10 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" (**Subsection C**) 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. Naturally 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 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 this percent to the Leaf Loss Chart, **Subsection D**.

(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, **Subparagraph E**, to obtain the modified stage for use with the Leaf Loss Chart (**Subparagraph D**).

NOTE: No further determination of defoliation should be made at the time of a later inspection unless further damage occurs.

M **Corn - Maturity Line Weight Method:** Use the Appraisal Worksheet for all grain appraisals from the milk stage until kernel moisture drops below 40 percent. If at all possible, defer appraisal to weight method.

- (1) **Select representative samples of 1/100 acre .**
- (2) This method is based on weighing ear samples which are grouped according to maturity and converting this production to bushels per acre. **(Ratio of corn to cob is not as accurate as with field corn.)**
- (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 corn required to make a bushel of mature shelled corn are as illustrated in **Section 12, Subparagraph C, 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. Take the butt end of each ear, and using a sharp pocket knife, flip out two kernel rows from the broken end to expose at least five representative kernels in an adjacent row. With the knife, make a single cut to dissect the kernels to expose a cross-section of the kernels in the row. With the knife blade tip, locate the line separating the solids and liquid. This will determine the location of the maturity line. 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. (**Section 12, Subparagraph C, Figure C.**)
- (6) Use the appropriate factor on the appraisal worksheet for converting the stage weight to bushels per acre of mature potential production.

N **Corn - Weight Method:** Use the Weight Method Appraisal Worksheet for all grain appraisals after the corn kernels are physiologically mature (some have developed the black or brown abscission layer in the kernel) moisture drops below 40 percent.

- (1) This method is based on weighing the ears in a fraction of an acre, then converting this production to bushels-per-acre.
- (2) Select representative samples of 1/100 acre.
- (3) Pick and husk all ears in the sample area. Weigh production.
- (4) Multiply average sample weight by 1.43 if sample size was 1/100 acre.

The results will be the bushels-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 corn sample, shell, and weigh.
 - (b) Divide the weight of the shelled corn by 4 and multiply by 100.
 - (c) Or, determine in accordance with **Subparagraph K.**

NOTE: Shelling percent is **only** applicable to corn in the ear such as weight-method appraisals (or stored as ear corn). If the corn is reported on a shelled basis, the conversion of ear to shelled basis assumes 70 lbs. per bushel ear corn equals 56 lbs. per bushel of shelled corn and no shelling percent is reported.

(RESERVED)

O Sorghum Appraisal Methods

NOTE: Immature hybrid sorghum seed appraisals are counted as seed production. Producers wishing to delay appraisals until maturity by use of representative areas may do so if:

- C Approved by the contracting seed company;
- C Representative areas left for sampling consist of at least the planting pattern width (i.e., 2 male, 6 female, 2 male rows, or other appropriate pattern). The length of each row must be sufficient for a 1/100 acre sample if areas are chosen by an adjuster, otherwise rows the length of the field are to be maintained;
- C Three barrier rows or the equivalent are left around each representative area to serve as an environmental barrier;
- C The insured agrees to maintain representative areas and accept appraisals as representative of the field or sub-field.

Sample(s) of mature grain are to be submitted to the contracting seed company for determination of seed production. If such determination is not made, all grain will be considered seed.

P Sorghum - Stand Reduction Chart

(Rounded percent of stand to the nearest 5 percent)

Percent of Stand Remaining	100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5
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Percent of Potential Production Remaining Through the 11th Leaf Stage	100	98	96	93	91	88	85	82	79	76	72	68	63	57	50	44	35	26	17	9
--	-----	----	-----------	----	----	-----------	----	----	-----------	----	----	-----------	----	----	-----------	----	----	-----------	----	---

Percent of Potential Production Remaining After the 11th Leaf Stage	100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5
--	-----	----	-----------	----	----	-----------	----	----	-----------	----	----	-----------	----	----	-----------	----	----	-----------	----	---

Q Sorghum - Hail Stand Reduction Chart

Percent of Stand Remaining	100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5
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Percent of Damage Beginning with 10th Leaf Stage	0	2	4	7	9	12	15	18	21	24	28	32	37	43	50	56	65	74	83	91
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(Round percent of stand to the nearest 5 percent)

R Sorghum - Net Percent of Head Damage Chart

Gross Percent of Head Damage	<u>Percent of Damage from Stand Reduction</u>																		
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95
5	5	5	4	4	4	4	3	3	3	3	3	2	2	1	1	1	1	0	0
10	10	9	9	8	8	7	7	6	6	5	4	4	3	3	2	2	1	1	0
15	14	14	13	12	11	11	10	9	8	8	7	6	5	4	4	3	2	1	1
20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
25	24	23	21	20	19	18	16	15	14	13	11	10	9	7	6	5	4	2	1
30	29	26	26	24	23	21	20	18	17	15	13	12	10	9	7	6	4	3	1
35	33	32	30	28	26	25	23	21	19	18	16	14	12	10	9	7	5	3	2
40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2
45	43	41	38	36	34	32	29	27	25	23	20	18	16	13	11	9	7	4	2
50	48	45	43	40	38	35	33	30	28	25	22	20	17	15	12	10	7	5	2
55	52	49	46	44	41	38	36	33	30	27	25	22	19	16	14	11	8	5	3
60	57	54	51	48	45	42	39	36	33	30	27	24	21	18	15	12	9	6	3
65	62	58	55	52	49	45	42	39	36	32	29	26	23	19	16	13	10	6	3
70	66	63	59	56	52	49	45	42	38	35	31	28	24	21	17	14	10	7	3
75	71	67	64	60	56	52	49	45	41	37	34	30	26	22	19	15	11	7	4
80	76	72	68	64	60	56	52	48	44	40	36	32	28	24	20	16	12	8	4
85	81	76	72	68	64	59	55	51	47	42	38	34	30	25	21	17	13	8	4
90	85	81	76	72	67	63	58	54	49	45	40	36	31	27	22	18	13	9	4
95	90	85	81	76	71	66	62	57	52	47	43	38	33	28	24	19	14	9	5
100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5

Round gross damage figures to the nearest 5 percent.

S **Grain Sorghum - Leaf Loss Chart**

ULTIMATE NUMBER OF LEAVES ON PLANTS									PERCENT DEFOLIATION (ROUND % OF LEAF AREA DESTROYED TO NEAREST 5%)																		
15	16	17	18	19	20	21	22	23	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
* STAGES OF GROWTH									PERCENT OF DAMAGE																		
					11	11	11	12	0	0	0	0	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3
		11	11	12	12	13	13	14	0	1	1	1	1	1	1	2	2	2	2	3	3	3	4	4	4	5	5
	11	12	12	13	13	14	15	15	1	1	1	1	2	2	2	2	3	3	4	4	5	5	6	6	7	7	8
11	12	13	13	14	14	15	16	16	1	2	2	3	3	4	4	5	5	6	7	8	9	10	12	12	14	15	16
11	12	13	14	14	15	16	17	17	2	2	3	4	5	6	7	7	8	10	11	13	14	16	17	19	21	22	24
12	13	14	14	15	16	17	17	18	3	3	4	5	7	8	9	10	11	13	15	17	19	21	24	26	28	31	33
12	13	14	15	16	17	18	18	19	3	4	5	7	9	10	11	13	14	16	19	22	24	27	30	32	35	38	41
13	14	15	16	17	18	19	19	20	4	5	7	8	10	12	14	15	17	20	23	26	30	33	36	39	43	47	50
14	15	16	17	18	19	20	20	21	4	6	7	9	11	14	16	18	20	23	26	30	34	37	41	44	49	53	57
15	16	17	18	19	20	21	22	23	5	7	8	11	13	15	18	20	22	26	30	34	38	42	47	51	56	61	65
FULL LEAF DEVELOPMENT									6	8	10	13	15	18	21	24	26	31	36	41	45	50	55	60	66	72	77
STAGES OF GROWTH									*WHERE THE STAGE OF GROWTH IS REPEATED IN THE SAME COLUMN, USE THE UPPER LINE FOR EARLY AND THE SECOND LINE FOR LATER IN THE STAGE																		
									PERCENT OF DEFOLIATION (ROUND % OF LEAF AREA DESTROYED TO NEAREST 5%)																		
									10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
BOOT									4	6	10	14	18	21	25	28	31	36	42	48	53	59	65	70	78	84	90
JUST HEADED									4	7	12	16	20	23	27	30	34	39	45	52	58	64	71	76	85	92	98
BLOOM									4	6	11	15	19	23	26	30	33	39	44	51	57	62	69	75	83	90	96
BLISTER									3	5	9	14	17	20	23	26	30	35	40	45	51	56	62	67	74	80	86
EARLY MILK									3	4	8	12	15	18	21	24	26	31	36	41	45	50	55	60	66	72	77

T Sorghum - Threshing Factor Table

Weight of Grain (Whole Pounds)	SORGHUM THRESHING FACTORS									
	TENTHS OF POUNDS									
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
<u>0</u>	.00	.03	.05	.08	.11	.13	.16	.19	.21	.24
<u>1</u>	.27	.29	.32	.35	.37	.40	.43	.45	.48	.51
<u>2</u>	.53	.56	.59	.61	.64	.67	.69	.72	.75	.77
<u>3</u>	.80	.83	.85	.88	.91	.93	.96	.99	-----	-----

EXAMPLE: Threshed grain from 5 pound sample of heads weighs 2.8 pounds.
Threshing factor of .75 would be applied to the per-acre yield.

U Sorghum - Stand Reduction Method: Use the Stand Reduction Appraisal Worksheet (from emergence to the milk stage).

- (1) This method is based on the number of the surviving plants in a designated sample row length.
- (2) Surviving plant counts are converted to bushels per acre by multiplying the percent of potential remaining by the adjusted average yield. This yield is the expected yield level for a specific variety, in bushels per acre, determined by the **RSO** (shown on the "Hybrid Sorghum Seed Approved Yield" form).
- (3) Prior to the 12th leaf stage, the "Stand Reduction Chart" is used to determine the percent of potential remaining (**Subparagraph N**).
- (4) After the 11th leaf stage 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. See Row Width and Length Chart (**Section 11, Subparagraph E**) for appropriate sample sizes.

V Sorghum - Hail Damage Method: Use the Hail Damage Appraisal Worksheet for hail-damaged sorghum appraisals beginning with the 10th leaf stage and until the sorghum reaches the milk stage.

- (1) This method is based on the calculation of direct and indirect damage from hail to determine the percent of potential remaining, converted to a bushel-per-acre appraisal.
- (2) For damage due to hail, inspections must be delayed at least 7 to 10 days after damage for a more accurate damage assessment.
- (3) Direct damage includes stand reduction and damage to the stalk and head.

(a) Stand reduction:

- 1 Hail damage stand reduction prior to the 10th leaf stage is considered recoverable since the plant growing point is largely protected to this stage and regrowth will usually show no adverse effects in grain yield.
- 2 In the 10th leaf to milk stage, the "Hail Stand Reduction Loss Chart" (**Subparagraph O**) is used to determine percent of damage due to stand reduction.

(b) Head Damage:

Hail damage to sorghum heads is determined by comparing the number of damaged kernels to the number of total kernels in a sample of four "average" heads. See Hail Method Worksheet Instructions (**item 16**) for complete details.

(c) Stalk Damage:

Plants having stalk bruises should not automatically be counted as destroyed. A normal or near normal head will usually be produced even though stalk damage is present. 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 and subsequent yield loss:

- (a) Select representative plants;
- (b) Remove the leaves which were exposed at the time of hail damage;
- (c) Determine the percent of leaf area destroyed (missing or brown areas) on each removed leaf;
- (d) Total the leaf-area-loss percentages; and
- (e) Divide by the total percentage by the total number of leaves to determine the average percent. Apply the average percent (to the nearest 5 percent) to the leaf loss chart, **Subparagraph Q**.

If the damage occurred prior to boot stage, use top portion of the chart. Determine the ultimate number of leaves 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. 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 the percent of defoliation as of date of hail loss. No further determination of defoliation should be made at the time of later inspection unless further damage occurs.

If the damage occurred in boot through early milk stage, apply the average percent (determined above) to the lower portion of **Subparagraph Q**.

W **Sorghum - Headed Weight Method:** Use the Headed Weight Method Appraisal worksheet for all grain appraisals from milk stage through maturity.

- (1) This method is based on weighing the grain heads in a fraction of an acre, then converting this production to bushels per acre.
- (2) Select representative samples of:
 - (a) 1/100 acre if the potential appears to be less than 20 bushels per acre; or
 - (b) 1/1000 acre if the potential appears to be 20 or more bushels per acre.
- (3) Harvest all grain heads in the sample by cutting heads from the stalks as close as possible to the lowest head branch.
- (4) Multiply average sample weight by:
 - (a) 1.34 if the sample size selected was 1/100 acre;
 - (b) 13.4 if the sample size selected was 1/1000 acre; or
 - (c) The result will be the bushels per acre of potential production.
- (5) If grain is light and chaffy or heads are poorly filled, determine threshing percentage in accordance with **Subparagraph T**.
- (6) If the appraisal for any field or sub-field exceeds the adjusted average yield, explain the high appraisal on the reverse of the appraisal worksheet original. See subsection (1)(b) of this section for the definition of adjusted average yield.

14 APPRAISAL FORM ENTRIES AND COMPLETION STANDARDS**A General Information**

- (1) The Hybrid Seeds appraisal forms herein contain the required standard items and entries for documenting appraisals. Hybrid seeds appraisal forms developed by insurance providers must contain at least the required standard items.
- (2) Insurance providers can format hybrid seeds appraisal forms, as applicable, provided all required standard items are on the FCIC-approved appraisal form.

B Standard Items

- (1) Standard items and numbers contained in this section correspond with the standard hybrid seeds appraisal forms (the entry heading on the appraisal form may not match exactly the “Standard Items” shown below).
- (2) Appraisal Form for Hybrid Corn Seed and Hybrid Sorghum Seed.

- c The adjuster will complete the appraisal worksheet and Claim Form entries, arrange for the insured's signature on the worksheet and/or claim and distribute the documents.

- 10 **Sample Number** MAKE NO ENTRY

- 11 **Normal Plant Population** Normal plant population - determine by counting the potential (living, dead, missing, and non-emerged) plants in a length of row equivalent to 1/100 acre.

- 12 **Number of Plants** Number of surviving plants.

- 13 **Percent of Stand**
 - Corn** - MAKE NO ENTRY
 - Sorghum** - Result, to tenths, of dividing number of plants (item 12) by the normal plant population (item 11).

- 14 **Nearest 5 Percent**
 - Corn** - MAKE NO ENTRY
 - Sorghum** - Percent of stand (item 13) rounded to the nearest 5 percent.

- 15 **Percent of Potential** Enter the percent of potential as follows:
 - a Determine the stage at time of damage and enter in item 19.
 - b
 - Corn** - Before 11th leaf stage, use Stand Reduction Chart (**Section 13, Subparagraph B**) and enter percent potential to nearest whole percent, after interpolating.
 - Sorghum** - Before 12th leaf stage, use Stand Reduction Chart **Section 13, Subparagraph P, and entry in item 14.**
 - c
 - Corn** - After 10th leaf stage enter result of dividing item 12 by item 11 (to whole percent).
 - Sorghum** - After 11th leaf stage, repeat entry form item 14.

- 16 **Approved Yield** Repeat the entry from item 9

- 17 **Appraisal for Sample** Result (to tenths) of multiplying percent of potential (item 15) (expressed as a decimal) by the approved yield (item 16).

- 18 **Total Appraisal Samples** Sum of entries in item 17 to (tenths).

- 19 **Stage of Growth** Stages of growth at time of damage (Refer to Section 12).
- 20 **Total Appraisal Sample** Repeat entry from item 18.
- 21 **Total Number of Samples** Total Number of Samples.
- 22 **Appraisal Per Acre** Result (to tenths) of dividing the total appraisals for all samples (item 20) by the total number of samples (item 21).

Remarks and Signatures:

- 23 **Remarks and Notes** Enter pertinent information about the appraisal, including any appropriate calculations, or on a Statement of Facts and attach to the claim when remarks are needed.

Enter claim number assigned to loss claim by the insurance provider for control purposes.
- 24 **Insured's Signature and Date** Insured's or insured's authorized representative's signature and date after all entries are explained to the insured.
- 25 **Adjuster's Signature, Code Number and Date** Adjuster than enters his/her code number, signature, and date.

Note: The example on the stand reduction appraisal worksheet illustrates “**Corn**” and “**Grain Sorghum**”. Be sure the proper factors are used for each crop.

(FOR ILLUSTRATION PURPOSES ONLY) STAND REDUCTION APPRAISAL WORKSHEET (Corn and Grain Sorghum)	1. INSURED'S NAME I.M. INSURED			2. POLICY NO. XXXXXXXXXX	3. UNIT 00200	4. Com
	5. 19YY	6. FSA FARM 106 Hybrid 10W	7. FIELD NO. A2	8. ROW 36"	9. BASE 40	

COMPUTATIONS

SAMPLE NUMBER	NORMAL PLANT POPULATION ON 1/100 ACRE	NUMBER OF SURVIVING PLANTS 1/100 ACRE	GRAIN SORGHUM ONLY		PERCENT OF POTENTIAL	BASE YIELD	APPRAISAL FOR SAMPLE (COL. 15 X 16)
			PERCENT OF STAND	ROUND COL. 13 TO NEAREST 5 PERCENT			
10		12	13		15	16	
1	220	36			37	X 40	= 14.8
2	220	32			34	X 40	= 13.6
3	220	23			27	X 40	= 10.8
4	220	42			41	X 40	= 16.4
5	220	51			47	X 40	= 18.8
6						X 40	= 10.0
7						X 40	= 10.0
8						X 40	= 10.0
9						X 40	= 10.0
10						X 40	= 10.0
11						X 40	= 10.0
12						X 40	= 10.0
13						X 40	= 10.0
18. TOTAL							74.4

19. STAGE OF GROWTH AT TIME OF DAMAGE 8th leaf	20. TOTAL APPRAISALS FOR ALL SAMPLES 74.4	21. NUMBER OF SAMPLES 5	22. APPRAISAL PER ACRE/FIELD = 14.9 BU
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23. NOTES AND CALCULATIONS

24. PRODUCER'S SIGNATURE I.M. INSURED	DATE MM/DD/YY
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25. ADJUSTER'S CODE NUMBER & SIGNATURE xxxxx I.M. ADJUSTER	DATE MM/DD/YY
--	-------------------------

(FOR ILLUSTRATION PURPOSES ONLY) STAND REDUCTION APPRAISAL WORKSHEET (Corn and Grain Sorghum)	1. INSURED'S NAME I.M. INSURED			2. POLICY NO. XXXXXXXXXX	3. UNIT NO. 00100	4. CROP Sorghum
	5. CROP YR. 19YY	6. FSA FARM NO. 106 Hybrid 88g	7. FIELD NO. A 32.1 acres		8. ROW WIDTH 38"	9. BASE YIELD 44

COMPUTATIONS

SAMPLE NUMBER	NORMAL PLANT POPULATION 1/100 ACRE	NUMBER OF SURVIVING PLANTS 1/100 ACRE	GRAIN SORGHUM ONLY		PERCENT OF POTENTIAL	BASE YIELD	APPRaisal FOR SAMPLE (COL. 15 X 16)
			PERCENT OF STAND	ROUND COL. 13 TO NEAREST 5 PERCENT			
10	11	12	13	14	15	16	17
1	320	21	6.6	5	9	X 44	= 4.0
2	320	17	5.3	5	9	X 44	= 4.0
3	320	36	11.3	10	17	X 44	= 7.5
4	320	39	12.2	10	17	X 44	= 7.5
5	320	47	14.7	15	26	X 44	= 11.4
6						X 44	= =
7						X 44	= =
8						X 44	= =
9						X 44	= =
10						X 44	= =
11						X 44	= =
12						X 44	= =
13						X 44	= =

18. TOTAL						34.4
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19. STAGE OF GROWTH AT TIME OF DAMAGE 10th leaf	20. TOTAL APPRAISALS FOR ALL SAMPLES 34.4	21. NUMBER OF SAMPLES 5	22. APPRAISAL PER ACRE/FIELD = 6.9 BU
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23. NOTES AND CALCULATIONS

24. PRODUCER'S SIGNATURE I.M. INSURED	DATE MM/DD/YY
---	-------------------------

25. ADJUSTER'S CODE NUMBER & SIGNATURE XXXXX I.M. ADJUSTER	DATE MM/DD/YY
--	-------------------------

- c The adjuster will complete an appraisal worksheet and Claim Form entries, arrange for the insured's signature on the worksheet and/or claim and distribute the documents.

- 10 **Sample Number** MAKE NO ENTRY

- 11 **Normal Number of Plants** 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.

- 12 **Totally Destroyed plants** Number of plants totally destroyed. (If totally destroyed plants cannot be accurately counted, complete item 13 and enter result of subtracting item 13 from item 11.)

- 13 **Remaining Stand** Number of remaining plants - determine number of remaining plants or enter the result of subtracting item 12 from item 11.

- 14 **Percent of Damage**
 - Corn** - Determine and enter percent of damage (to whole percent).
 - a From 7th through 10th leaf stages, use "Hail Stand Reduction Loss Chart" (**Section 13, Subparagraph C**) based on entries in items 11 and 13. Interpolate to nearest whole percent.
 - b After 10th leaf stage, divide item 12 by item 11.
 - Sorghum** - Divide item 13 by item 11. Round to the nearest 5 percent and apply results to Stand Reduction Chart **Section 13, Subparagraph Q**. Enter percent of damage from table.

- 15 **Percent Cripples**
 - Corn** - Percent Cripples - Determine entry as follows (see item 31 for calculations and Section 13 Paragraph L (3) (b) for definition):
 - a Count the number of cripples in 100 remaining live plants.
 - b Individually evaluate the ears on the crippled plants to determine the **gross** damage from cripples.
 - c Multiply this Gross percent times the remaining crop (100 - item 14) to obtain the **net** percent of damage. Round to nearest tenth.
 - Sorghum** - MAKE NO ENTRY

- 16 **Percent Damage**
 - Corn** - Percent Ear Damage:
 - a If no ear damage - make no entry.

- b If ear damage - determine **net percent** of ear damage by multiplying the **gross percent** times the remaining crop (100 - item 14 - item 15).

If there is non-seed production from hail-caused ear damage, be sure to account for it, and if possible, defer appraisals until weight method appraisal can be used or the crop is harvested. (Subtract the seed production from the appraisal to determine the non-seed.)

Sorghum - Enter net percent of head damage determined as follows (if applicable):

- a Determine the average number of destroyed kernels on 4 "average" heads.
- b Determine the average total number of kernels on 4 "average" heads by calculating the average number of kernels per spike let (using four specialize - one from near the bottom of the head, one a quarter of the way up, one from half way up, and one from three-fourths of the way up). Multiply by the number of spikelets (count the four or five small spikelets in the very top of the head as one average spikelet).
- c Divide the average number of kernels destroyed per head by the average number of total kernels per head to determine **gross percent** of head damage.
- d Apply gross percent of head damage ("C" above) and stand reduction percent of damage (item 14, rounded to nearest 5 percent) to **Section 13, Subparagraph R**, to obtain NET percent of head damage.

If there is non-seed production from hail-caused head damage, be sure to account for it, and if possible, defer appraisals until weight method appraisal can be used or the crop is harvested. (Subtract the seed production from the appraisal to determine the non-seed.)

- e If no head damage, enter "NONE."

17 **Total Direct Damage**

Corn - Sum of items 14, 15, and 16.

Sorghum - Sum of 14 and 16.

18 **Potential Remaining**

Result of subtracting entry in item 17 from 100.

19	Percent Destroyed	Determine and enter percent of leaf area destroyed.
20	Percent Damage	Percent of damage for leaf destruction based on items 19 and 27. Corn - Section 13, Subparagraph D. Sorghum - Section 13, Subparagraph S and the ultimate number of leaves item 8).
21	Net Indirect Damage	Result (to tenths) of multiplying item 18 by item 20.
22	Percent Hail Damage	Sum of items 17 and 21 (to tenths).
23	Percent Potential production Remaining	Result (to tenths) of subtracting item 22 from 100.
24	Approved Yield	Repeat item 9 entry.
25	Appraisal For Sample	Result (to tenths) of multiplying item 23 (expressed as a decimal) by item 24.
26	Total	Sum of entries in item 25.
27	Stage of Plant	Stages of growth at time of damage. Corn - Refer to Section 12, Subparagraph B. Sorghum - Refer to Section 12, Subparagraph E.
28	Total All Samples	Repeat item 26 entry.
29	Number Samples	Total Number of Samples.
30	Bushel Per Acre Appraisal	Result of dividing item 28 by item 29, rounded to the nearest tenth.
31	Remarks	Enter pertinent information about the appraisal. Include any appropriate calculations on a Special Report and attach to the claim when more space is needed. Enter Claim number assigned to loss claim by the insurance provider for control purposes.

Corn - Show calculations converting cripples to net percent of damage. See example below for one sample:

- 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 item 14 entry.
- e Resulting net cripple damage against remaining stand.

	(a)	(b)	(c)	(d)	(e)
	Sample Percent No. Cripples	Percent Damage Factor	Percent Damage from Cripples	Percent Remaining Plants	Net Percent Cripple Damage
1	25 X	.67 =	16.8 X	37 =	6.2

Signatures

- 32 **Insured's Signature and Date** Insured's or insured's authorized representative's signature and date after all entries are explained to the insured
- 33 **Adjuster's Signature, Code Number and Date** Adjuster then enters his/her code number, signature, and date.

Note: The example on the Hail Method Appraisal Worksheet illustrates “**Corn**” and “**Grain Sorghum**”. Be sure the proper factors are used for each crop.

(FOR ILLUSTRATION PURPOSES) HAIL DAMAGE APPRAISAL WORKSHEET (Corn and Grain Sorghum)				1. INSURED'S NAME				2. CONTRACT NUMBER			3. UNIT		4. CROP		
				I.M. INSURED				XXXXXXXXXX			00100		Corn		
5. CROP YEAR				6. FSA FARM NO.		7. FIELD NO.		8. ULTIMATE NO. OF		9. BASE					
19YY				C106Hybrid		A				40					
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 (Corn) % 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 HALL (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	0.3	69.5	30.5	40	12.2
2	230	189	41	61	7.8		68.8	31.2	40	1	0.3	69.1	30.9	40	12.4
3	240	198	42	61	7.3		68.3	31.7	42	1	0.3	68.6	31.4	40	12.6
4	235	216	19	77	1.5		78.5	21.5	46	1	0.2	78.7	21.3	40	8.5
5	240	205	35	65	5.9		70.9	29.1	44	1	0.3	71.2	28.8	40	11.5
6															
7															
8															
9															
26. TOTAL													57.2		
27. STAGE OF PLANT GROWTH AT TIME OF						28. TOTAL ALL SAMPLES			29. NO. SAMPLES		30. PER ACRE APPRAISAL BU.				
9th leaf						57.2			÷ 5		= 11.4				
31. REMARKS															
Net percent cripple damage															
Sample Number	Percent Cripples		Percent Damage Factor	Percent Damage from criples	Percent Remaining plants	Net Percent cripple damage									
1	25	X	.67	= 16.8	X 37	= 6.2									
2	30	X	.67	= 22.1	X 39	= 7.8									
3	28	X	.67	= 18.3	X 39	= 7.7									
4	10	X	.67	= 6.7	X 23	= 1.5									
5	25	X	.67	= 16.8	X 35	= 5.9									
32. PRODUCER'S SIGNATURE										DATE					
I.M. INSURED										MM/DD/YY					
33. ADJUSTER'S CODE NO. & SIGNATURE										DATE					
XXXXX I.M. ADJUSTER										MM/DD/YY					

(FOR ILLUSTRATION PURPOSES ONLY) HAIL DAMAGE APPRAISAL WORKSHEET (Corn and Grain Sorghum)		1. INSURED'S NAME		2. CONTRACT NUMBER		3. UNIT NUMBER		4. CROP HYBRID							
		I.M. INSURED		XXXXXXXXXX		00100		Sorghum							
		5. CROP YEAR	6. FSA FARM NO.	7. FIELD NO.	8. ULTIMATE NO. OF		9. BASE								
		19YY	106 hybrid 88	C 9.5 acres	20		44								
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 (Corn) % 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	320	176	144	32	-	32	64	36	90	66	23.8	87.8	12.2	44	5.4
2	320	206	114	43	-	41	84	16	95	72	11.5	95.5	4.5	44	2.0
3	320	191	129	37	-	36	73	27	92	66	17.8	90.8	9.2	44	4.0
4															
5															
6															
7															
8															
9															
10															
11															
12															
26. TOTAL													11.4		
27. STAGE OF PLANT GROWTH AT TIME OF DAMAGE			28. TOTAL ALL SAMPLES		29. NO. SAMPLES		30. PER ACRE APPRAISAL			BU.					
Early Milk			11.4		+		3		=		3.8				
31. REMARKS															
32. PRODUCER'S SIGNATURE										DATE					
I. M. INSURED										MM/DD/YY					
33. ADJUSTER'S CODE NO. & SIGNATURE										DATE					
XXXXX I.M. ADJUSTER										MM/DD/YY					

E MATURITY LINE WEIGHT METHOD WORKSHEET INSTRUCTIONS

(1) HYBRID “CORN” SEED:

Complete HEADING items 1 through 7, and PART II items 20 through 32.

Verify or make the following entries:

<u>Standard Items</u>	<u>Information Required</u>
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 Number	Five-digit (e.g., 00100) unit number from the acreage report.
3a Claim Number	Enter claim number.
4 Crop Name	“Hybrid Corn Seed”.
5 Crop Year	Crop year, as defined in the policy, for which the claim has been filed.
6 FSA Farm Number	FSA Farm Serial Number (if applicable). Hybrid identification code.
7 Kind of Appraisal	Circle “EC” for ear corn.
8-19	MAKE NO ENTRY.

PART II - MATURITY LINE WEIGHT METHOD (from milk stage to 40 percent grain moisture).

<u>Standard Items</u>	<u>Information Required</u>
20 Field ID	Field identification symbol.
21 Acres in Field	Acres in field identified by field ID (item 20) to tenths.
22 Stage	MAKE NO ENTRY.
23 Fraction of Acre	Use “1/100”.
24 Weight by Stage	a Pound weight, to tenths, for each sample by stage of maturity. Determine weights by:

- (1) Picking and husking all harvestable ears from the sample.
 - (2) Discarding portions of ears having no kernels.
 - (3) Dissecting each ear in order to determine its stage.
 - (4) Sorting ears by stage and weighing all ears in stage (pounds to tenths).
- 25 **Total Weight All Sample Plots** Total of sample weights from all sample plots for that stage (to tenths).
- 26 **Yield Factor** Use appropriate factor for fraction of an acre used.
- 27 **Appraisal Per Stage** Result of multiplying Total Weight All Sample Plots (item 25) by appropriate yield factor (item 26), rounded to tenths.
- 28 **Total Appraisal All Stages** Sum of entries in item 27 (Appraisal Per Stage), to tenths.
- 29 **Total No. Rep. Sample Plots** Number of sample plots.
- 30 **Acre Appraisal** Result of dividing Total Appraisals All Stages (item 28) by number of Total Number of Representative Sample Plots (item 29).
- 31 **Insured's Signature** 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, particularly explaining codes, etc., which may not be readily understood.
- 32 **Adjuster's Code Number, Signature, and Date** Signature of adjuster, code number, signature, and date signed after the insured (or insured's authorized representative) has signed. If the appraisal is performed prior to 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.

Remarks

Enter pertinent information about the appraisal. Include any appropriate calculations. Attach a Special Report when more space is needed.

(FOR ILLUSTRATION PURPOSES ONLY) HYBRID CORN SEED MATURITY LINE WEIGHT METHOD APPRAISAL WORKSHEET

COMPANY		1. INSURED'S NAME I. M. Insured	2. POLICY NUMBER XXXXXXX	3. UNIT NUMBER 00100	3a. CLAIM NUMBER XXXX	7. KIND OF APPRAISAL CIRCLE APPRAISAL CODE
4. CROP Hybrid Corn Seed	5. CROP YR YYYY	6. FSA FARM NO. 106 Hybrid 100 W	YIELD FACTOR			GRAIN SORGHUM - GS EAR CORN - EC POPCORN - PEC CORN SILAGE - CS GRAIN SORGHUM, SILAGE - GSS
		Popcorn <small>100 if sample size selected was 1/100 acre 1000 if sample size selected was 1/1000 acre</small>	Corn <small>1.43 if sample size selected was 1/100 acre 14.3 if sample size selected was 1/1000 acre</small>	Grain Sorghum <small>1.34 if sample size selected was 1/100 acre 13.4 if sample size selected was 1/1000 acre</small>		

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	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	
														18. MOISTURE	19. SHELLING
												BUSHEL TONS POUNDS	PERCENT/FACTOR		
												BUSHEL TONS POUNDS	18. MOISTURE	19. SHELLING	
												BUSHEL TONS POUNDS	PERCENT/FACTOR		
												BUSHEL TONS POUNDS	18. MOISTURE	19. SHELLING	
												BUSHEL TONS POUNDS	PERCENT/FACTOR		
												BUSHEL TONS POUNDS	18. MOISTURE	19. SHELLING	
												BUSHEL TONS POUNDS	PERCENT/FACTOR		
												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	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) 1. 1/100 acre if potential appears to be less than 500 lbs./acre. 2. 1/1000 acre if potential appears to be in excess of 500 lbs./acre.
			Plot 1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9		Corn	Popcorn		
A	1/4	1/100	6.1	3.3	3.3	0.0	0.0				12.7	.7092	40.0	9.0	REPRESENTATIVE SAMPLES (Corn, Grain Sorghum) 1. 1/100 acre if potential appears to be less than 20 bushels/acre. 2. 1/1000 acre if potential appears to be in excess of 20 bushels/acre.	
		1/1000										7.0920	400.0			
Acres in Field to tenths 21 20.0	1/2	1/100	7.1	6.5	4.4	5.2	6.3				29.5	.7463	42.0	22.0		
		1/1000										7.4630	420.0			
20.0	3/4	1/100	6.9	4.1	3.2	5.8	0.0				20.0	.8000	45.0	16.0		
		1/1000										8.0000	450.0			
	Doughy	1/100	3.5	0.0	0.0	0.0	0.0				3.5	.8475	47.0	3.0		
		1/1000										8.4750	470.0			
	Extended	1/100										1.0638	59.0	5		
		1/1000										10.6380	590.0			

REMARKS:

28. TOTAL APPR. ALL STAGES 50.0	5	10.0
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31. INSURED'S SIGNATURE I. M. Insured	DATE MM/DD/YYYY	32. CODE NUMBER & ADJUSTER'S SIGNATURE XXXXX I.M. Adjuster	DATE MM/DD/YYYY
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(RESERVED)

F HYBRID CORN SEED AND HYBRID SORGHUM SEED WEIGHT METHOD WORKSHEET INSTRUCTIONS

Complete HEADING items 1 through 7, PART 1 items 8 through 19, and Part II items 31 and 32.

Verify or make the following entries:

<u>Standard Items</u>	<u>Information Required</u>
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 Number	Five-digit (e.g., 00100) unit number from the acreage report.
3a Claim Number	Enter claim number.
4 Crop Name	“Hybrid Corn Seed” or “Hybrid Sorghum Seed”.
5 Crop Year	Crop year, as defined in the policy, for which the claim has been filed.
6 FSA Farm Number	FSA Farm Serial Number (if applicable). Hybrid identification code.
7 Kind of Appraisal	Circle “EC” for ear corn or circle “GS” for grain sorghum and enter in item 10, Part 1.

PART 1 - WEIGHT METHOD

Use this method for hybrid corn seed for grain when grain moisture is **40 percent or below**, and for hybrid sorghum seed for all grain appraisals from the milk stage through maturity.

Verify or make the following entries:

<u>Standard Items</u>	<u>Information Required</u>
8 Field ID	Field identification symbol.
9 Acres in Field	Acres in field identified by field ID (item 8), to tenths.
10 Kind of Appraisal	Enter “EC” for ear corn or “GS” for grain, forage, or sudan (sorghum) seed production.

- 11 **Fraction of Acre** **Corn** - Enter "1/100".
Sorghum - Enter "**1/100**" if the potential appears to be 20 bushels per acre or less, or "**1/1000**" if the potential appears to be in excess of 20 bushels 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) pounds, to tenths.
- 14 **Number of Sample Plots** Number of sample plots.
- 15 **Average Sample Weight per Field** Result of dividing total weight all samples (item 13) by the number of sample plots (item 14), rounded to tenths.
- 16 **Yield Factor** **Corn** - Enter the factor (to hundredths) determined by multiplying (1.5) times the whole percentage points of moisture, in excess of 14.0; adding the result to 70; and dividing the sum into 100. Example: 20.5% moisture is 6 whole percentage points in excess of 14.0; $1.5 \times 6 = 9$; $+70 = 79$; $100 \div 79 = 1.27$). When moisture is 14 percent or less enter 1.43.
Sorghum - If entry in item 11 is 1/100, enter "1.34". If entry in item 11 is 1/1000, enter "13.4".
- 17 **Per Acre Yield** **Corn** - Result to tenths, of multiplying average sample weight (item 15) by yield factor (item 16). Circle appropriate unit of measure.
Sorghum - Result, to tenths, of multiplying item 15 by item 16. If threshing factor is applied (Section 13, Subparagraph T), line through appraisal and enter adjusted appraisal in the space below the original appraisal. Show calculation on worksheet.
- 18 **Moisture** Moisture percentage (to tenths).
Corn - if in excess of 14.0 (through 40 percent).
- 19 **Shelling** Shelling percentage factor (to whole percent). Refer to Section 13, subparagraph K.
Sorghum - Make no entry.

Signatures

- 31 **Insured's
Signature** 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, particularly explaining codes, etc., which may not be readily understood.
- 32 **Adjuster's
Code Number,
Signature,
and Date** Signature of adjuster, code number, signature, and date signed after the insured (or insured's authorized representative) has signed. If the appraisal is performed prior to 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.

Remarks

Enter pertinent information about the appraisal. Include any appropriate calculations. Attach a Special Report when more space is needed.

(RESERVED)

(FOR ILLUSTRATION PURPOSES ONLY) MATURE HYBRID SORGHUM SEED WEIGHT METHOD APPRAISAL WORKSHEET

COMPANY		1. INSURED'S NAME I.M. Insured			2. POLICY NUMBER XXXXXXX		3. UNIT NUMBER 00100		3a. CLAIM NUMBER XXXX		7. KIND OF APPRAISAL CIRCLE APPRAISAL CODE		
4. CROP Hybrid Sorghum Seed		5. CROP YR YYYY		6. FSA FARM NO. 106 Hybrid 88g		YIELD FACTOR Popcorn 100 if sample size selected was 1/100 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		Grain Sorghum 1.34 if sample size selected was 1/100 acre 13.4 if sample size selected was 1/1000 acre		GRAIN SORGHUM - (GS) EAR CORN - EC POPCORN - PEC CORN SILAGE - CS GRAIN SORGHUM, SILAGE - GSS	

PART I - MATURE EAR CORN - POPCORN - HYBRID SEED (corn, grain sorghum) - GRAIN SORGHUM AND SILAGE WEIGHT METHOD

FIELD ID	ACRES IN FIELD	KIND OF APPR.	FRACTION OF	RECORD IN EACH BLOCK THE POUNDS PER SAMPLE PLOT TO TENTHS						TOTAL WEIGHT ALL SAMPLE PLOTS	NO. OF SAMPLE PLOTS	AVG. SAMPLE WEIGHT PER FIELD	YIELD FACTOR	PER ACRE YIELD (CIRCLE ONE)	FOR MATURE CORN POPCORN AND GRAIN SORGHUM	
				4.3	5.2	8.4	7.1	8.1							PERCENT	FACTOR
F	10.1	GS	1/100							33.1	5	6.6	1.34	(BUSHEL S) 8.8 TONS POUNDS	18. MOISTURE 15.1	19. SHELLING
				Example of appraisal adjusted for low threshing percentage						8.8 bu. X .75 factor = 6.6 bu.			(BUSHEL S) 8.8 TONS POUNDS	18. MOISTURE 15.1	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	STAGE	FRACTION OF ACRE	Record in Each Block the Pounds per Sample Plot to Tenths									TOTAL WEIGHT ALL SAMPLE PLOTS	YIELD FACTOR		APPRAISAL PER STAGE	REPRESENTATIVE SAMPLES (Popcorn)	
			Plot 1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9		Corn	Popcorn			
Acres in Field to tenths 21	1/4	1/100												.7092	40.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	1/100 acre if potential appears to be in excess of 500 lbs./acre.
		1/1000												7.0920	400.0		
	1/2	1/100												.7463	42.0		
		1/1000												7.4630	420.0		
3/4	1/100												.8000	45.0	REPRESENTATIVE SAMPLES (Corn, Grain Sorghum)		
	1/1000												8.0000	450.0			
Doughy	1/100												.8475	47.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	1/100 acre if potential appears to be in excess of 500 lbs./acre.	
	1/1000												8.4750	470.0			
Extended	1/100												1.0638	59.0	TOTAL AVERAGE OF 20 bushels/acre.		
	1/1000												10.6380	590.0			

REMARKS:

28. TOTAL APPR. ALL STAGES

31. INSURED'S SIGNATURE I.M. Insured			DATE MM/DD/YYYY	32. CODE NUMBER & ADJUSTER'S SIGNATURE XXXXX I.M. Adjuster			DATE MM/DD/YYYY
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(FOR ILLUSTRATION PURPOSES ONLY) MATURE HYBRID CORN SEED WEIGHT METHOD APPRAISAL WORKSHEET

COMPANY		1. INSURED'S NAME I.M. Insured		2. POLICY NUMBER XXXXXXX		3. UNIT NUMBER 00100		3a. CLAIM NUMBER XXXX		7. KIND OF APPRAISAL CIRCLE APPRAISAL CODE	
4. CROP Hybrid Corn Seed		5. CROP YR YYYY		6. FSA FARM NO. 106 Hybrid 100 W		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		Grain Sorghum 1.34 if sample size selected was 1/100 acre 13.4 if sample size selected was 1/1000 acre	
7. GRAIN SORGHUM - GS EAR CORN - (EC) POPCORN - PEC CORN SILAGE - CS GRAIN SORGHUM, SILAGE - GSS											

PART I - MATURE EAR CORN - POPCORN - HYBRID SEED (corn, grain sorghum) - GRAIN SORGHUM AND SILAGE WEIGHT METHOD

FIELD ID	ACRES IN FIELD	KIND OF APPR.	FRACTION OF	RECORD IN EACH BLOCK THE POUNDS PER SAMPLE PLOT TO TENTHS					TOTAL WEIGHT ALL SAMPLE	NO. OF SAMPLE PLOTS	AVG. SAMPLE WEIGHT PER FIELD	YIELD FACTOR	PER ACRE YIELD (CIRCLE ONE)	FOR MATURE CORN POPCORN AND	
				4.3	6.2	5.1	3.9	7.0						18. MOISTURE	19. SHELLING
B	19.0	EC	1/100						26.5	5	5.3	x 1.27 =	(BUSHEL 6.7 TONS POUNDS	20.5	80
												x =	BUSHEL TONS POUNDS	18. MOISTURE	19. SHELLING
												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	STAGE	FRACTION OF ACRES	Record in Each Block the Pounds per Sample Plot to Tenths									TOTAL WEIGHT ALL SAMPLE PLOTS	YIELD FACTOR		APPRAISAL PER STAGE	REPRESENTATIVE SAMPLES (Popcorn)
			Plot 1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9		Corn	Popcorn		
20	1/4	1/100										25	.7092	40.0	27	1. 1/100 acre if potential appears to be less than 500 lbs./acre. 2. 1/1000 acre if potential appears to be in excess of 500 lbs./acre.
		1/1000											7.0920	400.0		
Acres in Field to tenths	1/2	1/100											.7463	42.0		
		1/1000											7.4630	420.0		
21	3/4	1/100											.8000	45.0		REPRESENTATIVE SAMPLES (Corn, Grain Sorghum)
		1/1000											8.0000	450.0		
	Doughy	1/100											.8475	47.0		1. 1/100 acre if potential appears to be less than 20 bushels/acre. 2. 1/1000 acre if potential appears to be in excess of 20 bushels/acre.
		1/1000											8.4750	470.0		
	Extended	1/100											1.0638	59.0		TOTAL NO. REP. SAMPLE PLOTS
		1/1000											10.6380	590.0		

REMARKS:

28. TOTAL APPR. ALL STAGES	÷	=	29	30
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31. INSURED'S SIGNATURE I.M. Insured			DATE MM/DD/YYYY	32. CODE NUMBER & ADJUSTER'S SIGNATURE XXXXX I.M. Adjuster			DATE MM/DD/YYYY
---	--	--	--------------------	---	--	--	--------------------

15 APPRAISAL CALCULATION STANDARDS

See Section 14, APPRAISAL FORM ENTRIES AND COMPLETION STANDARDS for form entries, appraisal calculations, and rounding rules.

16 APPRAISAL MODIFICATION AND DEVIATION STANDARDS

A Appraisal Deviation or Modification for Hybrid corn Seed or Hybrid Sorghum Seed

- (1) Deviations require **written notification from FCIC** before the adjuster applies the deviation (See the LAM). Document on a Special Report the authorization to use the appraisal deviation Had been given.
- (2) Modifications Requiring Authorization from the Next Level of Supervision are to be used **ONLY** when conditions warrant.

B Corn - Appraisal Modifications

When applicable, with the **Insurance Provider** authorized representative approval, use the following instructions in conjunction with the appropriate appraisal methods for damage due to insurable causes.

(1) **Insufficient Male Stand to Provide Adequate Pollination of Female Population:**

Identify factors affecting circumstances. Defer appraisal to maturity line method.

(2) **No Pollination Due to Drought, Heat, Hot Winds, and/or Insects:**

Appraise hybrid corn seed as "0" (for the actual acreage so affected) if, after a general 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.

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

Appraise hybrid corn seed 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 ½-pound ear of corn, 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 "Note and Calculation section" of the stand reduction appraisal worksheet or on an attached Statement of Facts.

(4) Severely Drought-Stunted Hybrid Corn:

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.

NOTE: Use of representative sample areas for hybrid corn seed requires seed company as well as insurance provider approval, since such production is under seed company contract. Representative areas chosen by a loss adjuster to be left for sampling must include at least the entire planting pattern (male and female rows), with the length of each row equivalent to 1/100 acre. The sample area must also be bordered by three or more rows or their equivalent, to serve as an environmental barrier. If sample areas are not chosen by the loss adjuster, representative strips the entire length of the field must be left. The insured must agree to accept the determination of seed/nonseed based on such representative sample areas. If a determination cannot be made, all production will be counted as seed.

Representative strips/sample areas must be maintained just as if all production would be harvested as seed. Such maintenance includes isolation for genetic purity as required by the seed-grower contract. Unless the plants are destroyed prior to pollination, detasselling must be performed at least within the boundaries of such required isolation.

(5) Permanently Wilted Hybrid Corn

Note on appraisal worksheet "no production potential due to permanent wilt" and enter zero appraisal for the affected acres. For acreage with no or minimal 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.

NOTE: Permanent wilt is caused by extremely dry soil conditions and can occur at any immature stage of growth. It 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.

(6) Appraisal Modification for Early Freeze Damage:

When authorized by the Insurance Provider, 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. Document on a Statement of Facts, all pertinent information regarding the loss such as the hybrid number, the maturity rating of the corn, whether the late planting provisions apply, planting (and any replanting) dates, the practicality of any late replanting, extent of freeze damage to corn in the area (whether general or isolated), date of normal freeze, date(s) of damaging freeze(s), and specifically why the corn did not escape freeze damage. Do not apply the appraisal modification for early freeze damage if you determine that the insured could have prevented the damage through proper farming practices.

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 doughy and extended 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:

- (a) 1/4 stage - count 25 percent of the appraisal.
- (b) 1/2 stage - count 50 percent of the appraisal.
- (c) 3/4 stage - count 75 percent of the appraisal.

The adjustments do not apply if:

- 1 Kernels are in the doughy or extended 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-1/4 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.

NOTE: Germination percentage of frost-damaged hybrid seed declines rapidly with physical damage. Representative sample areas may be left for later appraisal if some production is likely. This would be necessary to avoid counting poorly germinating grain (non-seed) as seed (as specified for appraisals of immature hybrid corn seed).

For purposes of this appraisal modification, "early freeze damage" refers to a freeze which occurs early enough in the corn'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.

C Sorghum - Appraisal Modifications

When applicable, with the Insurance Providers Authorized Representative's approval, use the following appraisal modifications in conjunction with the appropriate grain appraisal methods for damage due to insured causes.

(1) **Permanent Wilt (Not applicable to irrigated practice).**

(a) When permanent wilt is present:

1 Plants are damaged to the point that the leaves remain tightly rolled throughout the night; and

2 The four lower leaves of the plant are brown and brittle, and during the day, will crumble when rolled between the hands.

(b) When all plants are permanently wilted and stand reduction appraisal is appropriate, note on appraisal sheet "no production potential due to permanent wilt," and enter zero appraisal for acreage so affected.

(c) When permanent wilt has been determined in the area, but not all (or none) of the plants in the field or sub-field have been affected, appraise in the normal manner unless the insured agrees to leave representative areas for later appraisal. Inform insured to request another appraisal within 30 days of this inspection.

NOTE: Acreage affected by permanent wilt should be inspected in early-morning hours to confirm turgor has not been restored overnight. Make observations before 9 A.M. if possible. Permanently wilted plants are damaged to the extent that they will die even if supplied moisture.

(2) **Lack of Frost-Free Days:**

If the number of days from the date of appraisal to the date for the end of the insurance period listed in the actuarial table is fewer than the number of days the hybrid sorghum would require to reach the soft-dough stage, frost/freeze damage is probable. (The date listed in the actuarial table for the end of the insurance period roughly approximates the normal killing frost date in most cases.) To adjust appraisals for lack of frost-free days:

- (a) Determine the stage of growth on the date of appraisal.
- (b) Determine the ultimate number of leaves the plants would have produced if frost were not a factor.
- (c) Determine the number of days from the stage of growth on the day of appraisal to the date the hybrid sorghum seed would reach the soft dough stage. When counting, do not count days for leaf stages beyond the determined ultimate number of leaves. For example: Stage of growth on date of appraisal = 14th leaf. Determined ultimate number of leaves = 18. Number of days from 14th to 18th leaf stage (full leaf development) = 12 days. Number of days from full leaf development to soft dough stage = 36 days. Total number of days from 14th leaf stage (through full leaf development) to soft dough stage = 48 days.
- (d) Add 5 days (to days calculated in sub-paragraph (c)) to account for slower plant development as the frost date approaches.
- (e) When the sum of sub-paragraphs (c) and (d) equals or exceeds the number of days from date of appraisal to the frost date listed in the actuarial table, appraise the affected acreage at zero potential, if the delay in maturity is due to an insurable cause. Enter "Will not reach soft dough stage by the actuarial table frost date" on the appraisal worksheet or an attached Statement of Facts and show computations.

NOTE: If female plants are incapable of reaching the soft-dough stage before the listed actuarial date, be certain the variety is adapted to the area. Frost damage is insurable only if it occurs before the date listed in the actuarial table and is due to insurable causes. (Determine if proper farming practices could have prevented the damage.)

- (f) If the sum of sub-paragraphs (c) and (d) is less than the number of days from date of appraisal to the end of the insurance period, appraise in the normal manner. When frost could be a factor for further damage, document on the appraisal sheet why it was not reflected in the appraisal.

17 (RESERVED)

18 (RESERVED)

19 (RESERVED)

PART 3 HYBRID SEED CLAIMS

20 CLAIM FORM ENTRIES AND COMPLETION STANDARDS

Generic Standard Item identifiers have been assigned to each required item. Insurance providers are to ensure that their claim form provides the same information consistent with the FCIC standards. Insurance providers may provide separate column, items, or entries for information which, by necessity, has been consolidated into a single column, item, or entry in this standard. Any difference in arrangement of insurance provider's items or information is considered cosmetic and not substantive unless it adversely affects the calculations, or the legality or availability of the FCIC required information.

A Instructions

- (1) The claim form is a progressive form containing all notices of damage for all preliminary, and final inspections on a unit. **No replant payment made on Hybrid Seed.**
- (2) If a claim form 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. Adjuster and insured should initial any line corrections.
- (3) Refer to the LAM for instructions regarding the following:
 - (a) Acreage report contains errors.
 - (b) For delayed notices and delayed claims.
 - (c) For corrected claims or fire losses (double coverage) and cases involving concealment, misrepresentation, or litigation.
 - (d) For claims involving a Certification Form (when all the acreage on the unit has been appraised to be put to another use).
 - (e) Each "No Indemnity Due" claim must be verified by an APPRAISAL or NOTIFICATION from the insured that the production exceeded the guarantee.
- (4) The adjuster is responsible for determining if any of the insured's requirements under the notice and claim provisions have not been met. If any have not, the adjuster should contact the insurance provider.
- (5) Instructions labeled "P" apply to preliminary inspections only.
- (6) Instructions labeled "F" apply to final inspections only.
- (7) Instructions not labeled apply to ALL inspections.

B Heading information

Verify or make the following entries:

<u>Standard Items</u>	<u>Information Required</u>
1 Crop - Code	<p>“Hybrid Corn Seed” (0062)</p> <p>“Hybrid Sorghum Seed” (0050)</p>
2 Unit Number	Five digit unit number from the acreage report after it is verified to be correct (00100).
3 Legal Description	Section, Township, and Range numbers, or other legal descriptions, that identifies the location of the unit.
4 Date of Damage	Enter the first three letters of the month during which most of the insured damage (including progressive damage) occurred for each inspection. Include the specific date where applicable as in the case of hail damage (e.g., AUG 11).
5 Cause of Damage	<p>P MAKE NO ENTRY</p> <p>F Enter the primary insured cause of loss exactly as listed in the LAM. If it is evident that no indemnity is due, enter “NONE.”</p> <p>If a primary or secondary insured cause of loss is coded as “Other,” explain in the Narrative.</p> <p>Damage due to insufficient or improper application of disease or pest control measures are not insured causes of loss. Specify the type of insects, disease, or mycotoxins in the narrative.</p>
6 Primary Cause of Damage Percent	<p>P MAKE NO ENTRY</p> <p>F Enter percent of primary cause of damage (primary cause of damage must exceed 50 percent). Enter an “X” in the major secondary cause of damage.</p>
7 Company Name Agency Name	Company name and agency name.
8 Name of Insured	Name of the insured that identifies exactly the person (legal entity) to whom the policy is issued.
9 Claim number	Enter the claim number as assigned by the insurance provider.

10	Policy Number		Insured's assigned policy number.
11	Crop Year		Crop year for which the claim is filed, as defined in the policy.
12	Additional Units	P	MAKE NO ENTRY
		F	Enter the 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 claim form has not been completed. Additional non-loss units may be entered on a single claim form.
			NOTE: If more spaces are needed for non-loss units, enter the unit numbers on an attached Special Report identified as "Non-Loss".
13	Estimated Production Per Acre	P	MAKE NO ENTRY
		F	Enter the estimated yield per acre in whole bushels of all non-loss units for the crop at the time of final inspection.
14	Date(s) Notice of Loss	P	<p>a Enter the date the notice of damage was given for the unit in item 2.</p> <p>b A third preliminary inspection (if needed) requires an additional set of claim forms. Enter the date of notice for a third preliminary inspection in the 1st space of item 14 on the second set.</p> <p>c Reserve the "Final" space on the first page of the first set of claim forms for the date of notice for the final inspection.</p> <p>d If the inspection is initiated by the insurance provider, enter "Company Insp." instead of the date.</p>

F Adjusters: Transfer the last date in the 1st, or 2nd space to the final space if a final inspection should be made as a result of the notice. Use the date entered in the "Final" notice of damage for all damaged units shown in item 12 unless an earlier notice has been filed on any unit. Always enter the complete date of notice for the "final" inspection in the final space on the first page of the first set of claim forms (month, day, year). For a delayed notice of loss or delayed claim, refer to the LAM.

If the date of notice is later than the time specified in the policy provisions, refer to the LAM.

15 Companion Policies

- a If no other person has a share in the unit, enter "NONE".
- b If another person has a share in the unit, refer to the LAM.

C SECTION I - Acreage Appraised, Production and Adjustments

Make separate line entries for varying:

- (1) Rate class, types, or farming practices;
- (2) APH Yields;
- (3) Appraisals;
- (4) Adjustments to appraised mature production (moisture, etc.)
- (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.

Standard Items

Information required

- | | | | |
|----------|--------------------------|----------|--|
| A | Field ID | | The field identification symbol from a sketch map or an aerial photo. See the "Narrative". In the margin (or in a separate column), enter the date of inspection for the last line entry of each inspection. |
| B | Preliminary Acres | P | The number of acres, to tenths, occupied by female plants only, (include "E" if estimated), for which consent for other use has been given. Determine actual acreage, to tenths, when the boundaries of the appraised acreage may not be determined later. |
| | | F | MAKE NO ENTRY |

C Final Acres

P See the LAM for definition of acceptable determined acres used herein. Determined acres to tenths, occupied by female plants for hybrid seeds which consent is given for other use and/or acreage is:

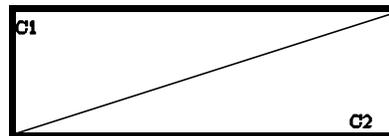
- a Put to other use without consent.
- b Abandoned.
- c Damaged by uninsured causes.

F Determined acres to tenths.

NOTE: Acreage breakdowns within a unit may be estimated (enter "E" in front of the acres) if a determination is impractical and if authorization was received from the insurance provider. Document authorization in the Narrative.

Account for all acreage occupied by Female Plants for Hybrid Seed in the unit. In the event of over reported acres, handle in accordance with individual insurance company policy. In the event of under reported acres, draw a diagonal line in Column "C" as shown.

- C₁ Enter the actual acres for the field or subfield.
- C₂ Enter the reported acres for the field or subfield.



D Interest or Share

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

E Risk

The correct rate class from the County Actuarial Table. Verify with the acreage report and if the rate class is found to be incorrect, prepare a revised acreage report.
NOTE: Unrated land is uninsurable without a written agreement.

F Practice

Practice, entered as a 3-digit code number exactly as shown on the County Actuarial Table, for the practice carried out by the insured. If "No Practice Specified," enter appropriate 3-digit code number from the County Actuarial Table.

PREVENTED PLANTING: See the LAM for proper codes for any eligible prevented planting acreage.

J Appraised Potential

Per-acre appraisal in bushels, to tenths, of potential production for the acreage appraised. (See appraisal methods for additional instructions.)

NOTE: If there is no potential on UH acreage enter "0".

K₁ Moisture %

Enter moisture percent to nearest tenth (for weight method only). For all other appraisals MAKE NO ENTRY. (Sorghum appraised mature grain).

NOTE: For corn this entry is for documentation purposes only. Moisture correction is computed on the weight method appraisal worksheet.

K₂ Factor

Corn - MAKE NO ENTRY

Sorghum - Enter the four-place moisture factor from the Hybrid Sorghum Seed Moisture Factor Table (Exhibit 2).

L Shell and/or Quality Factor

Sorghum - Make No Entry.

Corn - When a weight-method appraisal is made for mature ear corn, enter the shelling percentage factor rounded to whole percent. (See Section 13, Subparagraph K); Otherwise, MAKE NO ENTRY.

a For seed production, enter, the dollar-and-cents value per bushel for the acreage which produced the (corn) (sorghum). Obtain this value by multiplying the approved yield (from the "HYBRID SEED APPROVED YIELD" form) by the coverage level percent, and dividing the result into the dollar amount of insurance per acre.

b For non-seed (corn) (sorghum) production:

(1) Sold or otherwise disposed of: Enter the actual dollar-and-cents value per bushel received or the local market price per bushel on the date of disposition, whichever is higher.

(2) For mycotoxin-infected production with no market value, see the LAM.

NOTE: If there is sufficient reason to suspect significant mycotoxin presence, the Insurance Provider can pay reasonable costs of testing. The Insurance Provider will determine if testing is to be done on a paid basis and if such costs are considered reasonable.

M. **Uninsured Causes**

EXPLAIN IN THE NARRATIVE.

a Hail and Fire exclusion **not** in effect.

- (1) For acreage abandoned without consent, put to other use without consent, damaged **solely** by uninsured causes, or for which the insured failed to provide acceptable records of production: Enter **not less** than the insured's production guarantee per acre in bushels, to tenths.

The "guarantee" (which this entry must equal or exceed) is the approved bushel yield from the "Hybrid Seed Approved Yield" form times the coverage level percentage for any such acreage.

NOTE: Late and prevented planting acreage guarantees are reduced as provided in the insurance contract.

NOTE: On preliminary inspections, advise the insured to keep the harvested production from any acreage damaged **solely** by uninsured causes separate from other production.

- (2) For acreage that is damaged **partly** by uninsured causes, enter the **appraised uninsured** loss of production per acre in bushels, to tenths, for any such acreage.

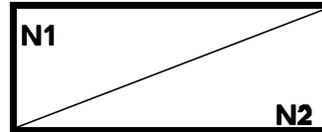
NOTE: For fire losses, if the insured also has other fire insurance (double coverage), refer to the **LAM**.

b Hail and Fire Losses - **See the LAM when a Hail and Fire Exclusion is in effect.**

c Enter the results of adding uninsured cause appraisals to hail and fire exclusion appraisals.

N **Adjusted Potential** F

Sorghum - Draw a diagonal line and record adjusted potential (Column "J" times Column "K₂") plus Column "M." above the line ("N₁") and the dollar value* per bushel below the line("N₂").



Corn - (Column "J" X"L") plus Column "M" above the line ("N₁") and the dollar value* per bushel below the line("N₂").

***DOLLAR VALUE:**

- a For line entries showing appraised production considered as seed production, or uninsured cause appraisals enter the applicable hybrid dollar value per bushel (in dollar and cents). Calculate the hybrid dollar value per bushel by multiplying the coverage level percent times the approved yield listed on the "HYBRID SEED APPROVED YIELD" form, (see **Exhibit 6** "Corn", **Exhibit 7** "Sorghum" for example) and dividing the result into the applicable dollar amount of insurance per acre. For "P" stage enter the amount of insurance per acre from the schedule of insurance.

- b For appraised production considered as non-seed production enter the local per bushel market value of the "sorghum" or "corn" on the date of final inspection.

 For appraised non-seed production which cannot be valued, enter the local price for No. 2 "grain sorghum" or "corn" on the date of final inspection.

- c For line entries showing a "P" stage, appraised production considered as seed production, or uninsured-cause appraisals, MAKE NO ENTRY. If at the time of the appraisal it cannot be determined if the crop will make acceptable seed production, the appraisal shall be considered as seed production.

NOTE: Only mature grain sorghum can qualify as non-seed; all appraised production prior to maturity must be counted as seed.

O	Total to Count	P	MAKE NO ENTRY
		F	Column "C" or "C ₁ " (actual acres) times Column "N ₁ " times "N ₂ " (rounded to nearest whole dollar).
P	Per Acre		Per Acre Guarantee-Enter the amount of insurance per acre from the schedule of insurance.
Q	Total		Column "C" or "C ₂ " (reported acres) times Column "P" (rounded to nearest whole dollar).
16	Total Acres	P	MAKE NO ENTRY
		F	Total Actual Acres (Column "C" and ["C ₁ " if there are under reported acres] total), rounded to tenths.
17	Totals	P	MAKE NO ENTRY
		F	Totals of Column "O" and Column "Q." Record the Hybrid Seed Company Code in the narrative.

NARRATIVE:

- a For all non-seed production, explain the reason for consideration as non-seed production, and show germination percentage for mature production.
- b Enter "No acreage released," your initials, and date if no acreage is released on the unit.
- c If notice of damage was given and "No Inspection" is necessary, enter in the Narrative the unit number(s), "No Inspection," date, and your initials. The insured's signature is not required.
- d Explain any uninsured causes, unusual, or controversial cases in this item or on an attachment. If you prepare an attachment, so indicate.
- e If there is an appraisal in Section I item M for uninsured causes due to a hail/fire exclusion, show the original hail/fire liability per acre and the hail/fire indemnity per acre.

- f State that there is "No other fire insurance" when fire damages or destroys the insured hybrid "corn" "sorghum" seed crop and you have determined that the insured has no other fire insurance. Also see the **LAM**.
- g Explain any errors found on the acreage report.
- h Explain any commingled production. See the **LAM**.
- i Explain any entry for "Production Not to Count" and/or any production not included in item I or item B - E entries.
- j Document any excess transportation costs or conditioning costs used to determine the QA factor.
- k Explain a "NO" checked in item 19.
- l Attach a sketch map or aerial photograph to identify the total unit:
 - (1) If consent is or has been given to put part of the unit to another use;
 - (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.

NOTE: Indicate on the aerial photo or sketch map, the disposition of acreage destroyed or put to other use with or without consent.
- m Explain any difference between inspection and signature dates. For an **absentee** insured, enter the date of the inspection **and** the date of mailing the form for signature.
- n Enter the code number of any other adjuster or supervisor and date of inspection in the lower right corner of this space when he/she accompanied the adjuster on the inspection.

- o Explain the reason for a "No Indemnity Due" claim. "No Indemnity Due" claims are to be distributed in the normal manner, except that they will not be transmitted for processing.
- p Document field ID's and date and method of destruction of mycotoxin-infested hybrid "corn" "sorghum" seed if it has no market value. For further documentation instructions, refer to the **LAM**.
- q Explain any delayed notices or delayed claims as instructed in the **LAM**.
- r Document any authorized estimated acres shown in item C as follows: "Line 3 'E' acres authorized by Insurance Provider MM/DD/YY."
- s Document, in the narrative or a Special Report, the method and calculation used to determine acres for the unit. See the **LAM**.
- t Document (in the narrative or on an attachment) any other pertinent information, including any raw data to support any factors used to calculate the production. If on an attachment, enter "See attachment."
- u 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.

D SECTION II - 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 (e.g., high moisture grain going into air-tight storage, released for other uses, etc.).

- (2) Columns “B” through “E” are for structure measurements entries (Rectangular, Round, Square, etc.). If structures are a combination of shapes, break into a series of average measurements, if possible. Enter “Odd Shape” or “Conical Pile” if production is stored in an odd shaped structure or conical pile. Document measurements on a Special Report or other worksheet used for this purpose. See The **LAM** for additional information on determining farm stored production.
- (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 “B” through “E.” See the **LAM** for acceptable weight tickets.
- (4) For production commercially stored, sold, etc., make entries in items B through E as follows:
 - (a) Name and address of storage facility or buyer.
 - (b) “Seed”, “Fed”, etc.
- (5) Non-seed production to count depends upon market value:

Determine local market price from a representative sample by contacting local grain dealers and livestock producers.
- (6) If acceptable sales or weight tickets are not available, obtain a representative grain sample to determine quality and moisture percentage. 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, dockage, test weight, value, etc.).

NOTE: Average percent of dockage and moisture can be entered when the elevator has calculated the average on the summary sheet, separate line entries are not otherwise required, and when the determined average is acceptable to the adjuster. See 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, see the **LAM**.
- (f) If acceptable sales or weight tickets are not available, see the **LAM**.
- (g) If production has been commingled, see the **LAM**.
- (i) For mycotoxin damage, See the **LAM** for special instructions.
- (j) If a correction is necessary in items A through S, strike out all entries on the line. The insured and the adjuster should then initial the line deletion in the margin beside A. Make corrected entries on a new line.

Verify or make the following entries:

<u>Standard Items</u>	<u>Information Required</u>
18 Date Harvest Completed	<p>P MAKE NO ENTRY</p> <p>F Enter the date the entire acreage was (1) totally destroyed, or (2) a combination of destroyed, put to other use, or harvested. For cases involving a Certification Form, when the entire unit is put to another use, enter the appropriate date from the Certification Form.</p> <p>Enter "Incomplete" if, at the time of final inspection, there is any insured acreage which is unharvested and could still be harvested.</p> <p>If none of the acreage was harvested nor will be harvested, enter "No Harvest." For Claims involving prevented planting, see the LAM.</p>
19 Similar Damage	<p>P MAKE NO ENTRY</p> <p>F 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.</p>
20 Assignment of Indemnity	<p>Check "Yes" Only if an assignment of Hybrid "Corn" "Sorghum" Seed indemnity is in effect for the crop year. Otherwise check "No".</p>

21	Transfer of Right to Indemnity	Check “Yes” Only if a transfer of right to Hybrid “Corn” “Sorghum” Seed indemnity is in effect for the unit for the crop year . Otherwise check “No”.
A1	Share	Insured’s interest in the crop to three decimal places.
A2	FIELD ID	<p>If only one practice and/or type of hybrid seed production is listed in Section 1 (column 1), MAKE NO ENTRY.</p> <p>If more than one practice and/or type of harvested hybrid seed production is listed, and separate approved APH yields exists, indicate for each practice/type, the corresponding Field ID (from Section 1, item “A”).</p>
B	Length or Diameter	<p>Internal measurement in feet to tenths of structural space occupied by crop. See the LAM for calculation instructions to convert circumference to diameter if internal diameter measurement is not possible.</p> <p>a Length if rectangular or square.</p> <p>b Diameter if round.</p> <p>c For production commercially stored, sold, etc., make entries in B through E as follows:</p> <p style="padding-left: 40px;">(1) Name and address of storage facility or buyer.</p> <p style="padding-left: 40px;">(2) “Seed”, “fed”,etc.</p>
C	Width	Internal width measurement in feet to tenths of space occupied by crop in structure if rectangular or square. If round enter “RND”.
D	Depth	Depth measurement in feet to tenths of space occupied by crop in rectangular, round, or square structure. If there is production in the storage structure from other units or sources, refer to the LAM .
E	Deductions	Cubic feet, to tenths, of crop space displaced by chutes, vents, studs, crossies, etc. Refer to the LAM for computation instructions.
F	Net Cubic Feet	Net cubic feet, to tenths, of crop in the storage structure. Refer to the LAM for computation instructions.

G **Conversion Factor**

Enter Conversion Factor as follows:
 Shelled Corn or Sorghum..... 0.8.
 Ground Shelled Corn..... 0.7.
 Ground Ear Corn..... 0.6.
 Ear Corn..... 0.4.

H **Gross Production**

Multiply Column “F” times Column “G,” rounded to tenths of a bushel.

I **Bu., Ton, Lbs.,
Cwt.**

Production in bushels, to tenths, before deductions for grain moisture and dockage for production:

- a Weighed and stored on the farm.
- b Sold - 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 commercial storage- Obtain gross production for the **unit** from the seed company records.
- d Stored in odd-shaped structures, conical piles. or a cone on the top or bottom of a bin. /the adjuster must compute the amount of gross production (explain and show calculations in Narrative or on a Special Report). (**Refer to the LAM** for cubic footage and production computations). A copy of **all** production calculations must be left in the file folder.
- e Of ground **shelled corn**.
- f For weighed **ear corn**, to determine the gross bushels, divide the pounds by 70. Do not enter shelling percent for such corn (70 pounds assumes 80 percent shell).

NOTE: For mycotoxin-infected hybrid “**corn**” or “**sorghum**” seed, enter **all** production even if it has no market value.

All “Corn” or “Sorghum” **Delivered** to and **Accepted** by the seed company is considered “seed production” even if the settlement sheet shows some production bought by the seed company as “seed” and some as “non-seed”; however, when the availability of seed corn is delivered, some companies will upgrade production **normally rejected** by separating bad seed from viable seed. When this happens, the adjuster must follow the following steps when working the claim:

- a Determine the percentage of germination from the “**original**” sample to document that this production does not meet the 80 percent requirement.
- b Count as seed production that portion of the production accepted by the seed company **after separating**.
- c Count as non-seed production that portion of production which was removed to increase the sample germination.

J Shell/Sugar Factor

Sorghum - MAKE NO ENTRY

Corn - To determine shelling factor for ear corn:

- a Husk 5 lbs. Of ear corn.
- b Shell all ears and weigh grain.
- c Apply weight to Table to get shelling percentage factor **Section 13, Subparagraph K**.
- d Enter percentage factor in Column “J”.

K₁ FM%

Make entry to nearest tenth for dockage (as applicable), for foreign material **only**, which the **buyer** has deducted (or will deduct if such production has not been sold). If elevator has averaged dockage on the settlement / summary sheet, see the **LAM** for instructions.

The terms “dockage” and “foreign material” are often used by buyers to describe the **same non-grain** material depending on the geographic area of the country. An adjuster may use either one or a combination of both (if provided) as the entry in K₁ (See official U.S. Grain Standards Handbook). Adjustment for other factors (damaged/broken kernels, moisture, etc.), **should not** be included in this entry.

K ₂	Factor	Enter the three place factor determined by subtracting the percent of dock from 1.000. Example: For 4 percent, enter ".960".
L ₁	Moisture %	Enter moisture percent to tenths.
L ₂	Factor	For shelled corn, or sorghum enter the four-place factor from the Hybrid "Corn" or "Sorghum" Seed Moisture Adjustment Factor Table (Exhibit 1 or 2). Apply moisture adjustment prior to any adjustment for quality. For ear corn in excess of 14.0 percent moisture, (any portion of a percentage point will be disregarded 14.7 = 1.000). See Exhibit 3.
M ₁	Test Wt.	Test Weight (only when storage structure measurements were entered) in whole pounds or tenths (as instructed by the insurance provider) with any foreign material removed.
M ₂	Factor	Test Weight Factor - enter the result of dividing the actual test weight by 56 (from a clean shelled sample from ear corn), to three decimal places (see Exhibit 4 "Corn" and "sorghum").
N	Adjusted Production	Result of multiplying ("H" or "I") x (corn "J") (sorghum "K₂") x "L ₂ " x "M ₂ ". (Round to nearest tenth).
O	Production Not to Count	Net production not to count when acceptable records identifying such production are available from: <ul style="list-style-type: none"> a Harvested acreage damaged solely by uninsured causes. b Other sources (e.g., other units or uninsured acreage) in the same storage structure if acceptable records identifying such production are available. Enter gross production before corrections for moisture, etc. if bin measurements are involved. For not-to-count production already on a weight basis, enter production after adjustment for moisture, etc.

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 D, and the depth for production not to count has been entered in the narrative. See sample in the exhibits section of the **LAM**.

P	Production		Result of subtracting the entry in Column "O" from Column "N".
Q ₁	Value		For seed production, enter, the dollar-and-cents value per bushel for the acreage which produced the (corn) (sorghum). Obtain this value by multiplying the approved yield (from the "HYBRID SEED APPROVED YIELD" form (see Exhibit 6 "corn" or 7 "sorghum") the coverage level percent, and dividing the result into the dollar amount of insurance per acre. If entry is made in "Q ₁ " make no entry in "Q ₂ ". MAKE NO ENTRY for Non- Seed Production.
Q ₂	Market Value	a	For seed production: MAKE NO ENTRY .
		b	For non-seed (corn) (sorghum) production:
		(1)	Sold or otherwise disposed of - Enter the actual dollar-and-cents value per bushel received or local market price per bushel 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 mycotoxin).
		(2)	For mycotoxin-infected production with no market value, see the LAM For guidelines. (See the LAM for complete Certification Form-use instructions).
R	Quality Factor		Enter "Q ₁ " or "Q ₂ " as applicable. Explain and enter equation in the narrative .
S	Production to Count		Enter result from multiplying Column "P" times Column "R".
22	Section II Total	F	Total of Column "S".
23	Section I Total	F	Enter figure from Section I Column "O" total.
24	Unit Total	F	Total of 22 and 23.

- | | | | |
|----|---|---|--|
| 25 | Adjuster's Code Number and Signature | P | Signature of adjuster, code and date signed. Sign and date the worksheet only after the insured (or other claimant) has signed. For an absentee insured, enter your code number only . The signature and date will be entered after the absentee has signed and returned the worksheet. |
| | | F | Final inspection should be signed on bottom line. |
| 26 | Insured's Signature | P | Insured's signature and date. Before obtaining insured's signature, review all entries on the claim form with the insured , particularly explaining codes, etc., which may not be readily understood. |
| | | F | Final inspection should be signed on bottom line. |
| 27 | Page Numbers | | Page numbers - (Example: Page 1 of 1, Page 1 of 2, Page 2 of 2, etc.). |

PRODUCTION WORKSHEET
(FOR ILLUSTRATION PURPOSES ONLY)

1 Crop/Code Hybrid corn seed 0062	2 Unit 00100	3 Legal Description sw9-4n-44w
4 Date of Damage JULY		
5 Cause of Damage DROUGHT		
6 Primary Cause % 100%		
12 Additional Units 00200		
13 Est. Prod Per Acre 40		

7 Company Agency
Any Company
Any Agency

8 Name of Insured I.M. Insured			
9 Claim Number XXXXXX		11 Crop Year 19YY	
10 Policy Number XX-XXX-XXXXX			
14 Date(s) Notice of Loss	1st 7-11-YY	2nd 9-1-YY	Final 10-11-YY
15 Companion Policy(s) NONE			

SECTION I - ACREAGE APPRAISED, PRODUCTION AND ADJUSTMENTS

ACTUARIAL									POTENTIAL YIELD							STAGE GUARANTEE	
A	B	C	D	E	F	G	H	I	J	K 1 K 2	L	M	N	O	P	Q	
Field ID	Prelim Acres	Final Acres	Interest or Share	Risk	Practice	Type Class	Stage	Intended or Final Use	Appraised Potential	Moisture % Factor	Shell and/or Quality Factor	Uninsured Cause	Adjusted Potential	Total To Count (C x N)	Per Acre	Total (C x P)	
A		5.0	1.000	R03	003	997	P	WOC					350	\$1,750	\$350	\$1,750	
B	20.0	20.0	1.000	R03	003	997	UH	silage	6.5	20.5	.80		5.2 13.33	\$1,386	\$350	\$7,000	
C		75.0	1.000	R03	003	997	H	H							\$350	\$26,250	
16 TOTAL		100.0											17 TOTALS	\$3,136		\$35,000	

NARRATIVE (If more space is needed, attach a Special Report)

Hybrid Seed Corn Company #209. See attached aerial photo for field ID's.

SECTION II - HARVESTED PRODUCTION

18 Date Harvest Completed 10-11-YY Yes No 19 Is damage similar to other farms in the area? Yes No 20 Assignment of Indemnity? Yes No 21 Transfer of Right To Indemnity? Yes No

MEASUREMENTS					GROSS PRODUCTION				ADJUSTMENTS TO HARVESTED PRODUCTION									
A 1 A 2	B	C	D	E	F	G	H	I	J	K 1 K 2	L 1 L 2	M 1 M 2	N	O	P	Q 1 Q 2	R	S
Share Field ID	Length of Diameter	Width	Depth	Deduction	Net Cubic Feet	Conversion Factor	Gross Prod. (F x G)	Bu. Ton Lbs. CWT	Shell/ Sugar Factor	FM % Factor	Moisture Factor	Test WT Factor	Adjusted Production (Hor) x J x K 2 x L 2 x M 2	Prod. Not to Count	Production (N - O)	Value Mkt. Price	Quality Factor (Q1 ÷ Q2)	Production to Count (P x R)
1.000	ABC Seed Company Anytown, Any State							2000.0					2000.0		2000.0	\$13.33	\$13.33	\$26,660
1.000	ABC Seed Company Anytown, Any State							340.0					340.0		340.0	\$2.65	\$2.65	\$901
1.000	16.0	8.0	8.0	9.0	101.5	.4	406.0		1.00		27.2 .8536	56 1.000	346.6		346.6	\$2.60	\$2.60	\$901

I certify the information provided above, to the best of my knowledge, to be true and complete and that it will be used to determine my loss, if any, for damage to my insured crops. I understand that this Production Worksheet and supporting papers are subject to audit and approval by the company. I understand that this crop insurance is subsidized and reinsured by the Federal Crop Insurance Corporation, an agency of the United States, and that I may be prosecuted under applicable provisions of the Criminal Code of the United States for knowingly or willfully making false statements or filing false reports, and if convicted may be fined up to \$5,000.00 or imprisoned up to two (2) years, or both, pursuant to 18 U.S.C. 1014, or other applicable provisions of the Criminal Code of the United States.

22 Section II Total \$28,462
23 Section I Total \$3,136
24 Unit Total \$31,598

25 Adjuster's Signature and Code Number	Date	26 Insured's Signature	Date
1st Inspection Mr. Adjuster 12345	7/15/YY	1st Inspection I.M. Insured	7/15/YY
2nd Inspection Mr. Adjuster 12345	9/5/YY	2nd Inspection I.M. Insured	9/5/YY
Final Inspection Mr. Adjuster 12345	10/15/YY	Final Inspection I.M. Insured	10/15/YY

27 Page 1 of 1

PRODUCTION WORKSHEET
(FOR ILLUSTRATION PURPOSES ONLY)

1 Crop/Code hybrid sorg. seed 0050	2 Unit 00100	3 Legal Description sw10 - 4n - 44w	7 Company Any Company		8 Name of Insured I.M. Insured
4 Date of Damage Aug. 11			Agency Any Agency		9 Claim Number XXXXXX
5 Cause of Damage HAIL				11 Crop Year 19YY	
6 Primary Cause % 100%				10 Policy Number XX-XXX-XXXXX	
12 Additional Units 00200				14 Date(s) Notice of Loss	1st 8-11-YY
13 Est. Prod Per Acre 100				2nd	
				Final	10-19-YY
				15 Companion Policy(s)	NONE

SECTION I - ACREAGE APPRAISED, PRODUCTION AND ADJUSTMENTS

ACTUARIAL									POTENTIAL YIELD							STAGE GUARANTEE	
A	B	C	D	E	F	G	H	I	J	K1 K2	L	M	N	O	P	Q	
Field ID	Prelim Acres	Final Acres	Interest or Share	Risk	Practice	Type Class	Stage	Intended or Final Use	Appraised Potential	Moisture % Factor	Shell and/or Quality Factor	Uninsured Cause	Adjusted Potential	Total To Count (C x N)	Per Acre	Total (C x P)	
A	19.6	19.6	1.000	R01	002	016	UH	To Pasture	6.6	15.1 .9748			6.4 \$6.22	\$780	\$275	\$5,390	
B		22.8	1.000	R01	002	016	H	H							\$275	\$6,270	
C		57.6	1.000	R01	002	016	H	H							\$275	\$15,840	
16 TOTAL		100.0											17 TOTALS	\$780		\$27,501	

NARRATIVE (If more space is needed, attach a Special Report)

Field B-Rejected by seed company due to inadequate isolation per contract; production included in line 1 Sec.II as seed production.

Sec. II, line 2 - non seed due to low germination test (78), not accepted by company.

SECTION II - HARVESTED PRODUCTION

18 Date Harvest Completed 10-19-YY _____ 19 Is damage similar to other farms in the Yes No 20 Assignment of Indemnity? Yes No 21 Transfer of Right To Indemnity? Yes No

MEASUREMENTS					GROSS PRODUCTION				ADJUSTMENTS TO HARVESTED PRODUCTION									
A1 A2	B	C	D	E	F	G	H	I	J	K1 K2	L1 L2	M1 M2	N	O	P	Q1 Q2	R	S
Share Field ID	Length of Diameter	Width	Depth	Deduction	Net Cubic Feet	Conversion Factor	Gross Prod. (F x G)	Bu. Ton Lbs. CWT	Shell/Sugar Factor	FM % Factor	Moisture % Factor	Test WT Factor	Adjusted Production (Horl)xJxK2xL2xM2	Prod. Not to Count	Production (N - O)	Value Mkt. Price	Quality Factor (Q1 ÷ Q2)	Production to Count (P x R)
1.000	ABC Feed Yard Anytown, Any State							1688.2			14.8 .9784		1651.7			\$6.22		\$10,274
1.000	ABC Feed Yard Anytown, Any State						622.4				14.6 .9808		610.4			\$1.85		\$1,129

I certify the information provided above, to the best of my knowledge, to be true and complete and that it will be used to determine my loss, if any, for damage to my insured crops/ understand that this Production Worksheet and supporting papers are subject to audit and approval by the company. I understand that this crop insurance is subsidized and reinsured by the Federal Crop Insurance Corporation, an agency of the United States, and that I may be prosecuted under applicable provisions of the Criminal Code of the United States for knowingly or willfully making false statements or filing false reports, and if convicted may be fined up to \$5,000.00 or imprisoned up to two (2) years, or both, pursuant to 18 U.S.C. 1014, or other applicable provisions of the Criminal Code of the United States.

25 Adjuster's Signature and Code Number	Date	26 Insured's Signature	Date	27 Page
Mr. Adjuster 12345	8/21/YY	1st Inspection	8/21/YY	1 of 1
		2nd Inspection		
Mr. Adjuster 12345	10/31/YY	Final Inspection	10/31/YY	

21 (RESERVED)

22 (RESERVED)

(RESERVED)

(RESERVED)

(RESERVED)

EXHIBIT 1

HYBRID CORN SEED MOISTURE ADJUSTMENT TABLE

Whole Percent & Moisture	<u>TENTHS OF PERCENT - MOISTURE</u>									
	<u>.0</u>	<u>.1</u>	<u>.2</u>	<u>.3</u>	<u>.4</u>	<u>.5</u>	<u>.6</u>	<u>.7</u>	<u>.8</u>	<u>.9</u>
10	1.0600	1.0588	1.0576	1.0564	1.0552	1.0540	1.0528	1.0516	1.0504	1.0492
11	1.0480	1.0468	1.0456	1.0444	1.0432	1.0420	1.0408	1.0396	1.0384	1.0372
12	1.0360	1.0348	1.0336	1.0324	1.0312	1.0300	1.0288	1.0276	1.0264	1.0252
13	1.0240	1.0228	1.0216	1.0204	1.0192	1.0180	1.0168	1.0156	1.0144	1.0132
14	1.0120	1.0108	1.0096	1.0084	1.0072	1.0060	1.0048	1.0036	1.0024	1.0012
15	1.0000	.9988	.9976	.9964	.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

EXHIBIT 2

HYBRID SORGHUM SEED MOISTURE ADJUSTMENT FACTOR TABLE

Whole Percent Moisture	<u>TENTHS OF PERCENT - MOISTURE</u>									
	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
10	1.0360	1.0348	1.0336	1.0324	1.0312	1.0300	1.0288	1.0276	1.0264	1.0252
11	1.0240	1.0228	1.0216	1.0204	1.0192	1.0180	1.0168	1.0156	1.0144	1.0132
12	1.0120	1.0108	1.0096	1.0084	1.0072	1.0060	1.0048	1.0036	1.0024	1.0012
13	1.0000	.9988	.9976	.9964	.9952	.9940	.9928	.9916	.9904	.9892
14	.9880	.9868	.9856	.9844	.9832	.9820	.9808	.9796	.9784	.9772
15	.9760	.9748	.9736	.9724	.9712	.9700	.9688	.9676	.9664	.9652
16	.9640	.9628	.9616	.9604	.9592	.9580	.9568	.9556	.9544	.9532
17	.9520	.9508	.9496	.9484	.9472	.9460	.9448	.9436	.9424	.9412
18	.9400	.9388	.9376	.9364	.9352	.9340	.9328	.9316	.9304	.9292
19	.9280	.9268	.9256	.9244	.9232	.9220	.9208	.9196	.9184	.9172
20	.9160	.9148	.9136	.9124	.9112	.9100	.9088	.9076	.9064	.9052
21	.9040	.9028	.9016	.9004	.8992	.8980	.8968	.8956	.8944	.8932
22	.8920	.8908	.8896	.8884	.8872	.8860	.8848	.8836	.8824	.8812
23	.8800	.8788	.8776	.8764	.8752	.8740	.8728	.8716	.8704	.8692
24	.8680	.8668	.8656	.8644	.8632	.8620	.8608	.8596	.8584	.8572
25	.8560	.8548	.8536	.8524	.8512	.8500	.8488	.8476	.8464	.8452
26	.8440	.8428	.8416	.8404	.8392	.8380	.8368	.8356	.8344	.8332
27	.8320	.8308	.8296	.8284	.8272	.8260	.8248	.8236	.8224	.8212
28	.8200	.8188	.8176	.8164	.8152	.8140	.8128	.8116	.8104	.8092
29	.8080	.8068	.8056	.8044	.8032	.8020	.8008	.7996	.7984	.7972
30	.7960	.7948	.7936	.7924	.7912	.7900	.7888	.7876	.7864	.7852
31	.7840	.7828	.7816	.7804	.7792	.7780	.7768	.7756	.7744	.7732
32	.7720	.7708	.7696	.7684	.7672	.7660	.7648	.7636	.7624	.7612
33	.7600	.7588	.7576	.7564	.7552	.7540	.7528	.7516	.7504	.7492
34	.7480	.7468	.7456	.7444	.7432	.7420	.7408	.7396	.7384	.7372
35	.7360	.7348	.7336	.7324	.7312	.7300	.7288	.7276	.7264	.7252
36	.7240	.7228	.7216	.7204	.7192	.7180	.7168	.7156	.7144	.7132
37	.7120	.7108	.7096	.7084	.7072	.7060	.7048	.7036	.7024	.7012
38	.7000	.6988	.6976	.6964	.6952	.6940	.6928	.6916	.6904	.6892
39	.6880	.6868	.6856	.6844	.6832	.6820	.6808	.6796	.6784	.6772
40	.6760	.6748	.6736	.6724	.6712	.6700	.6688	.6676	.6664	.6652

EXHIBIT 3

CONVERSION FACTOR TABLE FOR EAR CORN TO BUSHEL OF SHELLED HYBRID CORN SEED.

14 Percent Moisture and 70 Pounds per bushel.

14.0 - 1.0000	20.0 - .8861	26.0 - .7955	32.0 - .7216	38.0 - .6604
15.0 - .9790	21.0 - .8696	27.0 - .7821	33.0 - .7107	39.0 - .6512
16.0 - .9589	22.0 - .8537	28.0 - .7692	34.0 - .7000	40.0 - .6422
17.0 - .9396	23.0 - .8383	29.0 - .7568	35.0 - .6897	
18.0 - .9211	24.0 - .8235	30.0 - .7447	36.0 - .6796	
19.0 - .9032	25.0 - .8092	31.0 - .7330	37.0 - .6699	

Enter the four-place factor for ear corn in excess of 14.0 percent moisture, (any portion of a percentage point will be disregarded 14.7 = 1.000). [15 percent moisture ear corn = (70+1.5=71.5) 71.5 pounds per bushel (71.5 X .9790=70)].

EXHIBIT 4

TEST WEIGHT FACTOR TABLE FOR COMPUTING NET BUSHEL OF FARM STORED PRODUCTION

$$\text{Test Weight Factor} = \frac{\text{Actual Test Weight}}{\text{"Corn" or "Sorghum" 56 lbs}}$$

Actual Test Weight	Actual Factor	Actual Test Weight	Actual Factor	Actual Test Weight	Actual Factor	Actual Test Weight	Actual Factor
30	0.536	39	0.696	48	0.857	57	1.018
31	0.554	40	0.714	49	0.875	58	1.036
32	0.571	41	0.732	50	0.893	59	1.054
33	0.589	42	0.750	51	0.911	60	1.071
34	0.607	43	0.768	52	0.929	61	1.089
35	0.625	44	0.786	53	0.946	62	1.107
36	0.643	45	0.804	54	0.964		
37	0.661	46	0.821	55	0.982		
38	0.679	47	0.839	56	0.1.000		

EXHIBIT 5

HYBRID CORN SEED TERMINOLOGY

ASPIRATORS/GRAVITY TABLE - Air operated process which removes undesirable kernels. Method by which low germinating seed can be separated from high germinating seed.

BLENDING - (a) The mixing of at least 20 percent fertile with male sterile seed in order to insure pollination; (b) The mixing of not more than 25 percent reserve seed with new crop seed.

CLEANING - Process used to remove most cracked kernels and other foreign matter using round and slotted hole screens (25/64 round hole to 12/64 slotted).

CONDEMNED - Rejection of areas found unsuitable for harvest as seed line.

CONTAMINATION - Pollination of the seed line by other than the donor male line (self or outside source pollination).

CROSS, DOUBLE - Plants resulting from the crossing of 2 single crosses.

CROSS, SINGLE - Plants resulting from the crossing of 2 inbred lines.

CROSS, THREE WAY - Plants resulting from the crossing of a single cross and an inbred line.

DETASSELLING - Removal of the tassel from the female (seed line) plants before pollination occurs so as to prevent self pollination.

DRYING - Process of removing moisture from the ear corn (30-40% down to 10-12%) using low heat (100-110 degrees) and forced air in a 4-5 day process.

FAST GREEN TEST - A staining process which tests for mechanical damage done by insects or rough handling during harvest or conditioning.

GERMINATION COLD TEST - A seed evaluation process for determining potential field emergence under unfavorable conditions (7 days @ 50 then 7 days @ 77 degrees with light).

GERMINATION WARM TEST - A germination test for determining the percent germination producing normal seedlings under favorable conditions (warm, wet environment - 7 days @ 77 degrees).

HEAT UNITS - A measurement using degree days to determine approximate dates for tasseling and maturity (100 heat units to germinate: 600 to 800 heat units to pollination).

HUSKING BED - Machinery which removes husks from the ear before the corn is sorted.

HYBRID CORN SEED - Product of crosses between two unrelated genetic lines (strains) of corn.

INBRED - self-pollinated pure genetic line.

ISOLATION - Area required to be planted to either the donor male line or some crop other than corn in order to prevent genetic contamination of the seed line from wind-born pollen from neighboring fields. (The smaller the field the larger the percent of isolation; prevailing winds require more isolation on the South and West sides.)

EXHIBIT 5

HYBRID CORN SEED TERMINOLOGY (Continued)

MALE LINE - The male parent, pollen donor, or pollinator (which is not insurable).

MALE-STERILE CYTOPLASM - Plants which have a sterile gene that prevents the production of viable pollen.

NICK - The matching of the stages of development between the male lines (pollination) and the seed line (silking) to insure proper pollination.

NON-SEED PRODUCTION TO COUNT - All corn not qualifying as seed due to insurable causes for which there is a market value (see Exhibit 5, item 13 and the Policy for details).

OPEN POLLINATED CORN - Forerunner to hybrid seed corn which lacked vigor, and disease resistance, etc.

RESTORER POLLINATORS - Plants which have a gene that will restore a male sterile seed line to fertile in the next generation.

ROGUE - Off-type plant or impurity.

SCALPING - A screening process used to remove cobs and dirt (normally prior to storage).

SEED LINE - Female parent plants (only insurable plants).

SEED PRODUCTION TO COUNT - All corn accepted by the seed company, or if rejected, has 80 percent or more germination (warm test) on a cleaned sample and will pass over a prescribed screen, or that corn damaged or rejected due to uninsured causes. (See the Policy for details.)

SHELLING - The removal of the grain from the cob. Hybrid seed requires the use of a reduced cylinder speed to minimize kernel damage.

SISTER LINE - Two inbred lines of similar type (family or strain).

SIZING - Separation of seed corn by kernel sized in 2-3/64 increments and by "rounds" and flats."

SORTING - Removal by hand of all off-type ears (rogues) before drying.

TETRAZOLIUM TEST - A staining process that allows for a quick estimate of seed viability by identifying cell damage.

TREATING - Application of a fungicide to protect seedlings during germination and emergence.

HYBRID "CORN" SEED APPROVED YIELD FORM SAMPLE

HYBRID CORN SEED APPROVED YIELDS

FOR CROP YEAR:	19YY	TYPE: 041	PRACTICE: 003
BY SEED COMPANY'S INDIVIDUAL PLANT/FACILITY LOCATION			
SEED COMPANY'S NAME AND IDENTIFICATION CODE NUMBER: National Seed (999)		AGENCY OFFICE/INSURANCE COMPANY NAME: Your Agency, ABC Company	
INDIVIDUAL PLANT/FACILITY COMPLETE ADDRESS: Any Town Any State, xxxxx		ADDRESS: Any Town Any State, xxxxx	
		AGENCY PHONE NUMBER: XXX-XXX-XXXX	
APPROVED HYBRID CORN SEED YIELD IS APPLICABLE	HYBRID	APPROVED	
Any county	AX2YY	30	

The field production data was based on determinations obtained and calculated on harvested production delivered to the plant prior to any production entering the seed conditioning process. Hence, the field production data supplied and the FCIC approved yield for the hybrid are determined from harvested production leaving the field and delivered to the seed company's plant prior to entering any of the seed conditioning process (i.e., drying, shelling, screening, etc.). The reported amount must be adjusted according to policy and/or procedural provisions for moisture and foreign material (i.e., husks, stalks, etc.).

For the purpose of determining the quantity of mature field production, the following method - as checked - was indicated and utilized by the seed company and is the basis used to compute the approved yield.

- (A) Shelled corn was adjusted .12 percent for each .1 percentage point of moisture to 15.0.
- (B) Ear corn was measured at 70 pounds of ear corn equaling 56 pounds (one bushel) of shelled corn. The weight of to equal one bushel of shelled corn was increased 1.5 pounds for each percentage point of moisture in excess of
- (C) The seed company provided all records of harvested field seed production adjusted to a shelled corn basis of 15.0 56 pound test weight. The harvested field production records of the seed company will be used to determine the amount of indemnity; provided, that such harvested field production records are based on the same harvested field production criteria stated and described in the opening first paragraph and located immediately below the county name(s) and hybrid identification(s) as the criteria used to determine the approved yield.

In the event of a loss, notwithstanding the terms and conditions of the insurance policy, the insured's possible claim for indemnity will be determined/calculated according to the insurance contract and the loss adjustment procedures using the same basis for determining production as indicated by the above checked box.

As stated in the policy's provisions, the insured must establish the total production for the type and variety of the crop on the unit at the time of harvest.

Claim for indemnity and loss adjustment procedures are established by the insurance policy and related documents.

Prior to the final settlement of a claim, the final disposition of all production, appraised and harvested, must be verified and documented.

The value per bushel is determined by multiplying the approved yield by the insured's coverage level to establish the guarantee per acre and dividing the insured's amount of insurance by the guarantee/acre.

APPROVED:	DATE:
I.M. UNDERWRITER	MM/DD/YY

HYBRID "SORGHUM" SEED APPROVED YIELD FORM SAMPLE

HYBRID SORGHUM SEED APPROVED YIELDS

FOR CROP YEAR: 19YY		TYPE: 016	PRACTICE: 002
BY SEED COMPANY'S INDIVIDUAL PLANT/FACILITY LOCATION			
SEED COMPANY'S NAME AND IDENTIFICATION CODE National Seed (999)		AGENCY OFFICE/INSURANCE COMPANY NAME: Your Agency, ABC Company	
INDIVIDUAL PLANT/FACILITY COMPLETE ADDRESS: Any Town Any State, xxxxx		ADDRESS: Any Town Any State, xxxxx	
		AGENCY PHONE NUMBER: XXX-XXX-XXXX	
APPROVED HYBRID SORGHUM SEED YIELD IS	HYBRID	APPROVED	
Big	88g	44	
Red			

The field production data was based on determinations obtained and calculated on harvested production delivered to the plant prior to any production entering the seed conditioning process. Hence, the field production data supplied and the FCIC approved yield for the hybrid are determined from harvested production leaving the field and delivered to the seed company's plant prior to entering any of the seed conditioning process (i.e., drying, shelling, screening, etc.). The reported amount must be adjusted according to policy and/or procedural provisions for moisture and foreign material (i.e., weeds, stalks, etc.).

For the purpose of determining the quantity of mature field production, the following method - as checked - was indicated and utilized by the seed company and is the basis used to compute the approved yield.

- (A) Shelled corn was adjusted .12 percent for each .1 percentage point of moisture to 13.0.
- (B) Hybrid seed production was measured at 56 pounds of production equaling one bushel.
- (C) The seed company provided all records of harvested field seed production adjusted to a shelled corn percent moisture and 56 pound test weight. The harvested field production records of the seed company will be used to determine the amount of indemnity; provided, that such harvested field production records are based on the same harvested field production criteria stated and described in the opening first paragraph and located immediately below the county name(s) and hybrid identification(s) as the criteria used to determine the approved yield.

In the event of a loss, notwithstanding the terms and conditions of the insurance policy, the insured's possible claim for indemnity will be determined/calculated according to the insurance contract and the loss adjustment procedures using the same basis for determining production as indicated by the above checked box.

As stated in the policy's provisions, the insured must establish the total production for the type and variety of the crop on the unit at the time of harvest.

Claim for indemnity and loss adjustment procedures are established by the insurance policy and related documents.

Prior to the final settlement of a claim, the final disposition of all production, appraised and harvested, must be verified and documented.

APPROVED:	DATE:
I.M. UNDERWRITER	MM/DD/YY

(RESERVED)