United States
Department of
Agriculture

Federal Crop
Insurance
Corporation

Product
Development
Division

SOYBEAN LOSS ADJUSTMENT STANDARDS HANDBOOK

FCIC-25440 (06-1999)
FCIC-25440-1 (05-2000)
FCIC-25440-2 (02-2002)

2002 and Succeeding Crop Years

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

FEDERAL CROP INSURANCE HANDBOOK	**NUMBER:** **25440 (06-1999)** **25440-1 (05-2000)** **25440-2 (02-2002)**
SUBJECT: **SOYBEAN LOSS ADJUSTMENT STANDARDS HANDBOOK 2002 AND SUCCEEDING CROP YEARS**	**DATE: February 8, 2002** **OPI: Product Development Division** **APPROVED: /S:/ Tim B. Witt** **Deputy Administrator, Research and Development**

THIS HANDBOOK CONTAINS THE OFFICIAL FCIC-APPROVED LOSS ADJUSTMENT STANDARDS FOR THIS CROP FOR THE 2002 AND SUCCEEDING CROP YEARS. IN THE ABSENCE OF INDUSTRY-DEVELOPED, FCIC-APPROVED PROCEDURE FOR THIS CROP FOR 2002 AND SUCCEEDING CROP YEARS, ALL REINSURED COMPANIES WILL UTILIZE THESE STANDARDS FOR BOTH LOSS ADJUSTMENT AND LOSS TRAINING.

SUMMARY OF CHANGES/CONTROL CHART

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

Changes for Crop Year 2002 (FCIC-25440-2) issued **FEBRUARY 2002:**

A. Page 1, Paragraph 2 B (3): Added abbreviations for Crop Insurance Handbook (CIH), Federal Grain Inspection Service (FGIS), and Loss Adjustment Manual (LAM).

B. Page 2, Paragraph 3 A (1): Clarified policy requirements for insurability to more closely follow policy language.

C. Page 2, Paragraph 3 B (3): Clarified that Hail and Fire Exclusion provisions are not applicable to CAT coverage, and also not applicable if additional coverage is less than 65/100 or comparable coverage. Added a note referring adjuster to the CIH or LAM for other provisions not applicable to CAT coverage.

D. Page 3, Paragraph 3 D (2): Added a statement to clarify that "green damage" as described by FGIS is kernel damage, and to refer to the LAM for information on who may obtain samples for testing, and who may determine deficiencies.

E. Page 6, Paragraph 5 B (4): Changed to clarify that the adjuster must take not less than the minimum number of representative samples required in **TABLE A.**

SUMMARY OF CHANGES/CONTROL CHART (Continued)

F. Page 6-7, Paragraph 5 C (2): Revised procedures for determining the row width to coincide with procedure in the LAM for measuring row width skipped row pattern.

G. Page 11, Paragraph 5 D (6) (d); Changed the stage column to show a range. Expanded the description of Stage 6.5. Clarified the time interval column to reflect the number of days in the range.

H. Page 13, Paragraph 6 A and B (1): Added instructions for non-emerged seed to stand reduction method, and added a note to instruct adjusters to refer to the LAM if the stand reduction is solely due to non-emerged seed.

I. Page 28, Paragraph 9 A (3)(f): Removed the reference to "Prevented Planting."

J. Page 28, Paragraph 9 A (4): Added paragraph to instruct user to refer to the Prevented Planting Handbook for information on prevented planting.

K. Pages 33 and 34, Items "H" and "I": Changed reference from LAM to "Prevented Planting Handbook." Added statement to the refer to the LAM if any acreage is gleaned.

L. Page 41, Paragraph 9 B (Item L_2): Added the word "table" at the end of the sentence.

M. Page 41, Paragraph 9 B (Item M_1): Revised wording to refer to the LAM for instructions on determining test weight.

N. Pages 49-51, **TABLE E:** Corrected factors for broadcast acreage for plant populations of 40,000 to 105,000.

O. Page 53, **TABLE F**: Added factors for stand of 87,500 to 80,000 plants/acre.

P. Made various editorial changes throughout the handbook to comply with current approved format.

SUMMARY OF CHANGES/CONTROL CHART (Continued)

Control Chart For: Soybean Loss Adjustment Standards Handbook						
	SC Page(s)	TC Page(s)	Text Page(s)	Reference Material	Date	Directive Number
Remove	1-2				05-2000	FCIC-25440-1
		1-2			06-1999	FCIC-25440
			1-2		06-1999	FCIC-25440
			3-4		05-2000	FCIC-25440-1
			5-16		06-1999	FCIC-25440
			27-28		06-1999	FCIC-25440
			33-34		06-1999	FCIC-25440
			41-42		05-2000	FCIC-25440-1
				49-54	06-1999	FCIC-25440
Insert	1-4				02-2002	FCIC-25440-2
		1-2			02-2002	FCIC-25440-2
			1-2		02-2002	FCIC-25440-2
			3-4		02-2002	FCIC-25440-2
			5-16		02-2002	FCIC-25440-2
			27-28		02-2002	FCIC-25440-2
			33-34		02-2002	FCIC-25440-2
			41-42		02-2002	FCIC-25440-2
				49-54	02-2002	FCIC-25440-2
Current Index	1-4				02-2002	FCIC-25440-2
		1-2			02-2002	FCIC-25440-2
			1-16		02-2002	FCIC-25440-2
			17-26		06-1999	FCIC-25440
			27-28		02-2002	FCIC-25440-2
			29-32		06-1999	FCIC-25440
			33-34		02-2002	FCIC-25440-2
			35-36		06-1999	FCIC-25440
			37-38		05-2000	FCIC-25440-1
			39-40		06-1999	FCIC-25440
			41-42		02-2002	FCIC-25440-2
			43-46		06-1999	FCIC-25440
				47-48	06-1999	FCIC-25440
				49-54	02-2002	FCIC-25440-2
				55-60	06-1999	FCIC-25440

(RESERVED)

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1. INTRODUCTION

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

2. SPECIAL INSTRUCTIONS

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

A. DISTRIBUTION

The following is the minimum distribution of forms completed by the adjuster for the loss adjustment inspection:

One legible copy to the insured. The original and all remaining copies as instructed by the insurance provider.

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

B. TERMS, ABBREVIATIONS, AND DEFINITIONS

(1) Terms, abbreviations, and definitions **general** (not crop specific) to loss adjustment are identified in the LAM.

(2) Terms, abbreviations, and definitions **specific** to soybean loss adjustment and this handbook, which are not defined in this section, are defined as they appear in the text.

(3) Abbreviations:

CIH	Crop Insurance Handbook
FGIS	Federal Grain Inspection Service
LAM	Loss Adjustment Manual

3. INSURANCE CONTRACT INFORMATION

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

A. INSURABILITY

(1) The crop insured will be all soybeans in the county in which the insured has a share, for which premium rates are provided by the actuarial documents; and

(a) That are planted for harvest as beans;

(b) That are adapted to the area based on days to maturity and is compatible with agronomic and weather conditions in the area;

(c) Unless allowed in the Special Provisions or a written agreement, soybeans are not insurable if they are:

1 interplanted with another crop; or

2 planted into an established grass or legume.

(2) Unless otherwise allowed by the Special Provisions, soybeans must be mechanically incorporated in the planting process to be considered insurable. Refer to the Special Provisions for any applicable allowed practices such as ANIBR,@ or ANon-Conventional (NC).@ The ANon-Conventional@ practice deals with soybeans planted in a two-step operation in which the seed is first broadcast onto the surface of the soil using a boom type spreader and is subsequently incorporated into the soil at the proper depth in a timely manner. Written agreements may be issued to insure soybean acreage seeded by methods NOT RATED on the actuarial documents if specified standards provided for in the written agreement are met.

(3) Any acreage of the insured crop damaged before the final planting date, to the extent that the majority of producers in the area would normally not further care for the crop, must be replanted unless the insurance provider agrees that it is not practical. Refer to the LAM for replanting provision issues. Refer to section 4 of this handbook for replanting payment procedures.

B. PROVISIONS NOT APPLICABLE TO CAT COVERAGE

(1) Optional units.
(2) Written Agreements.
(3) Hail and Fire Exclusion provisions (also not applicable if additional coverage is less than 65/100 or comparable coverage).
(4) High Risk Land Exclusion.
(5) Replanting Payments.

NOTE: Refer to the CIH and LAM for other provisions not applicable to CAT.

C. UNIT DIVISION

Refer to the insurance contract for unit provisions. **NOTE:** Unless limited by the Crop or Special Provisions, a basic unit, as defined in the Basic Provisions, may be divided into optional units if, for each optional unit, all the conditions stated in the applicable provisions are met.

D. QUALITY ADJUSTMENT

(1) Refer to the LAM for information on contract prices in quality adjustment. THE QUALITY ADJUSTMENT FACTOR CANNOT BE GREATER THAN 1.000 or less than zero (.000).

(2) Soybean production will be eligible for quality adjustment if, due to insurable causes, deficiencies in quality, in accordance with the Official United States Standards for Grain, result in soybeans not meeting the grade requirements for **U.S. No. 4** (grades U.S. Sample Grade) because of test weight or kernel damage (excluding heat damage) or having a musty, sour, or commercially objectionable foreign odor (except garlic odor), or which meet the special grade for garlicky soybeans. "Green Damage" (soybeans which are discolored green in cross section), as described by FGIS, will be considered as a type of kernel damage. Refer to the LAM for instructions on who can obtain samples for grading, and who can make determinations of deficiencies, conditions and substances that would cause the crop to qualify for quality adjustment.

(3) The adjuster must refer to the Special Provisions if production is eligible for quality adjustment as identified in the Coarse Grains Crop Provisions.

(4) When due to insurable cause(s), use of quality adjustment for soybeans is handled by determining the appropriate discount factors from the Special Provisions, summing them together, if applicable, and subtracting from 1.000 to obtain the applicable Quality Adjustment Factor (percent of production to count). Refer to the Special Provisions for chart discount factors, instructions for calculating non-chart discount factors, and other discounts allowed. Also, refer to the LAM for examples and guidance in determining reduction in values (RIV=s) to determine non-chart discount factors.

(5) Moisture adjustment is applied prior to any qualifying quality adjustment factors such as test weight, kernel damage, etc. A soybean moisture adjustment chart is in **TABLE J**. Moisture adjustment results in a reduction in production to count of 0.12 percent for each 0.1 percent moisture in excess of 13%.

(6) For soybeans for which RIV's apply, and which can be conditioned/reconditioned, refer to the Special Provisions for instructions.

(7) If a local market cannot be found for the soybeans, refer to the LAM.

(8) Refer to the LAM for special instructions regarding mycotoxin infected grain.

(9) Document quality adjustment information as described in the instructions for the ANarrative@ section of the claim form (subsection 9 B), or on a Special Report.

(10) For additional quality adjustment definitions, instructions, qualifications, and testing requirements; refer to the LAM and the Official United States Standards for Grain.

4. REPLANTING PAYMENT PROCEDURES

A. GENERAL INFORMATION

(1) Replanting payments made on acreage replanted by a practice that was uninsurable as an original planting will require the deduction of the replanting payment for such acreage from the original unit liability. If the unit dollar loss (final claim) is less than the original unit liability minus such replanting payment, the actual indemnity dollar amount will not be affected by the replanting payment. The premium will not be reduced.

(2) No replanting payment will be made on acreage on which one replanting payment has already been allowed for the crop year.

B. QUALIFICATIONS FOR REPLANTING PAYMENT

To qualify for replanting payment, the:

(1) insured crop must be damaged by an insurable cause;

(2) insurance provider determines that it is practical to replant;

(3) acres must have been planted on or after the AInitial Planting@ date established by the Special Provisions;

(4) appraisal (or appraisal plus any appraisals for uninsured causes of loss) must be less than 90 percent of the production guarantee for the acreage;

(5) acreage replanted must be AT LEAST the lesser of 20 acres or 20 percent of the insured **planted** acreage for the unit (as determined on the final planting date or within the late planting period if a late planting period is applicable); and

NOTE: Any acreage planted after the end of the late planting period will not be included when determining if the 20 acres or 20 percent qualification is met. Refer to the LAM.

(6) insurance provider has given consent to replant.

NOTE: In the narrative of the claim form or on an attachment, show the appraisal and calculations to document that qualifications for a replanting payment have been met.

C. MAXIMUM REPLANTING PAYMENT

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

(1) the insured's actual replanting cost;

(2) the product of multiplying the maximum bushels allowed in the policy **(3 bushels)** by the insured=s price election, times the insured's share in the crop; or

(3) 20 percent of the production guarantee times applicable price election times the insured=s share.

NOTE: Compute the number of bushels per acre allowed for a replanting payment by dividing the insured=s cost to replant by the price election, and multiplying this result by the share (if individual company guidelines require application of insured share prior to entry on the claim form). This number must reflect the insured=s cost to replant, but cannot exceed the maximum amount allowed. Show all calculations in the narrative of the claim form or on a Special Report.

EXAMPLE 1

Owner/operator (100 percent share)
30 acres replanted
Insured=s actual cost to replant = $18.00
Price election = $5.50
20% of prod. guar. (28.0 bu.) = 5.6 x $5.50 (price election) = $30.80
3.0 bu. (maximum bu. allowed in policy) x $5.50 (price election) = $16.50
The lesser of $30.80, $16.50 and $18.00 is $16.50
Actual bushels per acre allowed = 3.0 bu. ($16.50) $5.50)
Enter 3.0 bu. in Section I AAdjusted Potential@ column of the claim form.

EXAMPLE 2

Landlord/tenant on 50/50 share
No agreement exists that allows the tenant to have the landlord=s share of the replanting payment.
30 acres replanted
Insured=s actual cost to replant = $9.00
Price election = $5.50 bu.
20% of prod. guar. (28.0 bu.) = 5.6 x $5.50 (price election) = $30.80 x .500 (share) = $15.40
3.0 bu. (maximum bu. allowed in policy) x $5.50 (price election) = $16.50 x .500 (share) = $8.25
The lesser of $9.00, $15.40, and $8.25 is $8.25
Actual bushels per acre allowed = 1.5 bu. ($8.25) $5.50)

NOTE: Enter 1.5 bu. In Section I, AAdjusted Potential@ column of the claim form if share has been applied or 3.0 bu. if share has yet to be applied. (Follow individual insurance provider guidelines). Indicate in the narrative if adjusted potential has/has not been reduced for share on claim form according to individual insurance provider guidelines.

D. REPLANTING PAYMENT INSPECTIONS

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

5. SOYBEAN APPRAISALS

A. GENERAL INFORMATION

Potential production will be appraised in accordance with procedures specified in this handbook and the LAM.

B. SELECTING REPRESENTATIVE SAMPLES FOR APPRAISALS

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

(2) Split the field into subfields when:

(a) variable damage causes the crop potential to appear to be significantly different within the same field; or

(b) the insured wishes to destroy a portion of a field.

(3) Each subfield must be appraised separately.

(4) Take not less than the minimum number (count) of representative samples required in **TABLE A**.

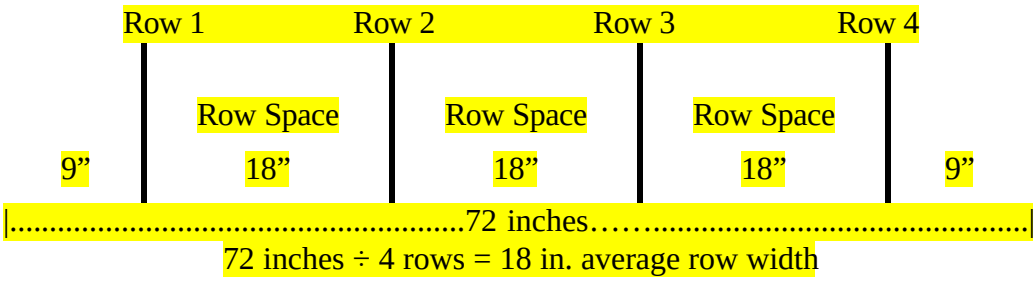
C. MEASURING ROW WIDTH FOR SAMPLE SELECTION

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

(1) Use a measuring tape marked in inches or convert a tape marked in tenths, to inches, to measure row width (refer to the LAM for conversion table).

(2) Measure across FOUR OR MORE rows, from the center of the first row space to the center of the fifth row space (or as many rows as needed), and divide the result by the number of rows measured across, to determine an average row width.

EXAMPLE:



72 inches ÷ 4 rows = 18 in. average row width

(3) Where rows are skipped for tractor and planter tires, refer to the LAM.

(4) For broadcast acreage, use a 3-foot square grid (9 square feet).

(5) Apply average row width in **TABLE B** to determine the factor required for the sample row. (The row-width factor is applied only to the Seed Count appraisal method).

D. PLANT TYPES AND STAGES OF GROWTH

(1) These instructions provide plant-type and growth-stage information for use when appraising potential production during various stages of growth.

(2) Soybean Types and Regions of Production. Soybeans fall into two general types, determinate and indeterminate, with several varieties in each type. Determinate varieties usually are planted in the southern region and indeterminate varieties are planted in the northern region.

(3) Plant Characteristics:

(a) Indeterminate type

1 Pods are generally formed on the main stem of the plant.

2 The plant is generally less bushy than the determinate varieties.

3 The blooming period begins earlier and extends over a longer period of time than the determinate type. Flowering begins at the 4th or 5th node and progresses upward.

(b) Determinate type

1 Pods are formed on branches as well as on the main stem of the plant.

2 Plants branch out considerably more than the indeterminate type and reach almost full height before blooming.

3 The blooming period is shorter than the indeterminate type. Regardless of planting dates, the same (determinate type) variety will generally bloom at the same time and with the same duration. Flowering begins at the 8th or 10th node and progresses both up and down.

(4) Growth Stage Determination and Designation:

(a) The growth stage determination is based on at least 50 percent of plants having reached the stage described. The main stem is used for stage determination and branches are ignored. Stage of growth is determined by the examination of 10 consecutive plants with a complete main stem. Fields should be split into sub-fields to reflect distinctly different stages from different parts of the field.

(b) Designation

1 Vegetative (V) Stages - From emergence of the plant until first bloom.

2 Reproductive (R) Stages - After bloom through plant maturity.

(c) For hail damage the stage of growth at the time of damage can be determined by inspecting the plant to determine the portions (leaves, pods, etc.) exposed at the time of the storm. In the absence of hail, and as verification, the stage can be determined by counting back from the date of adjustment by the time-intervals between stages.

NOTE: Do not attempt to go from reproductive to vegetative stages using time intervals.

(5) Vegetative Stage Identification:

(a) Determination of all vegetative stages requires node identification. Vegetative stages are determined by counting the nodes above the cotyledonary node.

(b) A node is the part of the stem from which leaves develop. When the leaf drops from the plant, the node is marked by a small knob that remains on the stem. Nodes, not leaves, are counted for stage determination.

(c) The cotyledonary node has 2 cotyledons (seed leaves) located directly opposite each other at the bottom of the main stem. The cotyledons are pulled above the soil surface as the seedling develops.

(d) The unifoliate node has 2 unifoliate (single leaflet) leaves located directly opposite each other, immediately above the cotyledonary node. This node is the first node counted in staging the growth of a soybean plant.

(e) All nodes above the unifoliate node have trifoliate (three leaflet) leaves. The trifoliate nodes alternate up the main stem with a node on one side of the stem, then above it another node on the opposite side of the stem.

(f) To stage the plant, count the unifoliate node and all nodes above it that have a fully developed trifoliate leaf present (or missing). A trifoliate leaf is considered fully developed when it has unrolled to the extent that the leaflet edges are no longer touching other portions of the leaflet.

(g) Shown below are leaves, nodes, and plants in various V stages. The V6 stage in Figure 3 indicates the fully develop stage of the plant, and the V5 stage not fully developed in Figure 4 indicates the stage of the plant.

Fig. 1

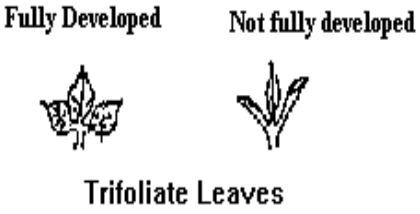
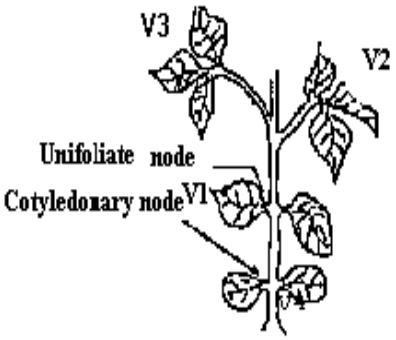


Fig. 2



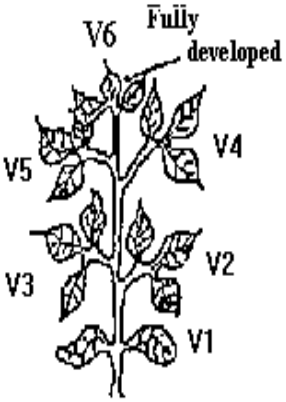


Fig. 3

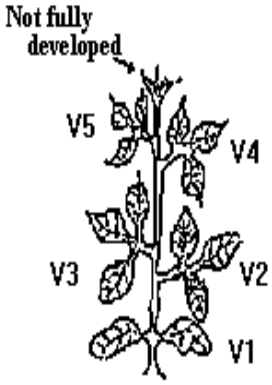


Fig. 4

(h) V-Stage descriptions are given below.

STAGE	DESCRIPTION	TIME INTERVAL IN DAYS FROM LAST STAGE
EMERGENCE (VE and VC) - V1	FROM EMERGENCE TO STAGE V1	
V1	Fully developed leaves at unifoliate node.	10
V2	Fully developed trifoliate leaf at second node above cotyledonary node.	5
V3	Fully developed trifoliate leaf at third node above cotyledonary node.	5
V4	Fully developed trifoliate leaf at fourth node above cotyledonary node.	5
V5	Fully developed trifoliate leaf at fifth node above cotyledonary node.	5
V6	Fully developed trifoliate leaf at sixth node above cotyledonary node.	3
V7	Fully developed trifoliate leaf at seventh node above cotyledonary node.	3
V8	Fully developed trifoliate leaf at eighth node above cotyledonary node.	3
V9	Fully developed trifoliate leaf at ninth node above cotyledonary node.	3
V10	Fully developed trifoliate leaf at tenth node above cotyledonary node.	3
VN	Node greater than tenth node above the cotyledon node that has a fully developed trifoliate leaf (e.g., V11, V12, etc.).	3
NOTE: Adjust all losses at the stage of growth on the date of damage.		

(6) Reproductive Stage Identification:

(a) Reproductive stages are based on flowering, pod development, and plant maturation.

(b) Reproductive stages are subdivided into half stages for adjusting losses. Development for a half stage is midway between that of stages with a whole number. All stages are based on 50% of the plants in the sample at or beyond a given phase of development. References to four uppermost nodes includes the top node with a fully developed trifoliate leaf.

(c) The vegetative stage that occurs prior to the R1 (indeterminate) or R1-R2 (determinate) Stage may vary depending on the season, variety, time of planting, etc. Time intervals cannot be used to determine the vegetative stage that occurred immediately prior to R1 (indeterminate) or R1-R2 (determinate). Time intervals for half-stages are one-half the number of days between whole stages.

(d) R-Stage descriptions

STAGE	DESCRIPTION	TIME INTERVAL IN DAYS FROM LAST STAGE
Indeterminate		
R1	One open flower at any node on the main stem.	
R1 - R2	Open flower at one of the two uppermost nodes on the main stem with a fully developed leaf.	3
Determinate		
R1 - R2	Flower at one of the four uppermost nodes.	3
Both Determinate and Indeterminate		
R2 - R3	Pod just visible at one of the four uppermost nodes.	7
R3 - R4	Pod 3/4" long at one of the four uppermost nodes.	9
R4 - R5	Seeds beginning to develop at one of the four uppermost nodes. A seed is considered "beginning to develop" when it is 1/8 inch in length.	9
R5 - R6	Pod containing green seeds that fill the pod cavity at one of the four uppermost nodes.	15
R6 - R6.5	Beginning of Seed Count Method. When all the normal pods on the four uppermost nodes of the main stem have their pod cavities completely filled, suture to suture, with seed.	9
R6.5 - R7	One normal pod on the main stem that has reached its mature pod color. 50 percent or more of the leaves are yellow at this stage. Physiological maturity.	9
R7 - R8	95 percent of pods are brown.	9
NOTE: Adjust all losses at the stage of growth on the date of damage, except that the Seed Count Method is used if in R6.5 or beyond at Date of Adjustment.		

(e) Shown below are pods and plants in various R stages.

R1 (Indeterminate)
R1-R2 (Determinate)

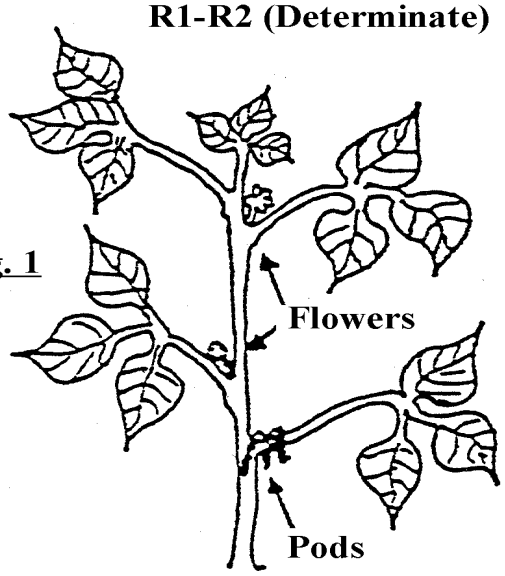


Fig. 1

R3

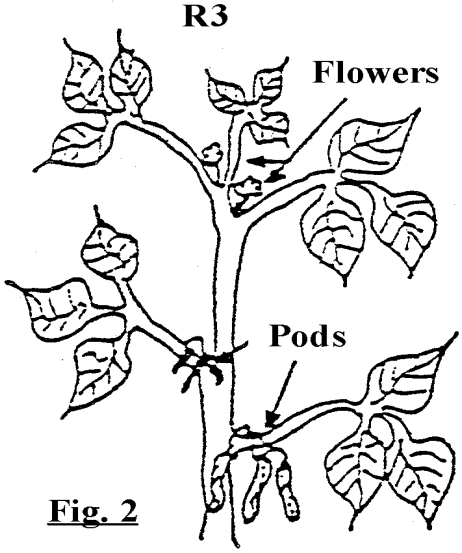


Fig. 2

Fig. 3

R4 Pod

3/4”

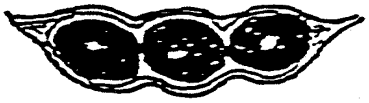
Fig. 4

R5 Pod

(1/8” seeds)

Fig. 5

R6 Pod



(Seeds fill cavity)

6. APPRAISAL METHODS

A. GENERAL INFORMATION

These instructions provide information on appraisal methods for:

Appraisal Method…	**Use…**
Stand Reduction Method	for planted acreage with no emerged seed, or on plants through the R6 Stage.
Plant Damage Method	when there is defoliation (leaf loss) AND plants that are cutoff or broken over. Plant damage calculations apply to the percent of the crop remaining (after stand reduction).
Seed Count Method	from the R6.5 stage through full maturity to determine the appraisal after any insured cause of damage.

B. STAND REDUCTION METHOD

(1) V-stage stand reduction. DETERMINE THE AMOUNT OF DIRECT DAMAGE. DEAD, MISSING, OR NON-EMERGED PLANTS are included as direct damage in the vegetative stages. When damage from an insurable cause results in missing plants or non-emergence, determine original plants per acre from an undamaged area of the unit if possible.

NOTE: If the reduction in stand is solely due to non-emerged seed, do not complete appraisals prior to the time specified in the LAM. Refer to the paragraph in the LAM regarding deferred appraisals and non-emerged seed.

(a) Determine the ORIGINAL number of plants, and the REMAINING number of live plants per acre. Use these steps:

1 Determine row width in inches, unless broadcast.

2 Measure a 10 ft. row length for the sample of row soybeans, or use 3-foot by 3-foot square grid for broadcast soybeans.

3 Count the original number of plants in the sample (living and dead, missing, or non-emerged).

4 Count the remaining number of live plants in the sample.

5 Use the PLANTS PER ACRE CHART to convert the original and remaining plants in the sample to plants per acre (**TABLE E**).

(b) Use the ORIGINAL AND REMAINING PLANTS PER ACRE values to determine the percent stand loss. Apply these values to the SOYBEAN STAND REDUCTION LOSS CHART (**TABLE F**).

EXAMPLE: Soybeans planted in 30-inch rows.

55 living and dead plants = 95,000 original plants/A. (**TABLE E**).
40 live plants = 70,000 remaining plants/A. **(TABLE E)**.
Stand reduction from loss (**TABLE F**) = 9.0 percent.

(2) R-stage plants destroyed. R1 through R6 Direct Damage (Part I, item 19 of the appraisal worksheet).

(a) Count 100 consecutive plants (living and missing, dead/non-harvestable).

(b) Determine the number of dead or non-harvestable plants in the 100 plant sample. This is the percentage of dead/non-harvestable plants. Enter this number in item 19 of the appraisal worksheet. Include any cutoffs and/or breakovers, from Stage R4 through Stage R6.0, on a factored bases, based on how many damaged plants are required to equal 1 undamaged plant (e.g., 2-for-1, or 3-for-1, etc.).

EXAMPLE: Entry for 10 dead/non-harvestable plants, plus 10 plants cutoff/broken over plants factored on a 2-for-1 basis = 15 plants .

C. PLANT DAMAGE METHOD (Part I - Appraisal Worksheet, items 22 and 23)

(1) Use the plant damage method for DEFOLIATION damage on determinate soybean plants beginning with the V9 stage, through the R6 stage. For indeterminate soybeans, beginning with the R1 stage, use the plant damage method for plants CUT OFF or BROKEN OVER in stages R1 through R3.5.

NOTE: Any plants cut off and/or broken over in stages R4.0 through R6.0 are included in item 19, "R-stage plants destroyed" of the Stand Reduction Method (on a factored basis).

Use the following procedure to record individual plant-count entries in the Field Notes (plant damage is applied to the percent of the crop remaining):

(a) Determine the number of original nodes (above the cotyledonary node) at date of damage for a representative 20-plant sample. (The number of original nodes will be number of nodes per plant for the stage times 20 (e.g. V9 stage, 9 nodes times 20 = 180 original nodes).

(b) Determine the number of nodes cutoff and/or broken over on each plant in the 20 plant sample and enter in item 34 of the Field Notes section.

NOTE: An individual plant may have nodes broken over as well as nodes cut off above the break. In such cases, both are recorded.

(c) Total the number of nodes cutoff and/or broken over. Divide the total by the total number of nodes at date of damage to arrive at the percent of nodes destroyed.

(d) Refer to the CUTOFF/BREAKOVER CHART **(TABLE G)** to determine the percent of damage.

If cutoffs and/or breakovers exceed 65 percent for the sample, have the insured leave representative strip(s) intact until a seed count appraisal can be made, or the crop is harvested. Otherwise, the damage is limited to the chart entry for 65 percent.

(e) For R stages and DETERMINATE V stages V9 – VN, determine the percent defoliation on each plant. Obtain the average, and apply to the appropriate defoliation chart to arrive at the percent damage for the sample. Enter the percent damage in item 35 of the appraisal worksheet. On cutoffs or breakovers, count only TRIFOLIATE LEAFLETS below cutoff or breakover point on the stem in determining defoliation.

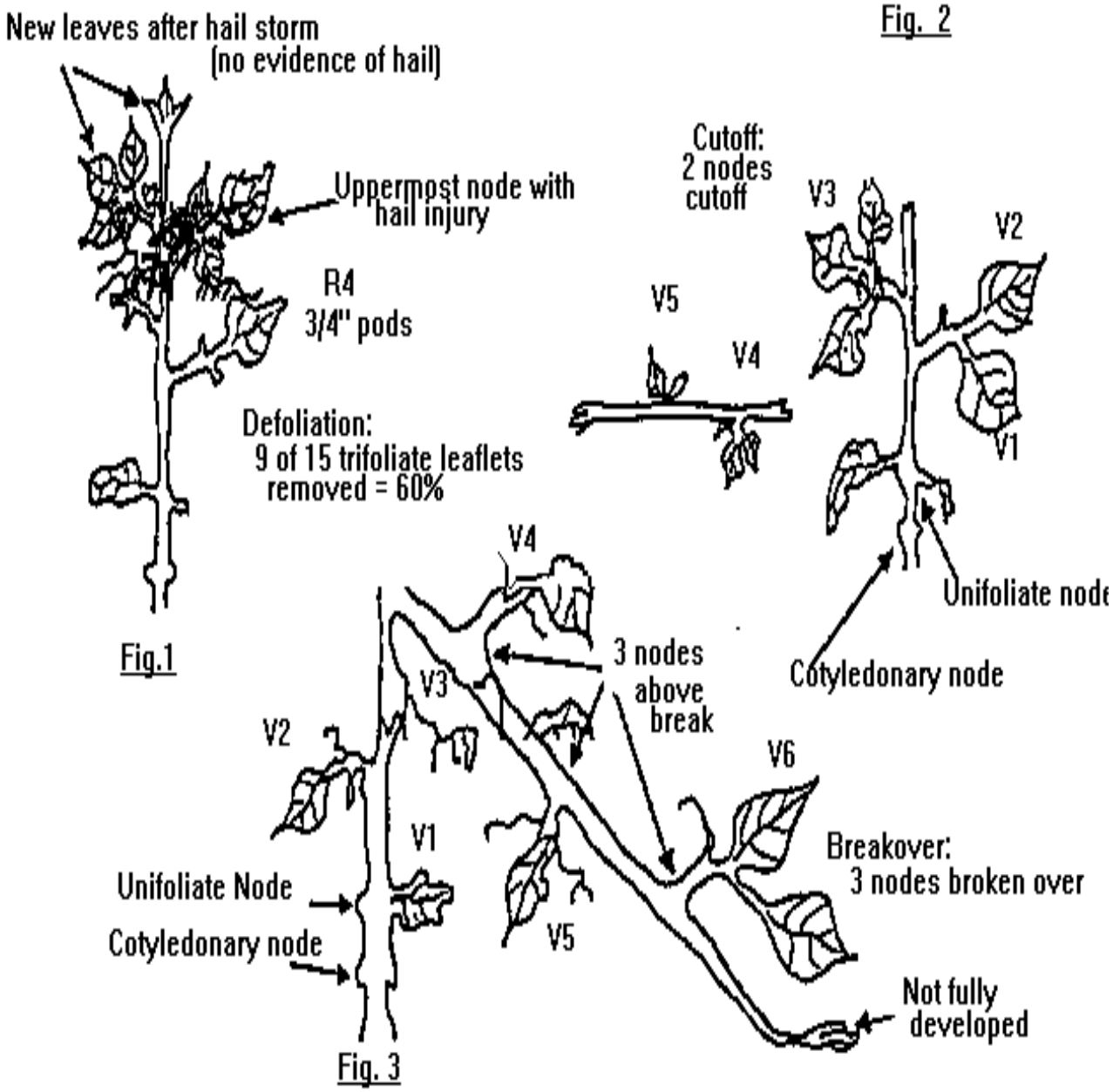
(f) To obtain the appraisal, multiply the percent potential (100 - percent damage) by the APH yield.

(2) Shown below are defoliation (Fig. 1), a cutoff with defoliation (Fig. 2), a breakover with defoliation (Fig. 3).

(a) DEFOLIATION: R4 represents the stage at the date of damage (DOD).

(b) CUTOFF: V5 represents the stage at the date of damage.

(c) BREAK OVER: V6 represents the stage at the date of damage.


New leaves after hail storm
(no evidence of hail)
Uppermost node with hail injury
R4
3/4" pods
Defoliation:
9 of 15 trifoliate leaflets removed = 60%
Fig.1
Cutoff:
2 nodes cutoff
V5
V4
V3
V2
V1
Unifoliate node
Cotyledonary node
Fig. 2
V4
3 nodes above break
V3
V2
V1
Unifoliate Node
Cotyledonary node
V5
V6
Breakover:
3 nodes broken over
Not fully developed
Fig. 3

PART ii - SEED COUNT METHOD TO BE USED AFTER R-6

1 Insured	2 Policy Number	3 Crop Year	4 Unit No.	5 Field ID	6 Practice
I. M. INSURED	**XXXXXXXX**	**YYYY**	**00100**	**A**	**003**

7 Company	8 Date of Damage	9 Acres	10 Variety	11 Row Width	12 Claim Number
ANY COMPANY	**AUG**	**10.0**	**WELLS – D**	**30”**	**XXXXXX**

43 SAMPLE NUMBER	1	2	3	4	5	6	7	8	9	10	51 Row Width Factor x **.80**
44 Plants Per 10 Feet	**17**	**0**	**15**	**0**	**19**	**16**					52 Seed Size Factor x **.064**
45 Plants Per Foot	**1.7**	**0**	**1.5**	**0**	**1.9**	**1.6**					47 Total **6.7** + 49 **6** = 53 Average Plants/Foot x **1.1**
46 Total Seeds (5 Rep. Plants)	**320**	**0**	**125**	**0**	**175**	**145**					48 Total **765** + 50 **20** = 54 Average Seeds/Plants = **38.3**

55 Appraisal(BU/A) **2.2**

57 Adjuster’s Signature	Code No.	Date	58 Insured’s Signature	Date
I. M. ADJUSTER	**XXXX**	**MM/DD/YYYY**	**I. M. INSURED**	**MM/DD/YYYY**

COLLECTION OF INFORMATION AND DATA (PRIVACY ACT)

To the extent that the information requested herein relates to your individual capacity as opposed to your business capacity, the following statements are made in accordance with the Privacy Act of 1974, as amended (5 U.S.C. 552a). The authority for requesting information to be furnished on this form is the Federal Crop Insurance Act, (7 U.S.C. 1501 et seq.) and the Federal crop insurance regulations contained in 7 C.F.R. chapter IV.

Collection of the social security account number (SSN) or the employer identification number (EIN) is authorized by section 506 of the Federal Crop Insurance Act (7 U.S.C. 1506), and is required as a condition of eligibility for participation in the Federal crop insurance program. The primary use of the SSN or EIN is to correctly identify you, and any other person with an interest in you or your entity of 10 percent or more, as a policyholder within the systems maintained by the Federal Crop Insurance Corporation (FCIC). Furnishing the SSN or EIN is voluntary; however, failure to furnish that number will result in denial of program participation and benefits.

The balance of the information requested is necessary for the insurance company and FCIC to process this form to: provide insurance; provide reinsurance; determine eligibility; determine the correct parties to the agreement; determine and collect premiums or other monetary amounts (including administrative fees and over payments); and pay benefits. The information furnished on this form will be used by Federal agencies, FCIC employees, insurance companies, and contractors who require such information in the performance of their duties. The information may be furnished to: FCIC contract agencies, employees and loss adjusters; reinsured companies; other agencies within the United States Department of Agriculture; The Department of Treasury including the Internal Revenue Service; the Department of Justice, or other Federal or State law enforcement agencies; credit reporting agencies and collection agencies; other Federal agencies as requested in computer matching programs; and in response to judicial orders in the course of litigation. The information may also be furnished to congressional representatives and senators making inquiries on your behalf. Furnishing the information required by this form is voluntary; however, failure to report the correct and complete information requested may result in rejection of this form; rejection of any claim for indemnity, replanting payment, or other benefit; ineligibility for insurance; and a unilateral determination of any monetary amounts due.

PAPERWORK REDUCTION ACT

In accordance with the Paperwork Reduction Act, public reporting burden for the collection of information is estimated to average 60 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate, or any other aspect of this collection information, including suggestions for reducing this burden to the Department of Agriculture, Clearance Officer, OIRM (OMB No. 0563-0053), Stop 7630, Washington, D.C. 20250-7630.

NONDISCRIMINATION STATEMENT

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

9. CLAIM FORM ENTRIES AND COMPLETION PROCEDURES

A. GENERAL INFORMATION

(1) The claim form (hereafter referred to as "Production Worksheet") is a progressive form containing all notices of damage for all preliminary, replant, and final inspections on a unit.

(2) If a Production Worksheet has been prepared on a prior inspection, verify each entry and enter additional information as needed. If a change or correction is necessary, strike out all entries on the line and re-enter correct entries on a new line. The adjuster and insured should initial any line deletions.

(3) Refer to the LAM for instructions regarding the following:

(a) Acreage report errors.

(b) Delayed notices and delayed claims.

(c) Corrected claims or fire losses (double coverage) and cases involving uninsured causes of loss, unusual situations, controversial claims, concealment, or misrepresentation.

(d) Claims involving a Certification Form (when all the acreage on the unit has been appraised to be put to another use, when acreage is being appraised for a replanting payment and all acreage on the unit has been initially planted, or other reasons described in the LAM).

(e) "No Indemnity Due" claims (which must be verified by an APPRAISAL or NOTIFICATION from the insured that the production exceeded the guarantee).

(f) Late planting.

(4) Refer to the Prevented Planting Handbook for information on prevented planting.

(5) The adjuster is responsible for determining if any of the insured's requirements under the notice and claim provisions of the policy have not been met. If any have not, the adjuster should contact the insurance provider.

(6) Instructions labeled "**PRELIMINARY**" apply to preliminary inspections only. Instructions labeled "**REPLANT**" apply to replant inspections only. Instructions labeled "**FINAL**" apply to final inspections only. Instructions not labeled apply to ALL inspections.

H. **Stage:**

PRELIMINARY: MAKE NO ENTRY.

REPLANT: Replant stage abbreviation as shown below.

STAGE	**EXPLANATION**
"R"	Acreage replanted and qualifying for replanting payment.
ANR@	Acreage not replanted or not qualifying for a replanting payment. Enter ANR@ if the combined potential production appraisal and uninsured cause appraisal totals 90 percent or more of the guarantee for replant claims.

FINAL: Stage abbreviation as shown below.

STAGE	**EXPLANATION**
AP@	Acreage abandoned without consent, put to other use without consent, damaged solely by uninsured causes, or for which the insured failed to provide records of production which are acceptable to the insurance provider.
AH"	Harvested.
AUH@	Unharvested or put to other use with consent.

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

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

I. **Intended or Final Use**: Use of acreage. Use the following AIntended Use@ abbreviations.

USE	**EXPLANATION**
"Replant"	Acreage replanted and qualifying for replanting payment
"Not Replanted"	Acreage not replanted or not qualifying for a replanting payment
"To Millet," etc.	Use made of the acreage
"WOC"	Other use without consent
"SU"	Solely uninsured
"ABA"	Abandoned without consent
"H"	Harvested
"UH"	Unharvested

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

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

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

J. **Appraised Potential:**

REPLANT: MAKE NO ENTRY. (Enter the replant appraisal in the narrative. Refer to section 4.)

PRELIMINARY AND FINAL: Per-acre appraisal in bushels, to tenths, of POTENTIAL production for the acreage appraised. Refer to section 5, "Soybean Appraisals " for additional instructions.

NOTE: If there is no potential on UH acreage, enter A0.@

$K_{1.}$ **Moisture %:**

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: Moisture percent (if in excess of 13.0 percent) to nearest tenth. Moisture adjustment is applied prior to any qualifying quality adjustment factors.

$K_{2.}$ **Factor:**

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: Moisture factor - For appraised mature grain production in excess of **13.0 percent**, obtain factor from **TABLE J.**

L. **Shell and/or Quality Factor:**

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: For mature unharvested soybeans which due to insurable causes qualify for quality adjustment as provided in the Coarse Grains Crop Provisions, enter the Quality Adjustment factor (three place decimal) calculated in accordance with the Quality Adjustment Statements in the Special Provisions. If appraised mature soybeans have no value, enter A.000.@ For additional quality adjustment definitions, instructions, qualifications and testing requirements, refer to the LAM and the Official United States Standards for Grain. Also refer to the quality adjustment instructions in the ANarrative,@ herein.

M. **+ Uninsured Cause:**

REPLANT: MAKE NO ENTRY.

PRELIMINARY AND FINAL: EXPLAIN IN THE NARRATIVE.

a. Hail and Fire exclusion NOT in effect.

(1) Enter NOT LESS than the insured's production guarantee per acre in bushels, to tenths, for the line, (calculated by multiplying the elected coverage level percentage times the approved APH yield per acre shown on the APH form) for any AP@ stage acreage.

The terms Adockage@ and Aforeign material@ are often used by buyers to describe the same non-grain material depending on the geographic area of the country. Refer to the Official U.S. Standards for Grain and the LAM.

K_2. **Factor:** Enter the three-place factor determined by subtracting the percent of FM from 1.000, or subtract the entry in K_1 from 100 and divide by 100. **EXAMPLE:** For 4 percent, enter A.960.@

L_1. **Moisture %:** Enter moisture percent to tenths. Moisture adjustment is applied prior to any qualifying quality adjustment factors.

L_2. **Factor:** If grain moisture is more than **13.0 percent**, enter the four-place moisture factor from the soybean moisture adjustment factor table (**TABLE J**).

M_1. **Test Wt.:** Enter test weight (ONLY when storage structure measurements are entered) in whole pounds (or pounds to tenths IF so instructed by the insurance provider). Refer to the LAM for instructions on determining test weight.

M_2. **Factor:** Test Weight Factor - enter the result of dividing the actual test weight by 60.0, to three decimal places (**TABLE C**).

N. **Adjusted Production:** Result of multiplying (AH@ or AI@) x AK_2@ x AL_2" x AM_2@. (Round to nearest tenth).

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

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

NOTE: 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. Refer to the example in the LAM.

P. **Production:** Result of subtracting the entry in Column AO@ from Column AN,@ to tenths.

Q_1. **Value:** When applicable, enter the Reduction in Value (RIV). RIV must be limited to amounts that are usual, customary, and reasonable. (Refer to the Special Provisions and the LAM for further instructions.)

NOTE: DO NOT make an entry when the Quality Adjustment factor can be obtained from the charts in the Special Provisions**.**

Q_2. **MKT. Price:** If an entry is in item "Q_1," enter the Local Market Price for U.S. Grade No. 1 Soybeans (refer to the crop provisions). Refer to the LAM for further instructions.

NOTE: DO NOT make an entry when the Quality Adjustment factor can be obtained from the charts in the Special Provisions.

R. **Quality Factor:** For production eligible for quality adjustment, enter the 3-digit quality adjustment factor determined by subtracting the result of Q_1 divided by Q_2 from 1.000, **or 1.000 minus the discount factor(s) obtained from the Special Provisions.**

S. **Production to Count:** Enter result from multiplying Column "P" times Column "R" in bushels to tenths.

NOTE: FOR ITEMS 22 - 24. WHEN SEPARATE LINE ENTRIES ARE MADE FOR VARYING SHARES, STAGES, APH YIELDS, PRICE ELECTIONS, TYPES, ETC., WITHIN THE UNIT, AND TOTALS NEED TO BE KEPT SEPARATE FOR CALCULATING INDEMNITIES, MAKE NO ENTRY AND FOLLOW THE INSURANCE PROVIDER'S INSTRUCTIONS; OTHERWISE, MAKE THE FOLLOWING ENTRIES.

22. **Section II Total:**

PRELIMINARY AND REPLANT: MAKE NO ENTRY.

FINAL: Total of Column "S," to tenths.

23. **Section I Total:**

PRELIMINARY AND REPLANT: MAKE NO ENTRY.

FINAL: Enter figure from Section I Column "O" total.

24. **Unit Total:**

PRELIMINARY AND REPLANT: MAKE NO ENTRY.

FINAL: Total of 22 and 23, to tenths.

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

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

TABLE E - PLANTS PER ACRE CHART (Page 1 of 4)

INSTRUCTIONS: Count the number of plants in a representative 10 feet of row (3-foot square grid for broadcast). Find the number nearest that total in the appropriate row width column. Then go to the far left column to find the number of plants per acre. If the number of counted plants is not shown on the table, use the next higher shown number and determine plants per acre as above.

Plants Per Acre	Row Width (inches)																			Broadcast
	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	7	6	(3"3')
180,000	138	131	124	117	110	103	96	90	83	76	69	62	55	48				24		37
175,000	134	127	121	114	107	100	94	87	80	74	67	60		47	40				20	36
170,000	130	124	117	111	104	98	91	85	78	72	65		52		39		25			35
165,000	126	120	114	107	101	95	88	82	76	69	63	57		44	38			22	19	34
160,000	122	116	110	104	98	92	86	80	73	67	61	55	49	43	37					33
155,000	119	113	107	101	95	89	83	77	71	65	59	53								32
150,000	115	109	103	98	92	86	80	75	69	63	57	52	46	40			23	20		31
145,000	111	105	100	94	89	83	78	72	67	61		50		39						30
140,000	107	102	96	91	86	80	75	70	64	59	54	48	43		32	27			16	29
135,000	103	98	93	88	83	77	72	67	62	57	52		41	36	31	26		18		28
130,000	99	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20			27
125,000	96	91	86	81	77	72	67	62	57	53	48	43	38	33	29	24	19	17		26
122,500	94	89	85	80	75	71	66	61	56	52	47	42							14	
120,000	92	87	83	78	73	69	64	60	55	51	46	41	37	32	28	23		16		25
117,500	90	86	81	77	72	68	63	59	54	50	45		36		27		18			
115,000	88	84	79	75	70	66	62	57	53	48	44	40	35	31	26	22				24
112,500	86	82	78	74	69	65	61	56	52	47	43	39		30				15	13	
110,000	84	80	76	72	67	63	59	55	51	46	42	38	34	29	25	21	17			23
	Number of Plants in Ten Feet of Row																			

TABLE E - PLANTS PER ACRE CHART (Page 2 of 4)

Plants Per Acre	Row Width (inches)																			Broadcast
	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	7	6	(3"3')
107,500	82	78	74	70	66	62	58	54	50	45	41	37	33							
105,000	80	76	72	68	64	60	56	52	48	44	40	36	32	28	24	20	16	14	12	22
102,500	79	75	71	67	63	59	55	51	47	43	39	35								
100,000	77	73	69	65	61	57	54	50	46	42	38	34	31	27	23	19				21
97,500	75	71	67	64	60	56	53	49	45	41	37		30	26			15	13	11	
95,000	73	69	65	62	58	55	51	47	44	40	36	33	29	25	22	18				20
92,500	71	67	64	61	57	54	50	46	43	39	35	32								
90,000	69	65	62	59	55	52	48	45	41	38	34	31	28	24	21	17	14	12		18
87,500	67	64	61	57	54	51	47	44	40	37		30	27						10	
85,000	65	62	59	55	52	49	46	42	39	36	33	29	26	23	20	16	13			17
82,500	63	60	57	54	51	48	45	41	38	35	32		25	22	19			11		
80,000	61	58	55	52	49	46	43	40	37	34	31	28	24	21	18	15	12			16
77,500	59	57	54	51	48	45	42	39	36	33	30	27							9	
75,000	57	55	52	49	46	43	40	37	34	32	29	26	23	20	17	14		10		15
72,500	56	53	50	48	45	42	39	36	33	31	28	25	22				11			
70,000	54	51	48	46	43	40	37	35	32	29	27	24	21	19	16	13			8	14
67,500	52	49	47	44	42	39	36	34	31	28	26	23		18				9		
65,000	50	47	45	42	40	37	35	32	30	27	25	22	20	17	15	12	10			13
62,500	48	46	43	41	39	36	34	31	29	26	24		19						7	
60,000	46	44	41	39	37	34	32	30	28	25	23	21	18	16	14		9	8		12
	Number of Plants in Ten Feet of Row																			

TABLE E - PLANTS PER ACRE CHART (Page 3 of 4)

Plants Per Acre	Row Width (inches)																			Broadcast
	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10	8	7	6	(3"3')
57,500	44	42	40	38	36	33	31	29	27	24	22	20				11				
55,000	42	40	38	36	34	32	29	27	25	23	21	19	17	15	13					11
52,500	40	38	36	35	33	31	28	26	24	22	20	18	16	14	12		8	7	6	
50,000	38	36	34	33	31	29	27	25	23	21	19	17	15	13	11	10				10
47,500	36	35	33	31	30	28	26	24	22	20	18	16								
45,000	34	33	31	29	28	26	24	22	21	19	17	15	14	12	10	9	7	6	5	9
42,500	32	31	29	28	26	25	23	21	20	18	16									
40,000	30	29	27	26	24	23	21	19	18	17	15	14	13	11	9	8	6			8
37,500	29	27	26	25	23	22	20	18	17	16	14	13	12	10				5	4	
35,000	27	25	24	23	21	20	19	17	16	15	13	12	11	9	8	7				7
32,500	25	24	23	22	20	19	18	16	15	14	12	11	10				5			
30,000	23	22	21	20	18	17	16	15	14	13	11	10	9	8	7	6		4		6
27,500	21	20	19	18	17	16	15	14	13	12									3	
25,000	19	18	17	16	15	14	13	12	11	11	10	9	8	7	6	5	4			5
22,500	17	17	16	15	14	13	12	11	10	10	9	8	7	6				3		
20,000	15	15	14	13	12	11	11	10	9	8	8	7	6	5	5	4	3			4
17,500	13	13	12	12	11	10	10	9	8	7	7	6			4				2	
15,000	11	11	10	10	9	9	8	7	7	6	6	5	5	4	3	3	2	2		3
12,500	10	9	9	9	8	8	7	6	6	5	5	4	4							
10,000	8	7	7	7	6	6	5	5	5	4	4	3	3	3	2	2	2	1	1	2
	Number of Plants in Ten Feet of Row																			

TABLE E - PLANTS PER ACRE CHART (Page 4 of 4)

If the number of counted plants in ten feet of row is greater than the top number in the appropriate row width column, divide the number of plants by 2, and proceed as above. Multiply the plants per acre found in the left column by 2 to arrive at the actual number of plants per acre. (Refer to **EXAMPLE 1** below.) If the number of counted plants in ten feet of row is fewer than the lowest number in the appropriate row width column, multiply the number of plants by 2, and proceed as above. Divide the plants per acre found in the left column by 2 to arrive at the actual number of plants per acre. (Refer to **EXAMPLE 2** below.)

EXAMPLE 1: Row Width = 30@
110 original plants in 10= of Row
110) 2 = 55
55 original plants = 95,000 plants/acre
95,000 plants/acre x 2 = 190,000 plants/acre

EXAMPLE 2: Row width = 30@
4 original plants in 10= of Row
4 x 2 = 8
8 original plants = 12,500 plants/acre
12,500) 2 = 6,250 plants/acre

If the planted row width is not listed on the table, divide the row width, in inches, by 12. Multiply this result by 10 to arrive at the square feet in the sample. Count the number of plants in the sample and divide by the square feet to arrive at plants per square foot. Multiply plants per square foot by 43,560 sq. ft. per acre to arrive at plants per acre. If the plant population is above 125,000, round to the nearest 5,000. If the population is below 125,000, round to the nearest 500. (Refer to examples below.)

EXAMPLE 1: Row Width = 15@
42 original plants in 10= of Row
(15@) 12@) x 10= = 12.5
42) 12.5 = 3.36
3.36 x 43,560 = 146,362 (round to 145,000)

EXAMPLE 2: Row Width = 7**2**@
15 original plants in 10= of Row
(7.5@) 12@) x 10= = 6.25
15) 6.25 = 2.40
2.40 x 43,560 = 104,544 (round to 104,500)

TABLE F: SOYBEAN STAND REDUCTION LOSS CHART (Page 1 of 3)

Original Stand Plants/Acre	Remaining Plants Per Acre (000's omitted)																		
	180	175	170	165	160	155	150	145	140	135	130	125	122.5	120	117.5	115	112.5	110	107.5
180,000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.5	2.0	2.5	3.0	3.5
175,000		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.5	2.0	2.5	3.0	3.5
170,000			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.5	2.0	2.5	3.0	3.5
165,000				0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.5	2.0	2.5	3.0	3.5
160,000					0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.5	2.0	2.5	3.0	3.5
155,000						0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.5	2.0	2.5	3.0	3.5
150,000							0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.5	2.0	2.5	3.0	3.5
145,000								0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.5	2.0	2.5	3.0	3.5
140,000									0.0	0.0	0.0	0.0	0.0	1.0	1.5	2.0	2.5	3.0	3.5
135,000										0.0	0.0	0.0	0.0	1.0	1.5	2.0	2.5	3.0	3.5
130,000											0.0	0.0	0.0	1.0	1.5	2.0	2.5	3.0	3.5
125,000												0.0	0.0	1.0	1.5	2.0	2.5	3.0	3.5
122,500													0.0	0.5	1.0	1.5	2.0	2.5	3.0
120,000														0.0	0.5	1.0	1.5	2.0	2.5
117,500															0.0	0.5	1.0	1.5	2.0
115,000																0.0	0.5	1.0	1.5
112,500																	0.0	0.5	1.0
110,000																		0.0	0.5
107,500																			0.0

Original Stand Plants/Acre	Remaining Plants Per Acre (000's omitted)																		
	105	102.5	100	97.5	95	92.5	90	87.5	85	82.5	80	77.5	75	72.5	70	67.5	65	62.5	60
180,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
175,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
170,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
165,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
160,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
155,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
150,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
145,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
140,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
135,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
130,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
125,000	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.5	21.0	22.5	24.0
122,500	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	12.5	13.5	14.5	15.5	16.5	17.5	19.0	20.5	22.0	23.5
120,000	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.5	20.0	21.5	23.0
117,500	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	12.5	13.5	14.5	15.5	16.5	18.0	19.5	21.0	22.5
115,000	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.5	19.0	20.5	22.0
112,500	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5	12.5	13.5	14.5	15.5	17.0	18.5	20.0	21.5
110,000	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.5	18.0	19.5	21.0
107,500	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.5	17.0	18.5	20.0
105,000	0.0	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.5	16.0	17.5	19.0
102,500		0.0	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.5	15.0	16.5	18.0
100,000			0.0	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.5	14.0	15.5	17.0
97,500				0.0	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.5	13.0	14.5	16.0
95,000					0.0	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.5	12.0	13.5	15.0
92,500						0.0	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.5	11.0	12.5	14.0
90,000							0.0	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.5	10.0	11.5	13.0
87,500								0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.5	11.0	12.5
85,000									0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.5	9.0	10.5	12.0
82,500										0.0	1.0	2.0	3.0	4.0	5.0	6.5	8.0	9.5	11.0
80,000											0.0	1.0	2.0	3.0	4.0	5.5	7.0	9.0	10.0
	PERCENT LOSS FROM STAND REDUCTION																		

TABLE F: SOYBEAN STAND REDUCTION LOSS CHART (Page 2 of 3)

Original Stand Plants/Acre	Remaining Plants Per Acre (000's omitted)																							
	57.5	55	52.5	50	47.5	45	42.5	40	37.5	35	32.5	30	27.5	25	22.5	20	17.5	15	12.5	10	7.5	5	2.5	0
180,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
175,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
170,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
165,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
160,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
155,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
150,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
145,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
140,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
135,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
130,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
125,000	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	38.0	40.0	42.0	44.0	46.5	49.0	51.5	54.0	56.5	59.0	62.0	65.0	73.8	82.5	91.3	100.0
122,500	25.0	26.5	28.0	29.5	31.0	32.5	34.0	35.5	37.5	39.5	41.5	43.5	46.0	48.5	51.0	53.5	56.0	58.5	61.5	64.5	73.4	82.3	91.1	100.0
120,000	24.5	26.0	27.5	29.0	30.5	32.0	33.5	35.0	37.0	39.0	41.0	43.0	45.5	48.0	50.5	53.0	55.5	58.0	61.0	63.5	72.6	81.8	90.9	100.0
117,500	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.5	38.5	40.5	42.5	45.0	47.5	50.0	52.5	55.0	57.5	60.5	63.5	72.6	81.8	90.9	100.0
115,000	23.5	25.0	26.5	28.0	29.5	31.0	32.5	34.0	36.0	38.0	40.0	42.0	44.5	47.0	49.5	52.0	54.5	57.0	60.0	63.0	72.3	81.5	90.8	100.0
112,500	23.0	24.5	26.0	27.5	29.0	30.5	32.0	33.5	35.5	37.5	39.5	41.5	44.0	46.5	49.0	51.5	54.0	56.5	59.5	62.5	71.9	81.3	90.6	100.0
110,000	22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	35.0	37.0	39.0	41.0	43.5	46.0	48.5	51.0	53.5	56.0	59.0	62.0	71.5	81.0	90.5	100.0
107,500	21.5	23.0	24.5	26.0	28.0	29.0	30.5	32.0	34.0	36.0	38.0	40.0	42.5	45.0	47.5	50.0	52.5	55.0	58.5	61.5	71.1	80.8	90.4	100.0
105,000	20.5	22.0	23.5	25.0	26.5	28.0	29.5	31.0	33.0	35.0	37.0	39.0	41.5	44.0	46.5	49.0	51.5	54.0	57.5	61.0	70.8	80.5	90.3	100.0
102,500	19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	32.0	34.0	36.0	38.0	40.5	43.0	45.5	48.0	50.5	53.0	56.5	60.0	70.0	80.0	90.0	100.0
100,000	18.5	20.0	21.5	23.0	24.5	26.0	27.5	29.0	31.0	33.0	35.0	37.0	39.5	42.0	44.5	47.0	49.5	52.0	55.5	59.0	69.3	79.5	89.8	100.0
97,500	17.5	19.0	20.5	22.0	23.5	25.0	26.5	28.0	30.0	32.0	34.0	36.0	38.5	41.0	43.5	46.0	48.5	51.0	54.5	58.0	68.5	79.0	89.5	100.0
95,000	16.5	18.0	19.5	21.0	22.5	24.0	25.5	27.0	29.0	31.0	33.0	35.0	37.5	40.0	42.5	45.0	47.5	50.0	53.5	57.0	67.8	78.5	89.3	100.0
92,500	15.5	17.0	18.5	20.0	21.5	23.0	24.5	26.0	28.0	30.0	32.0	34.0	36.5	39.0	41.5	44.0	46.5	49.0	52.5	56.0	67.0	78.0	89.0	100.0
90,000	14.5	16.0	17.5	19.0	20.5	22.0	23.5	25.0	27.0	29.0	31.0	33.0	35.5	38.0	40.5	43.0	45.5	48.0	51.5	55.0	66.3	77.5	88.8	100.0
87,500	14.0	15.5	17.0	18.5	20.0	21.5	23.0	24.5	26.5	28.5	30.5	32.5	35.0	37.5	40.0	42.5	45.0	47.5	51.0	54.5	65.9	77.3	88.6	100.0
85,000	13.5	15.0	16.5	18.0	19.5	21.0	22.5	24.0	26.0	28.0	30.0	32.0	34.5	37.0	39.5	42.0	44.5	47.0	50.5	54.0	65.5	77.0	88.5	100.0
82,500	12.0	14.0	15.5	17.0	18.5	20.0	21.5	23.0	25.0	27.0	29.0	31.0	33.5	36.0	38.5	41.0	43.5	46.0	49.5	53.0	64.8	76.5	88.3	100.0
80,000	11.5	13.0	14.5	16.0	17.5	19.0	20.5	22.0	24.0	26.0	28.0	30.0	32.5	35.0	37.5	40.0	42.5	45.0	48.5	52.0	64.0	76.0	88.0	100.0
	PERCENT LOSS FROM STAND REDUCTION																							