



United States
Department of
Agriculture



Federal Crop
Insurance
Corporation

FCIC-25040 (08-2013)

ARIZONA- CALIFORNIA CITRUS LOSS ADJUSTMENT STANDARDS HANDBOOK

2015 and Succeeding Crop Years

**RISK MANAGEMENT AGENCY
KANSAS CITY, MO 64133**

TITLE: ARIZONA-CALIFORNIA CITRUS LOSS ADJUSTMENT STANDARDS HANDBOOK	NUMBER: FCIC-25040
EFFECTIVE DATE: 2015 and succeeding crop years	ISSUE DATE: August 27, 2013
Subject: Provides the procedures and instructions for administering the Arizona-California Citrus crop insurance program.	OPI: Product Administration and Standards Division APPROVED: /s/ Tim B. Witt Deputy Administrator for Product Management

REASONS FOR AMENDMENT

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

1. Throughout the handbook: Reformatted appraisal and claim standards to track with new RMA External Handbook standards and removed references to specific sections in the LAM
2. Paragraph 11 B: Revised to include new insurability requirements from the revised CP.
3. Paragraph 11 C: Removed language excluding insects and disease from insurability.
4. Paragraph 21 B: Added requirements from the CP regarding duties in the event of damage or loss.
5. Paragraph 22 B: Reorganized steps for the Random Citrus Appraisal Method and made corrections to the corresponding example.
6. Exhibit 2: Modified the definition of Carton to track with the revised CP and added a definition of Freeze Damage.
7. Exhibit 3 B: In item 4 added instruction for entering the citrus fruit commodity name, commodity code, commodity type, and commodity type code on the appraisal worksheet and in item 28 added instructions for entering uninsured cause of loss appraisals on the PW.
8. Exhibit 4: In item 1 updated the citrus fruit commodity names and commodity codes; and in item 29 added language to clarify the meaning of harvest.
9. Exhibit 10: Revised to be consistent with new SP statement.

ARIZONA-CALIFORNIA CITRUS LOSS ADJUSTMENT STANDARDS HANDBOOK

CONTROL CHART

Arizona-California Citrus Loss Adjustment Standards Handbook							
	TP Page(s)	TC Page(s)	Text Page(s)	Exhibit Number	Exhibit Page(s)	Date	Directive Number
Remove	Entire Handbook						
Insert	Entire Handbook						
Current Index	1-2	1-2	1-11	1	12	08-2013	FCIC-25040
				2	13-14	08-2013	FCIC-25040
				3	15-18	08-2013	FCIC-25040
				4	19-36	08-2013	FCIC-25040
				5	37	08-2013	FCIC-25040
				6	38-39	08-2013	FCIC-25040
				7	40-41	08-2013	FCIC-25040
				8	42-43	08-2013	FCIC-25040
				9	44	08-2013	FCIC-25040
				10	45	08-2013	FCIC-25040

FILING INSTRUCTIONS

This handbook replaces the 2012 Arizona-California Citrus Loss Adjustment Handbook, FCIC-25040 (11/2010), the 2013 Arizona-California Citrus Loss Adjustment Handbook, FCIC-25040-1H (09/2011), and the 2014 Arizona-California Citrus Loss Adjustment Handbook, FCIC-25040-2H (08/2012). This handbook is effective for the 2015 and succeeding crop years.

**ARIZONA-CALIFORNIA CITRUS LOSS ADJUSTMENT HANDBOOK
TABLE OF CONTENTS**

PAGE NO.

PART 1 GENERAL INFORMATION AND RESPONSIBILITIES

1	General Information.....	1
2	AIP Responsibilities	1
3-10	(Reserved)	

PART 2 POLICY INFORMATION

11	Insurance Contract Information.....	3
12-20	(Reserved)	

PART 3 APPRAISALS

21	Arizona-California Citrus Appraisals	5
22	Appraisal Methods.....	6
23	Appraisal Deviations and Modifications	10
24-30	(Reserved)	

PART 4 PRODUCTION WORKSHEET

31	General Information.....	11
32-40	(Reserved)	

ARIZONA-CALIFORNIA CITRUS LOSS ADJUSTMENT STANDARDS HANDBOOK
TABLE OF CONTENTS

PAGE NO.

EXHIBITS

1	Acronyms and Abbreviations	12
2	Definitions	13
3	Appraisal Worksheet Standards and Elements	15
4	Production Worksheet Standards and Elements	19
5	Minimum Representative Sample Requirements	37
6	Determining Insurable Acreage by Variety	39
7	Arizona Citrus Laws and Procedures	40
8	California Orange Laws and Procedures	42
9	Other Arizona and California Citrus Laws	44
10	Policy Regarding Frost Protection Equipment	45

PART 1 GENERAL INFORMATION AND RESPONSIBILITIES

1. General Information

A. Purpose and Objective

The RMA issued loss adjustment standards for this commodity are the official standard requirements for adjusting losses in a uniform and timely manner. The RMA issued standards for this commodity and crop year are in effect as of the signature date for this crop handbook located at www.rma.usda.gov/handbooks/25000/index.html.

This handbook remains in effect until superseded by reissuance of either the entire handbook or selected portions (through amendments, bulletins, or FADs). If amendments are issued for a handbook, the original handbook as amended shall constitute the handbook. A bulletin or FAD can supersede either the original handbook or subsequent amendments.

B. Related Handbooks

The following table provides handbooks that must be used in conjunction with this handbook.

Handbook	Relation/Purpose
DSSH	Provides the form standards and procedures for use in the sales and service of crop insurance contracts.
LAM	Provides overall general loss adjustment (not crop-specific) process.

- (1) Terms, abbreviations, and definitions general (not crop specific) to loss adjustment are identified in the LAM.
- (2) Terms, abbreviations, and definitions specific to Arizona-California Citrus loss adjustment and this handbook are in exhibits 1 and 2, herein.

C. CAT Coverage

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

2. AIP Responsibilities

A. Utilization of Standards

All AIPs will utilize these standards for both loss adjustment and loss training for the applicable crop year. These standards, which include crop appraisal methods, claims completion instructions, and form standards, supplement the general (not crop-specific) loss adjustment standards identified in the LAM.

2. AIP Responsibilities (continued)

B. Form Distribution

The following is the minimum distribution of forms completed by the adjuster and signed by the insured (or the insured's authorized representative) for the loss adjustment inspection.

- (1) One legible copy to the insured; and
- (2) The original and all remaining copies as instructed by the AIP.

C. Record Retention

It is the AIP's responsibility to maintain records (documents) as stated in the SRA and described in the LAM.

D. Form Standards

- (1) The entry items and completion instructions in exhibits 3 and 4 are the minimum requirements for the Arizona-California Citrus Appraisal Worksheet, and Claim Form (hereafter referred to as "Production Worksheet"). All entry items are "Substantive" (i.e., they are required).
- (2) The Privacy Act and Non-Discrimination statements are required statements that must be printed on all forms or provided to the insured as a separate document. These statements are not shown on the example form(s) in exhibits 3 and 4. The current Non-Discrimination Statement and Privacy Act Statement can be found on the RMA website at: <http://www.rma.usda.gov/regs/required.html> or successor website.
- (3) The certification statement required by the current DSSH must be included on the Production Worksheet directly above the insured's signature block immediately followed by the statement below:

"I understand the certified information on this Production Worksheet will be used to determine my loss, if any, to the above unit. The insurance provider may audit and approve this information and supporting documentation. The Federal Crop Insurance Corporation, an agency of the United States, subsidizes and reinsures this crop insurance."
- (4) Refer to the DSSH for other crop insurance form requirements (e.g., point size of font, etc.).

3-10 (Reserved)

PART 2 POLICY INFORMATION

11. Insurance Contract Information

A. General Information

- (1) This section lists most insurability requirements for Arizona-California Citrus. Refer to the BP, CP, and SP for a complete list of insurability requirements.
- (2) AIPs shall determine if the insured complies with all of the policy provisions of the insurance contract.

B. Insured Crop

- (1) The **insured crop** will be all acreage in the county of each citrus **fruit group** designated in the **SP** that the insured elects to insure and for which a premium rate is provided by the actuarial documents; and:
 - (a) In which the insured has a share;
 - (b) That is **grown on rootstock and trees** adapted to the area;
 - (c) That is irrigated;
 - (d) That is grown in a grove that, if inspected, is considered acceptable by the AIP;
 - (e) That is not sold by direct marketing, unless allowed by the **SP** or by written agreement; and
 - (f) That, **unless otherwise provided in the SP**, has reached at least the sixth growing season after being set out or the fifth growing season after topwork or grafting if topwork or grafting occurs after set out. However, the AIP may inspect acreage that has not **met this requirement** and approve a written agreement to insure such acreage.
- (2) A citrus interplanted with another perennial **agricultural commodity** is insurable unless the AIP inspects the acreage and determines it does not meet the requirements for insurability contained in the policy.

C. Insurability Requirements

- (1) Damage or loss of production due to inability to market citrus for any reason other than actual physical damage from an insurable cause of loss (e.g., quarantine, boycott, or refusal of any person to accept production) is not insurable.
- (2) If an insured has not provided acceptable production records of citrus fruit production, coverage will not be provided unless a written agreement authorizing such coverage is in effect.

11. Insurance Contract Information (continued)

C. Insurability Requirements (continued)

- (3) If the producer's annual Pre-Acceptance Worksheet indicates an inspection is required, such acreage of the citrus fruit commodity must be inspected and accepted by the AIP before insurance will attach to that acreage for the crop year. Refer to section 16 of the CIH.

D. Unit Division

Refer to the insurance contract for unit provisions. Unless limited by the CP or SP, a basic unit, as defined in the BP, may be divided into optional units if, for each optional unit, all conditions stated in the applicable CP are met.

12-20 (Reserved)

PART 3 APPRAISALS

21. Arizona-California Citrus Appraisals

A. General Information

- (1) Potential production for all types of inspections will be appraised in accordance with procedures specified in this handbook and the LAM.
- (2) Specifically for Arizona-California Citrus, circumstances that require an appraisal include, but are not limited to:
 - (a) When citrus fruit is still on the tree and before removal, whenever possible;
 - (b) If verifiable production records may not be available (roadside markets, etc.); or
 - (c) If any production will be sold by direct marketing.
- (3) Make separate appraisals for each **commodity type** grown in the unit, as applicable.

B. Notice of Damage or Loss

Policy provisions require that insureds file a “notice of damage or loss.” In addition to the requirements of section 14 of the BP, if the insured intends to claim an indemnity on any unit, the insured must:

- (1) Notify the AIP at least 15 days before any production from any unit will be sold by direct marketing. The AIP will conduct pre-harvest appraisals to determine production to count for production sold by direct marketing. If damage occurs after this appraisal, the AIP will conduct an additional appraisal. In the event of failure to give timely notice that production will be sold by direct marketing, apply an appraised amount of production to count of not less than the production guarantee per acre, if such failure results in the inability of the AIP to make the required appraisal.
- (2) Notify the AIP at least 15 days prior to the beginning of harvest or immediately if damage is discovered during harvest so that unharvested trees can be inspected. The insured must not sell or dispose of the damaged insured crop until after the AIP has given written consent to do so. If the insured fails to meet the requirements of the CP, and such failure results in the AIP’s inability to inspect the damaged production, all such production is to be considered undamaged and included as production to count. Refer to the BP, CP, and the LAM for more information on “notice of damage or loss.”

C. Selecting Representative Sample Plants for Appraisals

Use as many samples as necessary to accurately determine the amount of unharvested fruit production in the block or unit. Minimum sample requirements are shown in exhibit 5.

Make a general examination of all acreage in the unit before determining the number of sample trees and their location in the unit. This examination should include the following:

- (1) **Total acres and number of trees.**

21. Arizona-California Citrus Appraisals (continued)

C. Selecting Representative Sample Plants for Appraisals (continued)

- *** (2) Extent of variation in the amount of production or damage within the acreage and location of the fruit on the tree. When variable damage causes the crop potential to be significantly different within the same unit, or when the insured wishes to destroy a portion of the unit, split the unit into blocks as applicable, and appraise each one separately.
- *** (3) Percent of each commodity type on the acreage.
- *** (4) Tree age, size, density, and vigor.
- (5) The acreage in the unit from which fruit has been picked and the extent of variation in the amount of unharvested fruit on the trees.
- (6) Any areas on the acreage that have been color/cherry (partially) picked.

22. Appraisal Methods

A. General Information

Instructions in this paragraph provide information for the following appraisal methods:

Appraisal Method	Used....
Random Citrus Sample Method	...to appraise fruit on unharvested citrus trees prior to harvest.
Representative Tree Appraisals	...when acreage is being harvested; production from representative trees will be harvested and used for the appraisal.
Harvested Acreage Appraisals	...when acreage is being harvested and the average yield per acre from harvested acreage approximates that of acreage that will not be harvested.

B. Random Citrus Sample Method

Step	Action
1	Random samples must be representative of all mature citrus fruit in the unit or block.
2	Determine the number of fruit per tree using the quadrant count method: count the number of fruit (including insured damaged fruit, uninsured damaged fruit, and marketable fruit) in one representative quadrant of each sample tree and multiply by 4 to determine the number of fruit on the entire tree, as applicable.
3	Select a representative random sample of mature fruit from sample trees to determine the number of fruit lost to insurable causes, using the following criteria (reference exhibit 5 for minimum number of sample trees):

22. Appraisal Methods (continued)

B. Random Citrus Sample Method (continued)

3 (continued)	(a) Select a sufficient number of individual mature fruit (minimum of 100 fruit total from all sample trees) from different locations on the trees that reflect the general condition of all insurable fruit in the unit/block. (b) The sample selected must be random. Doing so should result in a representative mixture of mature fruit that could be marketable, and fruit that could be eliminated if graded in the packinghouse. (c) Select fruit samples from the inside, outside, top, and bottom of all four quadrants of sample trees. (d) Select fruit samples from each sample tree in a representative number of rows in the unit/block.
4	Determine the number of mature fruit required to fill a standard carton: (a) Place the random sample(s) in the proper carton for the type of citrus fruit and count the number of fruit required to fill the carton; or (b) Use a hand held citrus fruit sizing gauge to determine the number of mature fruit required to fill a standard carton. Size at least 10 randomly selected mature fruit and determine the average number of mature fruit required to fill a standard carton. Example: If fruit sized 122, 131, 126, 125, 137, 132, 139, 116, 119, 129, the sum equals 1276 divided by 10 samples equals 127.6. Round result to whole fruits, so the example would be equal to 128 fruit per carton.
5	Separate grade fruit from culls.
6	Determine the number of graded fruit: cut only that portion of the sample that will be marketed or is marketable (grade portion) to determine the percent of damage. See exhibits 7-10 for Arizona Citrus Laws and Procedures, California Orange Laws and Procedures, and Other Arizona and California Citrus Laws for information and methods of determining freeze damage.
7	Determine cartons to count per acre: (a) Divide the number of graded fruit determined in step 6 by the number of fruit sampled (percent graded fruit per tree). (b) Multiply the result from 7 (a) by the number of fruit per tree from step 2.

22. Appraisal Methods (continued)

B. Random Citrus Sample Method (continued)

7 (continued)	(c) Divide the result from 7 (b) by fruit per carton from step 4 to determine graded cartons per tree. (d) Multiply the result of 7 (c) by the number of trees per acre determined in step 8 below to determine cartons to count per acre.
8	Determine the number of unharvested trees per acre. To determine number of trees per acre for square or rectangular planting patterns, multiply the distance between trees within a row (to nearest tenth of a foot) times the distance between rows (to nearest tenth of a foot) and divide this result into 43,560 sq. ft. per acre (round to the nearest whole number). EXAMPLE: 12.5 ft. X 16.0 ft. = 200sq. ft., then 43,560 sq. ft. divided by 200 = 217.8 rounded to 218 trees per acre. To determine the tree population per acre for other tree planting patterns (e.g., hexagonal, quincunx, etc.) refer to the LAM.
9	ONLY MARKETABLE CARTONS WILL BE COUNTED AS PRODUCTION TO COUNT. Packinghouse managers will be consulted to determine if representative samples can be packed as marketable fresh fruit. Citrus fruit that cannot be packed as marketable fresh citrus fruit can be released either to be dropped to the ground or processed into by-products.
10	If the adjuster finds that citrus fruit to be sent for processing into by-products, dropped on the ground, or left on the trees, is marketable as fresh fruit, or damaged from uninsured causes, an appraisal of potentially marketable fruit and/or fruit lost to uninsurable causes will be made.

Random Citrus Sample Method Example	
Important: Citrus fruit that is not marketable as fresh-packed fruit due to INSURABLE causes will not be considered production to count.	
a	The quadrant counts of fruit from representative trees averaged 625 fruit per tree.
b	Assume a random sample of 140 mature fruit was taken from representative trees in the block.
c	It was determined that 128 sized fruit are required to fill a standard carton.
d	115 of the 140 fruit samples were determined marketable as fresh-packed fruit.
e	After cutting, 17 fruit were found damaged, resulting in 98 graded fruit.
f	98 graded fruit divided by 140 sampled fruit equals 0.700 (percent of graded fruit per tree).
g	625 fruit per tree times 0.700 equals 438 graded fruit per tree.
h	438 graded fruit per tree, divided by 128 fruit per standard carton equals 3.4 standard cartons graded fruit per tree (rounded to nearest tenth).

22. Appraisal Methods (continued)

B. Random Citrus Sample Method (continued)

i	There are 450 unharvested trees in the block, divided by 5 acres in the block equals 90 unharvested trees per acre.
j	3.4 cartons of graded fruit times 90 unharvested trees per acre, equals 306 total cartons of graded fruit per acre from unharvested trees.

C. Harvested Acreage Appraisals

- (1) Representative Tree Appraisals: When representative harvested citrus trees are used for the appraisal, the adjuster and insured will jointly select representative sample trees that reflect the type and severity of insured crop damage in the unit/block. The adjuster will make arrangements with the insured to do a field inspection while the insured harvests the selected representative sample trees. During the field inspection, the adjuster will:

Step	Action
1	Determine the amount of appraised potential production on each sample tree as described in para. 22 B above, and
2	Document the amount of potential appraised production on the appraisal worksheet as described in exhibit 3.

- (2) Representative Harvested Acreage Appraisals: DO NOT USE THIS METHOD if the unharvested acreage will be harvested. Use this method to determine potential production when more than 50 percent of the acreage in the unit is harvested, and only when the harvested acreage can be verified as being representative of the unharvested acreage.

Step	Action
1	Prior to harvest, estimate the amount of potential gross production on the unharvested representative acreage.
2	Compare the estimate for the unharvested acreage determined in step 1 above to the actual gross production from the harvested acreage. If the estimated potential production is comparable to the harvested gross production, use the average yield per acre from the harvested acreage as the per acre appraisal for the unharvested acreage; otherwise, use the appraisal procedures specified in para. 22 B herein.
3	Document in the Remarks section or on a Special Report how the unharvested acreage appraisal was determined, including but not limited to the estimation method and calculations used to determine both the unharvested acreage potential and resulting appraisal.

23. Appraisal Deviations and Modifications

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

There are no pre-established appraisal modifications contained in this handbook (refer to the LAM for additional information).

24-30 (Reserved)

PART 4 PRODUCTION WORKSHEET

31. General Information

A. Claims Information

- (1) The Production Worksheet is a progressive form containing all notices of damage for all preliminary 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 are to 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, or other reasons as 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) If the AIP determines the claim is to be “denied,” refer to the LAM for Production Worksheet completion instructions.
- *** (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 AIP.
- (5) For insured acreage that is harvested after it has been appraised, determine production to count in accordance with section 15(b) of the BP.

B. Production Worksheet

Instructions labeled “**PRELIMINARY**” apply to preliminary inspections only. Instructions labeled “**FINAL**” apply to final inspections only. Instructions not labeled apply to ALL inspections.

32-40 (Reserved)

Acronyms and Abbreviations

The following table provides the acronyms and abbreviations used in this handbook.

Approved Acronym/Abbreviation	Term
AIP	Approved Insurance Provider
BP	Common Crop Insurance Policy Basic Provisions (11-BR)
CAT	Catastrophic Risk Protection
CIH	Crop Insurance Handbook, FCIC-18010
CP	Crop Provisions
DSSH	Document and Supplemental Standards Handbook, FCIC-24040
FAD	Final Agency Determination
FCIC	USDA Federal Crop Insurance Corporation
LAM	Loss Adjustment Manual, FCIC-25010
RMA	USDA Risk Management Agency
SP	Special Provisions
SRA	Standard Reinsurance Agreement

Definitions

Bearing Trees are trees that meet the insurability requirements as stated in the **CP**.

Carton means the standard container for marketing the fresh-packed citrus fruit **commodity** as shown below, **unless otherwise provided in the SP**. In the absence of marketing records on a carton basis, production will be converted to cartons on the basis of the following average net pounds of packed fruit in a standard packed **carton, unless otherwise provided in the SP**.

<u>Container Size</u>	<u>Citrus Fruit Commodity</u>	<u>Pounds</u>
Container #58	Oranges	38
Container #58	Lemons	40
Container #59	Grapefruit	32
Container #63	Mandarins/Tangerines and Tangelos	25

“Over packed” containers used for the export market (e.g., a standard 38 pound container may have been packed with up to 50 pounds of fruit) should be converted to the equivalent standard pack, if the marketing record clearly indicates the fruit was packed for the export market. Divide the total packed weight by the specified standard packed container average net fruit weight for the **citrus fruit commodity/commodity** type to determine the equivalent number of standard packed containers.

Citrus fruit commodity means citrus fruit as follows:

- (1) Oranges;
- (2) Lemons;
- (3) Grapefruit;
- (4) Mandarins/Tangerines;
- (5) Tangelos; and
- (6) Any other citrus fruit commodity designated in the actuarial documents.

Citrus fruit group is a designation in the Special Provisions used to identify commodity types within a citrus fruit commodity that may be grouped together for the purposes of electing coverage levels and identifying the insured crop.

Commodity type means a specific subgroup of a citrus fruit commodity having a characteristic or set of characteristics distinguishable from other subgroups of the same citrus fruit commodity.

Crop year is the period beginning with the date insurance attaches to the insured crop and extending through normal harvest time. It is designated by the calendar year following the year in which the bloom is normally set.

Culls are fruit that are not marketable as fresh-packed fruit.

Cut means cutting of the sample fruit, in accordance with the state’s citrus laws and procedures, to examine the pulp and edible portion of the fruit for determination of percent of freeze damage.

Definitions (continued)

Direct Marketing is the sale of the insured crop directly to consumers without the intervention of an intermediary such as a wholesaler, retailer, packer, processor, shipper or buyer. Examples of direct marketing include selling through an on-farm or roadside stand, farmer's market, and permitting the general public to enter the field for the purpose of picking all or a portion of the **insured** crop.

Freeze Damaged Citrus (as defined by the laws of the state in which the county is geographically located) means citrus seriously damaged by freeze as determined by the AIP from grove inspections, proof furnished by the insured, or from other evidence that may be available. The California code will apply to the grove inspections in California for fruit which will be packed in Arizona; however, the Arizona code will apply to the packout furnished by the packinghouse in Arizona.

Grade Fruit means fruit that is marketable as fresh-packed fruit.

Graded Fruit means fruit that has been graded marketable as fresh-packed fruit.

Graft means to unite a bud or scion with a rootstock or interstock in accordance with recommended practices to form a living union.

Harvest is the severance of mature citrus from the tree by pulling, picking, or any other means, or by collecting marketable fruit from the ground.

Interplanted means acreage on which two or more agricultural commodities are planted in any form of alternating or mixed pattern.

Interstock means the area of the tree that is grafted to the rootstock.

Rootstock means the root and stem portion of a tree to which a scion can be grafted.

Scaffold limb means a major limb attached directly to the trunk.

Scion means a detached living portion of a plant joined to a rootstock or interstock in grafting.

Set out means transplanting a tree into the grove.

Topwork means grafting a scion onto a pruned scaffold limb.

Appraisal Worksheet Standards and Elements

A. General Instructions for all Appraisal Methods

- (1) Include the AIP's name in the appraisal worksheet title if not preprinted on the AIP's worksheet, when a worksheet entry is not provided.
- (2) Include the claim number on the appraisal worksheet (when required by the AIP) when a worksheet entry is not provided.
- (3) Separate appraisals are required for each unit or block inspected. Use separate lines on the appraisal worksheet for production that is damaged by uninsured causes. Refer to para. 21 C for sampling instructions.
- (4) An example worksheet is provided in **this** exhibit to illustrate how to complete entries.
- (5) Standard appraisal worksheet items are numbered consecutively below.

B. Appraisal Worksheet Items

Element/Item Number	Description
Company Name	***Name of AIP, if not preprinted on the worksheet.
Claim No.	***Claim number as assigned by the AIP, if required.
1. Insured's Name	Name of the insured that identifies EXACTLY the person (legal entity) to whom the policy is issued.
2. Policy No.	Insured's assigned policy number.
3. Crop Year	Four-digit crop year, as defined in the policy, for which the claim is filed.
4. Type and Kind of Citrus	Citrus fruit commodity name, commodity code, commodity type, and commodity type code as shown on the actuarial documents, for the variety of citrus grown.
5. Date of Damage	First three letters of the month during which MOST of the insured damage (including progressive damage) occurred. Include SPECIFIC DATE where applicable, as in the case of hail damage (e.g., Aug 11, YYYY).
6. Unit No.	Unit number from the Summary of Coverage after it is verified to be correct.
7. Acreage	Number of determined acres, to tenths, in the unit/block being appraised.
8. Number of Trees Having Unpicked Fruit	Number of trees on the unit/block being appraised having unpicked (unharvested) fruit.
PART I – Unpicked Fruit on the Tree	
9. Sample Number	Sample/block identification number.

Appraisal Worksheet Standards and Elements (continued)

B. Appraisal Worksheet Items (continued)

10. No. of Trees in Block	Number of unharvested bearing trees in the sample block determined by multiplying the number of unharvested trees per acre by the number of acres in the block (e.g. 90 trees per acre times 5 acres equals 450 trees in the block).
11. Acres in Block	Block acres (rounded to tenths).
12. Random Pick	Number of mature fruit randomly picked as instructed in para. 22 B.
13. Grade (12-14)	Number of grade fruit (marketable) in the sample. Enter the result of random pick (item 12) minus culls (item 14).
14. Culls	Number of cull fruit in the sample.
15. No. Fruit Cut	Number of graded fruit (item 13) cut per sample.
16. No. Fruit Lost	Number of graded fruit lost to freeze damage per sample. Enter zero if the cause of loss is not freeze.
17. Graded Fruit (15-16)	Calculate the number of graded fruit by subtracting the number of fruit lost (item 16) from the number of fruit cut (item 15).
18. Remarks	Remarks pertinent to the appraisal, sampling, conditions in general, disposition of fruit, appraisal date, etc.
Part II – Determination of the Production to Count	
19. Sample Number	Sample/block identification number.
20. Carton Size Fruit	Number of mature fruit required to fill carton.
21. Total Fruit Lost (14+16)	To determine the total fruit lost, add Culls (item 14) to number of fruit lost (item 16).
22. Graded Fruit	Number of graded (marketable) fruit. Enter the result in Part I, item 17.
23. % of Carton (22÷12)	Percent of graded fruit in the carton rounded to three decimal places. Graded fruit (item 22) divided by random pick (item 12).
24. No. of Fruit per Tree	The number of fruit per tree (including insured damaged fruit, uninsured damaged fruit, and marketable fruit).
25. Graded Fruit per Tree (23×24)	Percent of graded fruit in the carton (item 23) times number of fruit per tree (item 24), rounded to the nearest whole fruit.
26. Graded Ctn. per Tree (25÷20)	Graded cartons per tree rounded to the nearest tenth. Number of graded fruit per tree (item 25) divided by carton size fruit (item 20).
27. Total Trees per Acre	Total unharvested trees per acre rounded to the nearest whole tree. Result of number of unharvested trees in the block (item 10) divided by the number of acres in the block (item 11) from Part I or as determined by method in para. 22 B.

Appraisal Worksheet Standards and Elements (continued)

B. Appraisal Worksheet Items (continued)

28. Ctns. To Count per Acre (26×27)	Cartons to count per acre rounded to the nearest tenth: Graded cartons per tree (item 26) times total trees per acre (item 27). For uninsured cause of loss appraisals, multiply the uninsured cause per acre appraisal by item 19 in the PW, and enter this result in item 37 of the PW.
The following required entries are not illustrated on the appraisal worksheet example below.	
29. Adjuster's Signature, Code No., and Date	Signature of the adjuster, code number, 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.
30. Insured's Signature and Date	Insured's (or insured's authorized representative's) signature and date. BEFORE obtaining insured's signature, REVIEW ALL ENTRIES on the Appraisal Worksheet WITH THE INSURED, particularly explaining codes, etc., which may not be readily understood.
31. Page Number	Page numbers - (Example: Page 1 of 1, Page 1 of 2, Page 2 of 2, etc.).

Appraisal Worksheet Standards and Elements (continued)

C. Example Appraisal Worksheet

COMPANY: ANY COMPANYCLAIM NUMBER: xxxxxxx

FOR ILLUSTRATION PURPOSES ONLY Citrus Appraisal Worksheet	1 INSURED=S NAME I. M. INSURED	2 POLICY NUMBER XXXXXXX	3 CROP YEAR YYYY
	4 TYPE AND KIND OF CITRUS Oranges - 0227/Navel - 131	5 DATE OF DAMAGE DEC 7, YYYY	6 UNIT NUMBER 0001-0001 OU
	7 ACREAGE 35.0	8 NUMBER OF TREES HAVING UNPICKED FRUIT 1350	

PART I UNPICKED FRUIT ON THE TREE

Sample Number 9	No. of Trees in Block 10	Acres in Block 11	Random Pick 12	Grade (12-14) 13	Culls 14	Number Fruit Cut 15	Number Fruit Lost 16	Graded Fruit (15-16) 17
A	450	5.0	128	128	0	0	0	128
B	450	5.0	140	112	28	112	112	0
C	450	5.0	120	100	20 20	100	50	50

18 Remarks

APPROXIMATELY 2 CARTONS PER TREE ON GROUND DUE TO FREEZE.

NO FREEZE PROTECTION EQUIPMENT ON BLOCKS A AND B.

SEE MAP ON SPECIAL REPORT.

20 ACRES PICKED AND PACKED.

ACREAGE APPRAISED MM/DD/YYYY.

BLOCK A WILL DROP ON GROUND DUE TO SCALE; UNINSURABLE CAUSE OF LOSS.

BLOCK B WILL DROP ON GROUND. INSEPARABLE FREEZE DAMAGE CANNOT BE PACKED. PRODUCTION TO COUNT IS ZERO.

BLOCK C WAS PARTIALLY HARVESTED ("COLOR/CHERRY PICKED").

PART II DETERMINATION OF THE PRODUCTION TO COUNT

Sample Number 19	Carton Size Fruit 20	Total Fruit Lost (14+16) 21	Graded Fruit 22	% of Carton (22÷12) 23	No. of Fruit per Tree 24	Graded Fruit per Tree (23x24) 25	Graded Ctn. per Tree (25÷20) 26	Total Trees per Acre 27	Ctns. To Count per Acre (26x27) 28
A	128	0	128	1.000	625	625	4.9	90.0	441.0
B			No Production to Count-See Remarks						0
C	128	70	50	0.417	500	209	1.6	90.0	144.0

This form example does not illustrate all required entry items (e.g., signatures, etc.).

Production Worksheet Standards and Elements

- (1) An example Production Worksheet is provided herein to illustrate how to complete entries.
- (2) Standard Production Worksheet items are numbered consecutively below.

Element/Item Number	Description												
1. Crop/Code #	Enter the citrus fruit commodity name and the commodity code number. Applicable commodity code numbers are: <table border="1"> <thead> <tr> <th>Citrus Fruit Commodity</th><th>Code Number</th></tr> </thead> <tbody> <tr> <td>Oranges</td><td>0227</td></tr> <tr> <td>Lemons</td><td>0202</td></tr> <tr> <td>Tangelos</td><td>0203</td></tr> <tr> <td>Grapefruit</td><td>0201</td></tr> <tr> <td>Mandarins/Tangerines</td><td>0309</td></tr> </tbody> </table>	Citrus Fruit Commodity	Code Number	Oranges	0227	Lemons	0202	Tangelos	0203	Grapefruit	0201	Mandarins/Tangerines	0309
Citrus Fruit Commodity	Code Number												
Oranges	0227												
Lemons	0202												
Tangelos	0203												
Grapefruit	0201												
Mandarins/Tangerines	0309												
2. Unit #	Unit number from the Summary of Coverage verified as correct.												
3. Location Description	Location description may include section, township, and range; FSA Numbers, FSA CLU; tract numbers, GPS identifications; or Grid identifications.												
4. Date(s) of Damage	(a) First three letters of the month(s) during which the determined insured damage occurred for the inspection and the cause(s) of damage listed in item 5 below. If no entry in item 5 below MAKE NO ENTRY. (b) For progressive damage, enter in chronological order the month that identified when the majority of insured damage occurred. Include the specific date where applicable as in the case of hail damage. Example: Jan 11. (c) Enter additional dates of damage in the extra spaces, as needed. (d) If more space is needed, document additional dates of damage in the Narrative or on a Special Report. Refer to the illustration in item 6 below. Important: MAKE NO ENTRY if there is no insurable cause of loss, and a “No Indemnity Due” claim will be completed.												
5. Cause(s) of Damage	(a) Name of the determined insured cause(s) of damage as listed in the LAM for the date of damage listed in item 4 above for this inspection.												

Production Worksheet Standards and Elements (continued)

5. Cause(s) of Damage (continued)	(b) If an insured cause(s) of damage is coded as “Other,” explain in the Narrative. (c) Enter additional causes of damage in the extra spaces, as needed. (d) If more space is needed, document additional determined insured causes of damage in the Narrative or on a Special Report. Refer to the illustration in item 6 below. Important: If it is evident that no indemnity is due, enter “No Indemnity Due” across the column in item 5. Refer to the LAM for more information on no indemnity due claims.																		
6. Insured Cause %	PRELIMINARY: MAKE NO ENTRY. FINAL: Whole percent of damage for the insured cause of damage listed in item 5 above for this inspection. Enter additional “Insured Cause %” in the extra spaces, as needed. (a) If additional space is needed, enter the additional determined “Insured Cause %” in the Narrative or on a Special Report. The total of all “Insured Cause %” including those entered in the Narrative shall equal 100%. (b) Example entries for items 4 thru 6 and the Narrative, reflecting entries for multiple dates of damage, the corresponding insured causes of damage and insured cause percentages: <table border="1" data-bbox="493 1255 1466 1465"> <tr> <td>4. Date of Damage</td><td><i>May</i></td><td><i>Jun 30</i></td><td><i>Jun 30</i></td><td><i>Aug</i></td><td><i>Aug</i></td></tr> <tr> <td>5. Cause(s) of Damage</td><td><i>Excess-Moisture</i></td><td><i>Tornado</i></td><td><i>Hail</i></td><td><i>Drought</i></td><td><i>Heat</i></td></tr> <tr> <td>6. Insured Cause %</td><td><i>10</i></td><td><i>20</i></td><td><i>15</i></td><td><i>25</i></td><td><i>20</i></td></tr> </table> Narrative: <i>Date of additional damage – Sep 5; cause of damage – freeze; insured cause percent is 10%.</i> Important: MAKE NO ENTRY if there is no insurable cause of loss, and a “No Indemnity Due” claim will be completed.	4. Date of Damage	<i>May</i>	<i>Jun 30</i>	<i>Jun 30</i>	<i>Aug</i>	<i>Aug</i>	5. Cause(s) of Damage	<i>Excess-Moisture</i>	<i>Tornado</i>	<i>Hail</i>	<i>Drought</i>	<i>Heat</i>	6. Insured Cause %	<i>10</i>	<i>20</i>	<i>15</i>	<i>25</i>	<i>20</i>
4. Date of Damage	<i>May</i>	<i>Jun 30</i>	<i>Jun 30</i>	<i>Aug</i>	<i>Aug</i>														
5. Cause(s) of Damage	<i>Excess-Moisture</i>	<i>Tornado</i>	<i>Hail</i>	<i>Drought</i>	<i>Heat</i>														
6. Insured Cause %	<i>10</i>	<i>20</i>	<i>15</i>	<i>25</i>	<i>20</i>														
7. Company/Agency	Name of the AIP and agency servicing the contract.																		
8. Name of Insured	Name of the insured that identifies exactly the person (legal entity) to whom the policy is issued.																		
9. Claim #	Claim number as assigned by the AIP.																		

Production Worksheet Standards and Elements (continued)

10. Policy #	Insured's assigned policy number.
11. Crop Year	Four-digit crop year, as defined in the policy, for which the claim is filed.
12. Additional Units	PRELIMINARY: MAKE NO ENTRY. FINAL: (a) Unit number(s) for all non-loss units at final inspection. A non-loss unit is any unit with no completed Production Worksheet. (b) Enter additional non-loss units on a single Production Worksheet. Important: If more spaces are needed for non-loss units, enter such unit numbers, in the Narrative or on a Special Report.
13. Est. Prod. Per Acre	PRELIMINARY: MAKE NO ENTRY. FINAL: Estimated yield per acre, in whole cartons from all non-loss units for the insured crop at the time of final inspection.
14. Date(s) of Notice of Loss	PRELIMINARY: (a) Enter the date the first or second notice of damage or loss was given for the unit in item 2, in the 1st or 2nd space, as applicable. Enter the complete date for each notice in MM/DD/YYYY format. (b) A notice of damage or loss for a third preliminary inspection (if needed) requires an additional set of Production Worksheets. Enter the date of notice for a third preliminary inspection in the 1st space of item 14 on the second set of Production Worksheets. (c) Reserve the "Final" space on the first page of the first set of Production Worksheets for the date of notice for the final inspection. (d) If inspection is initiated by the AIP, enter "Company Insp" instead of the date. Important: If the notice does not require an inspection, document as directed in the Narrative instructions. FINAL: (a) Transfer the last date (in the 1st or 2nd space from first or second set of Production Worksheets) to the final space on the first page of the first set of Production Worksheets if a final inspection should be made as a result of the notice.

Production Worksheet Standards and Elements (continued)

14. Date(s) of Notice of Loss (continued)	(b) Always enter the complete date of notice for the “Final” inspection in the final space on the first page of the first set of Production Worksheets in MM/DD/YYYY format. Reminder: For delayed notice of loss or delayed claim, refer to the LAM.
15. Companion Policy(s)	(a) If no other person has a share in the unit (insured has a 100 percent share), MAKE NO ENTRY. (b) In all cases where the insured has less than a 100 percent share of a loss-affected unit, ask the insured if the other person sharing in the unit has a multiple-peril contract (not crop-hail, fire). If the other person does not, enter “None.” (1) if the other person has a multiple-peril contract and it can be determined that the same AIP services it, enter the contract number. Handle these companion policies according to AIP instructions. (2) if the other person has a multiple-peril contract and a different AIP or agent services it, enter the name of the AIP and/or agent (and contract number) if known. (3) if unable to verify the existence of a companion contract, enter “Unknown” and contact the AIP for further instructions. Reminder: Refer to the LAM for further information regarding companion contracts.

Section I – Determined Acreage Appraised, Production and Adjustments

Make separate line entries for varying:

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

Production Worksheet Standards and Elements (continued)

16. Field ID	The sample/block identification symbol from the appraisal worksheet, sketch map, or an aerial photograph, as applicable. Refer to the Narrative instructions.
17. Multi-Crop Code	MAKE NO ENTRY.
18. Reported Acres	(a) In the event of over-reported acres, handle in accordance with the individual AIP instructions. (b) In the event of under-reported acres, enter the reported acres to tenths for the unit/block. (c) If there are no under-reported acres, MAKE NO ENTRY. Reminder: Refer to the LAM or CIH for acreage determination specific to perennial commodities.
19. Determined Acres	PRELIMINARY AND FINAL: (a) Enter the determined acres to tenths (include “E” if estimated) for which consent is given for other use and/or: (1) put to other use without consent; (2) abandoned; (3) damaged by uninsured causes; (4) for which the insured failed to provide acceptable records of production. (5) from which production was sold by direct marketing if the insured failed to meet the requirements contained in the CP. (b) Refer to the LAM for procedures regarding when estimated acres are allowed and documentation requirements. Reminder: Refer to the LAM or CIH for definition of acceptable determined acres for perennial commodities used herein. FINAL ONLY: Determined acres to tenths. (a) Acreage breakdowns within a unit may be estimated (enter “E” in front of the acres) if a determination is impractical. (b) Account for all planted acreage in the unit.
20. Interest or Share	Insured’s interest in the insured crop to three-decimal places as determined at the time of inspection. If shares vary on the same unit, use separate line entries.

Production Worksheet Standards and Elements (continued)

21. Risk	Three digit code for the correct “Rate” specified on the actuarial document maps. If a “Rate” or “High Risk Area” is not specified on the actuarial document maps, MAKE NO ENTRY. Verify with the Summary of Coverage, and if the “Rate” is found to be incorrect, revise according to the AIP’s instructions. Refer to the LAM. Unrated land is uninsurable without a written agreement.
22. Type	Three-digit type code number, entered exactly as specified on the actuarial documents. If “No Type Specified” is shown in the actuarial documents, enter the appropriate three-digit type code number from the actuarial documents (997). If a type is not specified on the actuarial documents, MAKE NO ENTRY.
23. Class	Three-digit class code number, entered exactly as specified on the actuarial documents. If “No Class Specified” is shown in the actuarial documents, enter the appropriate three-digit type code number from the actuarial documents (997). If a class is not specified on the actuarial documents, MAKE NO ENTRY.
24. Sub Class	Three-digit sub class code number, entered exactly as specified on the actuarial documents. If “No Sub Class Specified” is shown in the actuarial documents, enter the appropriate three-digit type code number from the actuarial documents (997). If a sub class is not specified on the actuarial documents, MAKE NO ENTRY.
25. Intended Use	Three-digit intended use code number, entered exactly as specified on the actuarial documents. If “No Intended Use Specified” is shown in the actuarial documents, enter the appropriate three-digit type code number from the actuarial documents (997). If an intended use is not specified on the actuarial documents, MAKE NO ENTRY.
26. Irr. Practice	Three-digit code number, entered exactly as specified on the actuarial documents for the irrigated practice carried out by the insured. If “No Irrigated Practice Specified” is shown in the actuarial documents, enter the appropriate three-digit code number from the actuarial documents (997). If an irrigated practice is not specified on the actuarial documents, MAKE NO ENTRY.
27. Cropping Practice	Three-digit cropping practice code number, entered exactly as specified on the actuarial documents. If “No Cropping Practice Specified” is shown in the actuarial documents, enter the appropriate three-digit code number from the actuarial documents (997). If a cropping practice is not specified on the actuarial documents, MAKE NO ENTRY.

Production Worksheet Standards and Elements (continued)

28. Organic Practice	Three-digit code number, entered exactly as specified on the actuarial documents for the organic practice carried out by the insured. If “No Organic Practice Specified” is shown in the actuarial documents, enter the appropriate three-digit code number from the actuarial documents (997). If an organic practice is not specified on the actuarial documents, MAKE NO ENTRY.												
29. Stage	PRELIMINARY: MAKE NO ENTRY. FINAL: Stage abbreviation as shown below. <table border="1"> <thead> <tr> <th><u>STAGE</u></th><th><u>EXPLANATION</u></th></tr> </thead> <tbody> <tr> <td>“P”</td><td>Acreage abandoned without consent, put to other use without consent, damaged solely by uninsured causes, for which the insured failed to provide records of production which are acceptable to the AIP, or from which production was sold by direct marketing if the insured failed to meet the requirements contained in the CP.</td></tr> <tr> <td>“H”</td><td>***Harvested. Includes harvesting a portion of the insured crop on the acreage in a random manner, requiring an appraisal for any remaining production. Enter an appraisal for any such remaining production in item 31 and/or, if applicable, an appraisal for uninsured damage in item 37 on the Production Worksheet</td></tr> <tr> <td>“UH”</td><td>Unharvested or put to other use with consent.</td></tr> </tbody> </table> ***Reminder: Refer to the LAM for information on gleaning.	<u>STAGE</u>	<u>EXPLANATION</u>	“P”	Acreage abandoned without consent, put to other use without consent, damaged solely by uninsured causes, for which the insured failed to provide records of production which are acceptable to the AIP, or from which production was sold by direct marketing if the insured failed to meet the requirements contained in the CP.	“H”	***Harvested. Includes harvesting a portion of the insured crop on the acreage in a random manner, requiring an appraisal for any remaining production. Enter an appraisal for any such remaining production in item 31 and/or, if applicable, an appraisal for uninsured damage in item 37 on the Production Worksheet	“UH”	Unharvested or put to other use with consent.				
<u>STAGE</u>	<u>EXPLANATION</u>												
“P”	Acreage abandoned without consent, put to other use without consent, damaged solely by uninsured causes, for which the insured failed to provide records of production which are acceptable to the AIP, or from which production was sold by direct marketing if the insured failed to meet the requirements contained in the CP.												
“H”	***Harvested. Includes harvesting a portion of the insured crop on the acreage in a random manner, requiring an appraisal for any remaining production. Enter an appraisal for any such remaining production in item 31 and/or, if applicable, an appraisal for uninsured damage in item 37 on the Production Worksheet												
“UH”	Unharvested or put to other use with consent.												
30. Use of Acreage	Enter the applicable abbreviation as follows: <table border="1"> <thead> <tr> <th><u>USE</u></th><th><u>EXPLANATION</u></th></tr> </thead> <tbody> <tr> <td>“Bulldozed,” and so forth.....</td><td>Use made of acreage</td></tr> <tr> <td>“WOC”</td><td>Other use without consent</td></tr> <tr> <td>“SU”</td><td>Solely uninsured</td></tr> <tr> <td>“ABA”</td><td>Abandoned without consent</td></tr> <tr> <td>“DMWO”</td><td>Production sold by direct marketing without proper 15-day notice adversely affecting appraisals</td></tr> </tbody> </table>	<u>USE</u>	<u>EXPLANATION</u>	“Bulldozed,” and so forth.....	Use made of acreage	“WOC”	Other use without consent	“SU”	Solely uninsured	“ABA”	Abandoned without consent	“DMWO”	Production sold by direct marketing without proper 15-day notice adversely affecting appraisals
<u>USE</u>	<u>EXPLANATION</u>												
“Bulldozed,” and so forth.....	Use made of acreage												
“WOC”	Other use without consent												
“SU”	Solely uninsured												
“ABA”	Abandoned without consent												
“DMWO”	Production sold by direct marketing without proper 15-day notice adversely affecting appraisals												

Production Worksheet Standards and Elements (continued)

30. Use of Acreage (continued)	“H”..... Harvested “HI”..... Harvest incomplete, with an appraisal “UH”..... Unharvested Important: Verify any “Use of Acreage” 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 “Use of Acreage.” Reminder: Refer to the LAM for information on gleanings.
31. Appraised Potential	Transfer the per-acre appraisal in cartons, to tenths, of POTENTIAL production from appraised acreage from item 28 on the Appraisal Worksheet when loss is due to an insured cause. See appraisal methods for additional instructions. If there is no potential on UH acreage, enter “0,” (zero). ***Reminder: Refer to the LAM for procedures for documenting “0” (zero) yield appraisals.
32a.-33.	MAKE NO ENTRY.
34. Production Pre QA	Column 19 multiplied by column 31, results in cartons rounded to tenths.
35. Quality Factor	Under section 15 (j) of the BP, if due to insured causes, a Federal or State agency has ordered the appraised insured crop or production to be destroyed, enter the factor “0.000.” Otherwise, MAKE NO ENTRY. In these cases, instruct the insured to complete and submit a Certification Form stating the date the insured crop or production WAS DESTROYED and the method of destruction (refer to item 40 and the Narrative below). ***Important: Refer to the LAM for additional information. Reminder: Include a copy of all supporting quality adjustment documentation in the insured’s claim file.
36. Production Post-QA	Make the following entries in cartons, rounded to tenths. (a) For appraisal <u>with</u> quality adjustment: Column 34 multiplied by column 35. (b) For appraisals <u>without</u> quality adjustment: Transfer entry from column 34.

Production Worksheet Standards and Elements (continued)

37. Uninsured Causes	Make the following entries in cartons, rounded to tenths. For uninsured cause appraisals, column 19 multiplied by the per-acre appraisal in item 28 on the appraisal worksheet for uninsured causes or other documentation; otherwise, MAKE NO ENTRY. (a) Hail and fire exclusion <u>not</u> in effect. (1) Enter the result of multiplying item 19 by not less than the insured’s production guarantee per acre for the line, (calculate by multiplying the elected coverage level percentage times the approved APH yield per acre shown on the APH form) for any “P” stage acreage. 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 result of multiplying appraised uninsured loss of production per acre by item 19. Refer to the LAM for information regarding assessing uninsured cause appraisals. (b) Refer to the LAM when a Hail and Fire Exclusion is in effect and damage is from hail or fire. (c) Enter the result of adding uninsured cause appraisals to hail and fire exclusion appraisals. Reminder: For fire losses, if the insured also has other fire insurance (double coverage), refer to the LAM.																
38. Total to Count	Column 36 plus column 37, results in cartons to tenths.																
39. Total	Total of column 19 acres rounded to tenths.																
40. Quality	Check the applicable qualifying quality adjustment condition(s) affecting the unit’s appraised and harvested production (refer to the table below). Important: Refer to the CP and SP for quality conditions. <table><tr><th colspan="4">Qualifying Quality Adjustment Conditions Table</th></tr><tr><td>TW</td><td>Vomitoxin</td><td>Dark Roast</td><td>CoFo</td></tr><tr><td>KD</td><td>Fumonisin</td><td>Sclerotinia</td><td>Other</td></tr><tr><td>Aflatoxin</td><td>Garlicky</td><td>Ergoty</td><td>None</td></tr></table>	Qualifying Quality Adjustment Conditions Table				TW	Vomitoxin	Dark Roast	CoFo	KD	Fumonisin	Sclerotinia	Other	Aflatoxin	Garlicky	Ergoty	None
Qualifying Quality Adjustment Conditions Table																	
TW	Vomitoxin	Dark Roast	CoFo														
KD	Fumonisin	Sclerotinia	Other														
Aflatoxin	Garlicky	Ergoty	None														

Production Worksheet Standards and Elements (continued)

40. Quality (continued)	(a) Check “Other” if the identified injurious substances or conditions are not listed in the table above for production ordered destroyed by a Federal or State agency. (1) Identify the injurious substance or condition, the date the insured crop was destroyed and the method of destruction in the Narrative or on a Special Report. (2) Attach to the claim, the completed Certification Form, a copy of the destruction order, and if possible a copy of the laboratory test results confirming the presence of any injurious substances or conditions. (b) Otherwise, check “None.”
41. Mycotoxins exceed FDA, State, or other health organization maximum limits	Check “Yes” if any mycotoxin listed in item 40 (including any identified as “Other”) exceed the Federal, State, or other health organization maximum limits; otherwise, MAKE NO ENTRY. Document reasons for checking “Yes” in the Narrative.
42. Totals	Separately total columns 34, 36, 37, and 38 in cartons to tenths. MAKE NO ENTRY if a column has no entries.
Narrative	If more space is needed, document on a Special Report, and enter “See Special Report.” Attach the Special Report to the Production Worksheet. (a) Explain any delayed notices or delayed claims as instructed in the LAM. (b) If no acreage is released on the unit, enter “No Acreage Released,” adjuster’s initials, and date. (c) If notice of damage was given and no inspection is necessary, enter the unit number(s), “No Inspection,” date, and adjuster’s initials (do not enter unit numbers for which notice has not been given). The insured’s signature is not required. (d) Explain any uninsured causes, unusual, or controversial cases. (e) If there is an appraisal in column 37 for uninsured causes due to a hail/fire exclusion, show the original hail/fire liability per acre and the hail/fire indemnity per acre.

Production Worksheet Standards and Elements (continued)

Narrative (continued)	(f) Document the actual appraisal date if an appraisal was performed prior to the adjuster's signature date on the appraisal worksheet, and the date of the appraisal if not recorded on the appraisal worksheet. (g) State that there is "No Other Fire Insurance" when fire damages or destroys the insured crop and it is determined that the insured has no other fire insurance. Also refer to the LAM. (h) Explain any errors found on the Summary of Coverage. (i) Explain any commingled production. Refer to the LAM. (j) Explain any entry for "Production Not to Count" in column 62, and/or any production not included in column 56 entries. Example: Harvested production from uninsured acreage that can be identified separately from the insured acreage in the unit. (k) Explain a "No" checked in item 44. (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 uninsured causes are present; or (3) for unusual or controversial cases. Important: Indicate on the aerial photograph 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 Production Worksheet for signature. (n) When any other adjuster or supervisor accompanied the adjuster on the inspection, enter the code number of the other adjuster or supervisor and date of inspection. (o) Explain the reason for a "No Indemnity Due" claim. No Indemnity Due claims are to be distributed in accordance with the AIP's instructions.
---	---

Production Worksheet Standards and Elements (continued)

Narrative (continued)	(p) Document any authorized estimated acres shown in column 19 as follows: “Line 3 ‘E’ acres authorized by AIP MM/DD/YYYY.” (q) Document the method and calculation used to determine acres for the unit. Refer to the LAM. (r) For production ordered destroyed by a Federal or State agency due to the presence of injurious substances or conditions, document the following: (1) explain any “0.000” quality adjustment factor entered in columns 35 and 65. (2) follow the documentation requirements listed in items 40 and 41 above. (3) refer to the LAM for additional documentation requirements. (s) Explain if there is no market value for any appraised potential of citrus fruit. (t) Document the name and address of the charitable organization when gleaned acreage is applicable. Reminder: Refer to the LAM for more information on gleaning. (u) Document any other pertinent information, including any data to support any factors used to calculate the production, other than harvested fresh production calculations, and harvest cost calculations. (w) 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. (v) Verify whether or not frost protection is in place and adequate as defined in the SP when the insured has elected the frost protection option, and whether or not such frost protection was properly utilized if the cause of loss is frost related.
---	---

Production Worksheet Standards and Elements (continued)

Section II – Determined Harvested Production

- (1) When all acreage has been harvested, determine total production from warehouse receipts, packer/processor receipts, or farm management records (refer to the LAM for farm record requirements) verified by the adjuster and supported by written records from the first handler. This production will be the basis for computing losses from the insured and uninsured causes of damage on the Production Worksheet.
- (2) Account for ALL HARVESTED PRODUCTION (for ALL ENTITIES sharing in the insured crop) except production appraised BEFORE harvest and shown in SECTION I because the quantity cannot be determined later.
- (3) For production commercially stored, sold, etc., enter the name and address of storage facility, buyer, packing house, or processor as applicable in column 49 through 52. For fruit otherwise disposed of, indicate the method of disposition (e.g., sold at roadside stand, etc.)
- (4) If additional lines are necessary, the data may be entered on a continuation sheet. USE SEPARATE LINES FOR:
 - (a) Different FIRST handlers (buyers, packing houses, or processors). The insured must have maintained satisfactory records of ALL production sold or stored. Verify any packing house or processor records. In all localities, if the first handler was not a packer or processor, the production will be determined by the adjuster on the basis of available records.
 - (b) Varying shares; e.g., 50 percent and 75 percent shares on the same unit.
 - (c) Varying determinations of production (varying value, etc.).
 - (d) Varying practices or types/varieties when a separate approved APH yield exists.
- (5) There will generally be no harvested production entries in columns 47a through 68 for preliminary inspections.
- (6) Citrus fruit that cannot be marketed as fresh-packed fruit due to insurable causes will not be considered production to count.

Production Worksheet Standards and Elements (continued)

43. Date Harvest Completed	Date in MM/DD/YYYY format that is used to determine if there is a delayed notice or a delayed claim. Reminder: Refer to the LAM for delayed notice or delayed claim information. PRELIMINARY: MAKE NO ENTRY. FINAL: (a) The earlier of the date the entire acreage on the unit was (1) harvested, (2) totally destroyed, (3) put to other use, (4) a combination of harvested, destroyed, or put to other use, or (5) the calendar date for the end of the insurance period. (b) If at the time of final inspection (if prior to the end of the insurance period), there is any unharvested insured acreage remaining on the unit that the insured does not intend to harvest, enter “Incomplete.” (c) If at the time of final inspection (if prior to the end of the insurance period), <u>none</u> of the insured acreage on the unit has been harvested, and the insured does not intend to harvest such acreage, enter “No Harvest.” Important: If claim utilizes a Certification Form, enter date from such form when the entire unit is put to another use. Refer to the LAM.
44. Damage Similar to Other Farms in the Area?	PRELIMINARY: MAKE NO ENTRY. FINAL: Check “Yes” or “No.” Check “Yes” if amount and cause of damage due to insurable causes is similar to the experience of other orchards in the area. If “No” is checked, explain in the Narrative.
45. Assignment of Indemnity	Check “Yes” <u>only</u> if an assignment of indemnity is in effect for the crop year; otherwise, check “No.” Refer to the LAM.
46. Transfer of Right to Indemnity	Check “Yes” <u>only</u> if a transfer of right to an indemnity is in effect for the unit for the crop year; otherwise, check “No.” Refer to the LAM.
47a. Share	Record only varying shares on same unit to three decimal places.
47b. Field ID	(a) If only one practice and/or type of harvested production is listed in section I, MAKE NO ENTRY. (b) If more than one practice and/or type of harvested production is listed in Section I, and a separate approved APH yield exists, indicate for each practice/type, the corresponding Field ID (from column 16).
48. Multi-Crop Code	MAKE NO ENTRY.

Production Worksheet Standards and Elements (continued)

49.-52. Length or Diameter/Width/Depth/Deduction	(a) For production that is stored or sold: Enter the name and address of the buyer, packing house, or processor, as applicable. (b) For production otherwise disposed of: Identify method of disposition.
53.-55.	MAKE NO ENTRY.
56. Bu., Ton, Lbs., Cwt.	(a) Line out the column heading and enter “Cartons.” Enter the total marketable harvested production in cartons, rounded to tenths. (b) Cartons may require conversion from the size used by the packing house to the carton sizes defined in the policy. The adjuster should contact the packing house to verify the carton size used (e.g., if the packing house used a 25 pound carton for a particular type of fruit and the carton size specified by the policy is 38 pounds, the adjuster must convert the production to the equivalent of 38 pound cartons before entering the gross harvested production). Refer to the definition for “carton” in exhibit 2 for standard container sizes and production packed for export. Show conversion calculations in the Narrative
57.-60b.	MAKE NO ENTRY.
61. Adjusted Production	Transfer entry from column 56.
62. Prod. Not to Count	Net production <u>not to count</u> in cartons rounded 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 such as other units or uninsured acreage. This entry must never exceed entry in column 56 for harvested production shown on the same line. Reminder: Explain any “Production not to Count” in the Narrative.
63. Production Pre-QA	Make the following entries in cartons, to tenths. (a) When there is an entry in column 62: Column 61 minus column 62. (b) When there is no entry in column 62: Transfer entry from column 61.
64a. Value	MAKE NO ENTRY.
64b. Mkt. Price	MAKE NO ENTRY.
65. Quality Factor	***Under section 15 (j) of the BP, if due to insured causes, a Federal or State agency has ordered the appraised insured crop or production to be destroyed, enter the factor “0.000.”

Production Worksheet Standards and Elements (continued)

65. Quality Factor (continued)	Instruct the insured to complete and submit a Certification Form stating the date the insured crop or production was destroyed and the method of destruction (refer to items 35 and 40, and the Narrative).
66. Production to Count	***Transfer entry from column 63.
67. Total	***Total of column 63 entries in cartons, to tenths. If no entry in column 63, MAKE NO ENTRY.
68. Section II Total	PRELIMINARY: MAKE NO ENTRY *** FINAL: Total of column 66 entries, result in cartons, to tenths.
69. Section I Total	PRELIMINARY: MAKE NO ENTRY *** FINAL: Total of column 38 entries, result in cartons, to tenths.
70. Unit Total	PRELIMINARY: MAKE NO ENTRY *** FINAL: Item 68 plus item 69, result in cartons, to tenths.
71. Allocated Prod.	(a) Total production in cartons, rounded to tenths, allocated to this unit that is included in sections I or II of the Production Worksheet. (b) Document how allocated production was determined and record supporting calculations in the Narrative or on a Special Report. *** Reminder: Refer to the LAM for instructions for determining allocated production.
72. Total APH Prod.	***Make the following entry in cartons, to tenths. (a) When there are entries in column 37 and/or item 71: Item 70 minus item 71, minus total of column 37. (b) When there is no entry in item 71 and column 37: Transfer entry from item 70. Important: MAKE NO ENTRY when separate APH yields are maintained by type, practice within the unit.

Production Worksheet Standards and Elements (continued)

The following required entries are not illustrated on the Production Worksheet example.	
73. Insured's Signature and Date	(a) Insured's or insured's authorized representative's signature and date. (b) Before obtaining the insured's signature, review all entries on the Production Worksheet with the insured or insured's authorized representative, particularly explaining codes, etc., that may not be readily understood. (c) Final indemnity inspections should be signed on the bottom line.
74. Adjuster's Signature, Code # and Date	(a) Signature of adjuster, code number, and date signed after the insured or insured's authorized representative has signed. (b) 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. (c) Final indemnity inspections should be signed on the bottom line.
75. Page Numbers	PRELIMINARY: Page numbers - "1," "2," etc., at the time of inspection. FINAL: Page numbers. Example: Page 1 of 1, Page 1 of 2, Page 2 of 2 and so forth.

Production Worksheet Example

PRODUCTION WORKSHEET

1. Crop/Code # Mandarins/Tangerines 0309	2. Unit # 0001-0001 OU	3. Location Description NW6-14N-30W	7. Company Agency Any Company Any Agency	8. Name of Insured I. M. Insured																					
4. Date(s) of Damage JAN 10	5. Cause(s) of Damage Freeze	6. Insured Cause % 100	12. Additional Units 0001-0002 OU	13. Est. Prod. Per Acre 650	9. Claim # XXXXXXX										11. Crop Year YYYY										
10. Policy # XXXXXX										14. Date(s) Notice of Loss MM/DD/YYYY										1st MM/DD/YYYY		2nd MM/DD/YYYY		Final MM/DD/YYYY	
15. Companion Policy(s)																									
SECTION I – DETERMINED ACREAGE APPRAISED PRODUCTION AND ADJUSTMENTS																									
A. ACTUARIAL															B. POTENTIAL YIELD										
16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.	31.	32a.	32b.	33.	34.	35.	36.	37.	38.		
Field ID	Multi-Crop Code	Reported Acres	Determined Acres	Interest or Share	Risk	Type	Class	Sub-Class	Intended Use	Irr Practice	Cropping Practice	Organic Practice	Stage	Use of Acreage	Appraised Potential	Moisture % Factor	Shell %, Factor, or Value	Production Pre QA	Quality Factor	Production Post QA	Uninsured Causes	Total to Count			
A			5.0	1.000		141				002		997	P	SU								2205.0	2205.0		
B			5.0	1.000		143				002		997	UH	UH	0.0			0.0		0.0		0.0			
C			5.0	1.000		143				002		997	H	HI	144.0			720.0		720.0		720.0			
D			20.0	1.000		143				002		997	H	H											
39. TOTAL		35.0	40. Quality: TW ☐ KD ☐ Aflatoxin ☐ Vomitoxin ☐ Fumonisin ☐ Garlicky ☐ Dark Roast ☐ Sclerotinia ☐ Ergoty ☐ CoFo ☐ Other ☐ None ☒														42. TOTALS		720.0		720.0	2205.0	2925.0		
41. Do any mycotoxins exceed FDA, State or other health organization maximum limits? Yes ☐ No ☒																									

NARRATIVE (If more space is needed, attach a Special Report): ACREAGE DETERMINED USING GPS. BLOCK A UNINSURABLE CAUSE OF LOSS DUE TO SCALE (441.0 ctns. x 5.0 acres = 2205.0). BLOCK B WILL DROP TO THE GROUND DUE TO INSEPARABLE FREEZE DAMAGE. BLOCK C WAS “CHERRY PICKED.” HARVESTED PRODUCTION IN SECTION II BELOW REPRESENTS PRODUCTION FROM BOTH BLOCK C (450 CARTONS) AND D (7825 CARTONS).

SECTION II – DETERMINED HARVESTED PRODUCTION																								
43. Date Harvest Completed MM/DD/YYYY						44. Damage similar to other farms in the area? Yes ☒ No ☐						45. Assignment of Indemnity Yes ☐ No ☒						46. Transfer of Right to Indemnity? Yes ☐ No ☒						
A. MEASUREMENTS						B. GROSS PRODUCTION						C. ADJUSTMENTS TO HARVESTED PRODUCTION												
47a.	48.	49.	50.	51.	52.	53.	54.	55.	56.	57.	58a.	59a.	60a.	61.	62.	63.	64a.	65.	66.					
47b.											58b.	58b.	60b.				64b.							
Share	Multi-Crop Code	Length or Diameter	Width	Depth	Deduction	Net Cubic Feet	Conversion Factor	Gross Prod.	Bu., Ton Lbs., CWT Cartons	Shell/ Sugar Factor	FM%	Moisture %	Test WT	Adjusted Production	Prod. Not to Count	Production Pre-QA	Value	Quality Factor	Production to Count					
Field ID											Factor	Factor	Factor				Mkt. Price							
		Acme Fruit Co. Anytown, State							8275.0					8275.0		8275.0			8275.0					
67. TOTAL																8275.0	68. Section II Total				8275.0			
																69. Section I Total				2925.0				
																70. Unit Total				11,200.0				
																71. Allocated Prod.								
																72. Total APH Prod.				8995.0				

EXAMPLE AZ-CA CITRUS CLAIM

(For Illustration Purposes Only)

This form example does not illustrate all required entry items (e.g., signatures, etc.).

Minimum Representative Sample Requirements

Acres in Unit or Block:	Minimum Number of Trees in a Sample:
0.1 – 10.0	The lesser of 5 trees or 5% of the number of trees.
One additional sample is required for each additional 10.0 acres (or fraction thereof) in the unit/block.	

Determining Insurable Acreage by Variety

- (1) Scattered trees are defined as two or more varieties in a grove in no definite planting pattern. Scattered trees of different citrus varieties on a unit will be included in the predominant variety of the unit and will not be listed on separate lines of the acreage report, unless the number of trees of a separate variety exceeds 5%.

Example: A 10.0 acre grove with a total of 900 trees, 860 are Valencias and 40 are Navels. The entire acreage is insurable as Valencias. The insurable acreage is 10.0 acres since the Valencias cover the entire acreage while the Navel variety is scattered in no definite pattern over the acreage, and represents only 4 percent of the total trees.

- *** (2) Interplanted citrus in the same grove will be broken down by **commodity type** (for insurance purposes) based on tree spacing, number of trees, and the total acreage involved.

Example 1: A 10.0 acre grove contains 700 trees on a 25' x 25' spacing with every even numbered tree or row a Valencia, and every odd numbered tree or row a Navel. Use the total grove acreage together with the tree spacing, and planting pattern to determine the insurable acreage. In this example the insurable acreage is 5.0 acres of Valencias, and 5.0 acres of Navels. This interpretation will not change regardless of what the insured elects to insure.

Example 2: A 10.0 acre grove contains 700 trees on a 25' x 25' spacing in a three row planting pattern with Valencia trees in the first row and Navel trees in the second and third rows. This pattern contains a total of 233 Valencia trees and 467 Navel trees. The insurable acreage would be 3.3 acres or one-third Valencias and 6.7 acres or two-thirds Navels.

- (3) Replants of insurable varieties in an established interplanted pattern will not be considered for insurance purposes until the trees reach insurable age requirements stated in the policy.
- (4) Grove examination based on the amount and location of insured damage, the adjuster should consider the following to conduct accurate appraisals.
 - (a) Number of fruit for each sample.
 - (b) The location in the grove where the samples will be taken.
 - (c) As a general rule, do not break a unit down into more than one block unless there are areas within the unit with permanent boundaries or "blocks."

Determining Insurable Acreage by Variety (continued)

(5) Representative sample considerations.

The adjuster should consider the following points to determine the location of trees and number of citrus fruit required for obtaining accurate representative samples:

- (a) The number of trees with unpicked citrus fruit.
- (b) Tree age and size variation.
- (c) The variation in ground elevation.
- (d) The variability of fruit damage by location in the grove and on individual trees.
- (e) The location of the fruit on the tree.
- (f) The condition of the trees (never obtain samples from weaker than average trees).
- (g) Generally, the smaller the sample of trees and citrus fruit taken, the greater the chance that inaccurate appraisals will be made. Trees sampled should be representative of the trees in the unit having unpicked fruit. Use at least a 100 citrus fruit sample in any block.

Arizona Citrus Laws and Procedures

A. Laws

Applicable portions of the laws are quoted in part as follows: “In this article, unless the context otherwise requires:”

- (1) “Citrus” means the fruit of any orange, lemon, lime, grapefruit, tangerine, kumquat, or other citrus tree which produces edible citrus fruit suitable for human consumption.”
- (2) Tangerine or Mandarins shall include all varieties and hybrids of the mandarin group, and all varieties of tangelos.
- (3) A defect is serious in citrus fruits when the following conditions appear:
 - (a) Damage by freezing or drying from any cause if twenty percent or more of the pulp or edible portion of the fruit shows evidence of drying or a mushy condition, or, in a lemon, of staining, except membranous stain. Evidence of damage shall be determined by as many cuts of each fruit as may be necessary.”
 - (b) “In an orange, freezing damage is serious when surface membranes show a water soaked appearance, or evidence of previous water-soaking, or the presence of crystals or crystalline deposits on the two surface membranes on each of two or more segments, as shown on the separation of the segments one from another, of a section not less than one inch or more than one and one-half inch in thickness, of the central portion of the fruit, obtained by cutting off a portion of each end - the evidence of freezing injury to show the entire length but not necessarily the entire area of the surface membranes.”
- (4) “Tolerances”
 - (a) “Not more than 10 percent by count of the oranges, tangerines, or grapefruit in any one container may be seriously damaged by freezing or drying from any cause. When serious damage by freezing or drying from any cause is present, the combined tolerance for all defects shall not exceed fifteen percent.”
 - (b) “Not more than ten percent by count of the lemons in any one container may be seriously damaged by freezing, internal decline, sunburn or drying from any cause. When serious damage by freezing, internal decline, sunburn or drying from any cause is present, the combined tolerance of all defects shall not exceed 10 percent.”

B. Procedures.

As will be noted above, the Arizona Fruit and Vegetable Standardization Laws (Sec. 3-452, Par. 2) provides as follows: “Evidence of damage shall be determined by as many cuts of each fruit as may be necessary.” This immediately follows the provision that defines serious damage in citrus fruits as 20 percent or more of the pulp or edible portion of the fruit showing evidence of drying or a mushy condition.

- (1) Multiple cuts have been provided for in the past several years in Arizona. This means that adjusters can use the transverse center cut; cuts midway between the center and stem end; cuts midway between the center and styler end; or, any other cut which shows whether or not the fruit is 20 percent damaged.
- (2) The Supervisor of Standardization in Arizona does not establish dates when the inspectors begin using multiple cuts. The inspectors start using such cuts when drying has developed to the point where the percent of pulp affected can be clearly seen. Adjusters should proceed in the same manner as do the inspectors and industry people.

California Orange Laws and Procedures

A. Orange Laws (applicable portions quoted in part).

- (1) Freezing Damage. Damage from freezing to any one fruit is serious if it causes either a condition of (a) “damage on the segment walls” to the extent defined herein, or (b) “drying or desiccation” in 20 percent or more of the exposed pulp as shown on a transverse cut through the center.”
- (2) Damage on Segment Walls. “Damage on segment walls” means a water-soaked appearance, or evidence of previous water soaking, or the presence of crystals or crystalline deposits, on the two surface membranes of each of two or more segments of a section, which section shall not be less than one inch or more than one and one-half inches in thickness, obtained from the center portion of the fruit by cutting off a portion of each end such evidence of freezing injury to show for the entire length but not necessarily the entire area of the surface membranes.”
- (3) Determination of Extent of Freezing Damage. In any season in which freezing damage to oranges produced in California has occurred, the extent of damage by freezing to such oranges shall be determined as follows:”
 - (a) By examination for damage on the segment walls from and after the time when the oranges were first exposed to freezing temperatures to the date, herein designated as Date A, when the director, after survey, shall make a determination in writing that the drying process has developed to such extent as to furnish additional evidence of the extent of actual damage to the fruit.”
 - (b) By examination of the exposed pulp on a transverse cut through the center, from and after the date, herein designated as Date B, when the director, after survey, shall make a determination in writing that the drying process has developed to such extent as to permit reasonably accurate determination of the full extent of freezing damage by such examination, without regard to damage on the segment walls.”
 - (c) Either by examination for damage on the segment walls or by examination of the exposed pulp on a transverse cut through the center, or by such examination, during the period from Date A to Date B. In no event shall the interval from Date A to Date B exceed three weeks.”
- (4) Tolerances. In the case of serious damage by freezing injury, not more than 15 percent, by count, of the oranges in any one container or bulk lot may be below these requirements, but not to exceed one-third of this tolerance shall be allowed for oranges which show a “drying or desiccation” in 40 percent or more of the exposed pulp, as shown on a transverse cut through the center. The total tolerance for a combination of defects shall not exceed the tolerance permitted for any one cause by more than 5 percent by count.”

California Orange Laws and Procedures (continued)**B. Orange Procedures.**

- (1) From the foregoing, it will be noted that the manner in which the determination of the extent of freeze damage is governed by dates established by the Director of Agriculture of the State of California as follows:

PERIOD	METHOD OF DETERMINATION
From and after the time of exposure to freezing temperatures to the establishment of Date A in A(3)(a) of this section.	By examination for damage on the segment walls.
From and after the establishment of Date B in A(3)(b) of this section.	By examination of the exposed pulp on a transverse cut through the center.
During the interval (not exceeding three weeks) from Date A to Date B.	By either or both of the above methods.

- (2) Regulations of the Department of Agriculture for California provide that during the interval from Date A to Date B, if an individual orange is found to have less damage than “serious damage due to freezing” by one method of examination, it shall also be examined for damage by the other method; and, the total of the seriously damaged oranges found by both methods shall be the number of seriously damaged oranges in the sample examined.
- (3) Dates A and B are established each season by emergency regulation of the California Director of Agriculture as needed.
- (4) For further information on freezing injury, it is suggested that adjusters secure current publications from the California Department of Agriculture or the California Agricultural Experiment Station.

Other Arizona and California Citrus Laws

A. Tangerine or Mandarin Laws (applicable portions quoted in part).

- (1) “As used in this Section, the term “tangerines or mandarins” shall include all varieties and hybrids of the mandarin group and all varieties of tangelos.”
- (2) “Damage by freezing or drying due to any cause is serious if 20 percent or more of the pulp or edible portion of the fruit shows evidence of drying, desiccation, or a mushy condition. Evidence of damage shall be determined by as many cuts of each individual fruit as are necessary.”
- (3) Tolerances. Not more than 10 percent, by count, of the tangerines or mandarins in any one container or bulk lot may fail to meet the requirements because of damage by freezing or drying due to any cause.”

B. Lemon Laws (applicable portions quoted in part).

- (1) “Damage by freezing or drying due to any cause is serious if 20 percent or more of the pulp or edible portion of the lemon shows evidence of drying, or staining (except membranous stain), or a mushy condition. Evidence of damage shall be determined by as many cuts of each individual lemon as are necessary.”
- (2) Tolerances. Not more than 10 percent, by count, of the lemons in any one container or bulk lot may fail to meet the requirements because of damage by freezing, but not to exceed one-half of this tolerance, or 5 percent shall be allowed for lemons which show damage by freezing in 40 percent or more of the pulp or edible portion of the lemon.”

C. Grapefruit Laws (applicable portions quoted in part).

- (1) Damage by freezing or drying due to any cause is serious if 20 percent or more of the pulp or edible portion of the grapefruit shows evidence of drying or a mushy condition; and damage by freezing or drying due to any cause is very serious if 40 percent or more of the pulp or edible portion of the grapefruit shows evidence of drying or a mushy condition. Evidence of damage shall be determined by as many cuts of each individual grapefruit as are necessary.”
- (2) “Tolerances. The grapefruit in any one container or bulk lot shall be deemed, as a whole, to meet the requirements so long as not more than 15 percent, by count for California, 10 percent by count for Arizona, of the individual grapefruit in such container or bulk lot are seriously damaged by freezing or drying due to any cause, but not to exceed one-third of this tolerance shall be allowed for very serious damage by freezing or drying due to any cause.”

Policy Regarding Frost Protection Equipment

- *** (1) **Protection Rates.** The minimum requirements to qualify for frost protection rates are in the SP. A grove may meet minimum equipment requirements, however, this does not automatically qualify the grove for the frost protection rate. The SP state that frost protection rates are applicable only to acreage adequately protected by frost protection equipment.

The adequacy of frost protection equipment will vary depending on grove location, air drainage, cultivation practices, elevation, tree size, etc. One consideration is the ability of wind machines to reach all or essentially all the insured acreage in the grove. Groves with well-placed frost equipment are eligible for frost protection rates. The adjuster will determine whether frost protection equipment was properly utilized.

- (2) **Equipment Adequacy.** The grove inspector will evaluate the adequacy of the frost protection equipment at inspection time based on the following guidelines. Frost protection equipment must be determined to be consistent with at least one of the following paragraphs to be considered adequately protected.

- ***
- (a) Wind machines should have the ability to move air at 4 miles per hour. Wind machines brake or propeller horsepower per acre is the best indicator for determining the adequacy of frost protection in a grove. Other considerations such as propeller length and shape; wind machine placement in the grove; and the area covered by wind machines are all important in determining equipment adequacy. Five to eight propeller (brake) horsepower per acre is the recommended standard for frost protection under normal conditions (minimum standard in the SP is 5 horsepower per acre). Regardless of horsepower, one wind machine generally can service no more than ten acres.
 - (b) Heater type, number, and placement, on a per acre basis, is an indicator as to the adequacy of frost protection in a grove. Heater requirements could be reduced by the type of heater utilized. Return stack and spot heaters are recognized to be the most efficient types. Heaters should conform to district air pollution control regulations. Inspect heaters to determine if they are in working condition. The SP specify that a minimum of 40 serviceable heaters per acre are required to qualify for the frost protection rate.
 - *** (c) For solid set sprinklers or foggers supplied by well water, the pump and well must have the capacity to supply water to all the acreage simultaneously. Only that acreage that can be supplied with water simultaneously will be considered adequately protected.