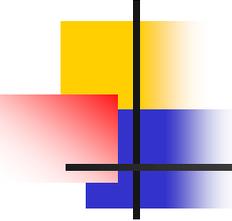


Macadamia Tree Crop Insurance Program

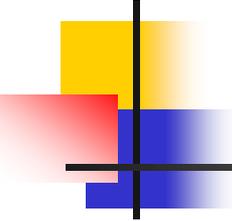
Training Module

2019 Crop Year



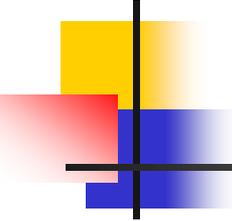
Objectives

- Review the Macadamia Tree Crop (MT) Crop Provisions, including the
 - Occurrence Loss Option (OLO)
- Review the Comprehensive Tree Value Endorsement (CTVE)
- Provide examples of
 - Determining the Amount of Protection and premium
 - Claim settlement for the MT (base) policy, base policy with the OLO, CTVE, and CTVE with the OLO



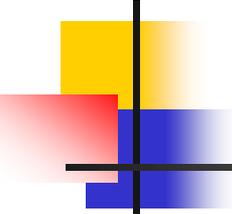
2019 Differences from 2016 MCT Program

- Modeled Coverage After Florida and Texas Tree programs
 - Coverage Basis
 - Per Tree vs. Per Acre
 - Reference Price/Tree vs. Dollar Amount/Acre Insurance Period
 - Reference Prices by Stage and Density Practice
 - Insured May Elect Different Price Percentages by Density Practice
 - Revised and Added Definitions As Required
 - Revised Unit Division Rules
 - Added Acreage Reporting Requirements
 - Revised Sales Closing Date: January 1 to November 30
 - Clarified Causes of Loss: Flood Specifically Named
 - Added 12-month Delayed Claim Provision to Duties and Claims Sections



2019 Differences from 2016 MCT Program

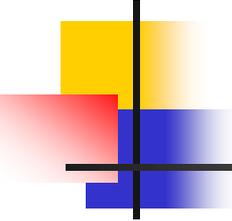
- Differences, *continued*
 - Damage Appraisal Method – Canopy Loss
 - Percent Damage Determined Only Within Stand of Damaged Trees Based On:
 - Destroyed
 - Fully Damaged
 - Partially Damaged
 - Percent of Damage Subject to Adjustment Based On Certified Actions (Removal, Reset, Rehabilitation) – See CP, section 13(i)
 - Revised Indemnity Calculations
 - Revised Prices and Rates
 - OLO Added - modifies indemnity calculation
 - CTVE Added - additional amount of protection



Section 1. Definitions

Definitions:

- Adjustment factor: A factor contained in the Special Provisions used to determine the percent of damage and damage value of fully and partially damaged trees for purposes of determining an indemnity.
- Age (of tree): The number of complete 12-month periods that have elapsed since the month the trees were set out or were grafted, whichever is later. Age determination will be made for each unit, or portion thereof, as of January 1 of each crop year.
- Amount of Insured Damage: The dollar amount determined by multiplying the damage value by the coverage level (applicable to the Occurrence Loss Option).



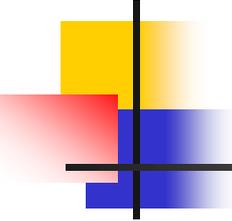
Section 1. Definitions

Definitions, *continued*:

- Amount of Protection (unit): The dollar amount for the unit calculated by multiplying the number of insurable trees reported by you in each stage-block times your tree reference price for each stage-block, totaling these values, and then multiplying this result times the coverage level selected by you.

(Your tree reference price for purposes of the base policy will be the applicable tree reference price multiplied by your price percentage.)

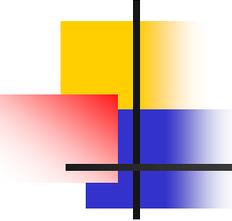
- Block: A stand of trees on acreage sharing a common boundary with no discernable change in the planting pattern.
- Crop year: A period beginning with the date insurance attaches to the macadamia tree crop extending through December 31 of the same calendar year. The crop year is designated by the calendar year in which insurance attaches.



Section 1. Definitions

Definitions, *continued*:

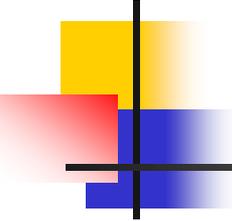
- Damaged (damage): A tree that requires rehabilitation, removal, or reset due to injury to the main trunk, roots, or canopy (including leaning and toppling) due to an insured cause of loss that occurs during the insurance period.
- Damage value: The dollar amount determined by multiplying the actual number of insurable trees in each stage-block damaged by the most recent cause of loss times your tree reference price for each stage-block, multiplying this result for each stage-block times the percent of damage applicable to each stage-block, and totaling these values.



Section 1. Definitions

Definitions, *continued*:

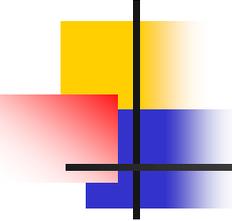
- Destroyed tree (100% damaged): A tree damaged to the extent that:
 - The tree is dead;
 - For stage I –III trees, the tree is toppled or leaning, and reset is not practical;
 - For stage IV – V, a tree that is toppled or leaning;
 - Is missing; or
 - Damage to the canopy is more than eighty (80) percent.
- See section 13(d) and (i) for determining the percent of damage for destroyed trees.



Section 1. Definitions

Definitions, *continued*:

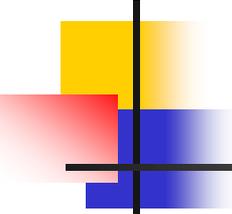
- **Discernable boundary** – An identifiable physical land feature such as a windbreak, private, public, or field road, drainage ditch, stream, ravine, vegetative area (e.g., woods, wetland, grassland, etc.), or other similar physical feature.
- Excess moisture (precipitation): Direct or proximate rainfall in quantities sufficient to cause flooding.
- Flood (flooding): An unusual and rapid accumulation or runoff of surface waters caused by excess moisture that results in the tree being toppled, caused to lean, or otherwise damaged.



Section 1. Definitions

Definitions, *continued*:

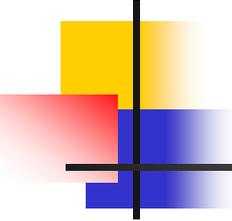
- Fully damaged tree: Fully damaged tree –
 - (a) An insurable tree requiring reset.
 - (b) A fully damaged tree will be considered 100-percent damaged but is not destroyed. (See section 13(d) and (i) for determining the percent of damage for fully damaged trees.)
- Leaning (lean): A tree that is leaning more than 15 degrees from the upright position.
- Limb adjustment percentage: The percentage of normal limb breakage contained in the Special Provisions and used to determine the percent of damage for partially damaged trees.



Section 1. Definitions

Definitions, *continued*:

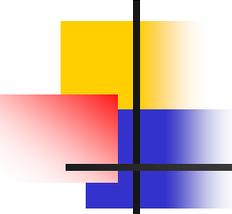
- Occurrence Loss Option: An option that may be elected by you that eliminates the unit deductible in accordance with section 15.
- Partially damaged tree: A tree that requires rehabilitation for which the damage to the tree's is more than 10 percent but less than 80 percent. (See section 13(d) and (i) for determining the percent of damage for partially damaged trees.)
- Rehabilitation: The pruning of a damaged tree in an attempt to remove the damaged areas and allow the tree to recover.
- Remove (removal, removed, removing): – Conducting the necessary operations to prepare the planting site for a replacement tree.



Section 1. Definitions

Definitions, *continued*:

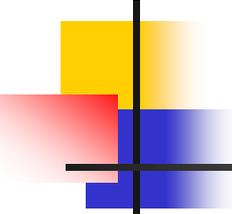
- Replacement tree: A tree set out in an existing orchard in the same location of a damaged tree that cannot be rehabilitated, reset, or is otherwise destroyed.
- Reset: Restoring a toppled or leaning tree to approximately the same position the tree occupied before it was caused to topple or lean, and carrying out the cultural practices necessary to restore the tree. For loss adjustment purposes only, reset is applicable only for stage I – III trees.
- Sales Closing Date: In lieu of the definition in section 1 of the Basic Provisions, the sales closing date for the crop year and subsequent crop years will be November 30 unless another date is provided in the Special Provisions.



Section 1. Definitions

Definitions, *continued*:

- Set out: Transplanting a tree into the orchard.
- Share: In addition to the definition in section 1 of the Basic Provisions, an insured tenant or operator must have a lease with the owner of the macadamia orchard that requires him or her to maintain the macadamia orchard using accepted orchard management practices. The lease agreement must clearly state the tenant is entitled to his or her insured share of any indemnities under the Macadamia Tree Crop Provisions. A copy of the lease must be on file with the insuring company at the time insurance attaches. However, only for the purpose of determining the amount of indemnity, the insured's share will not exceed the insured's share at the time of loss.



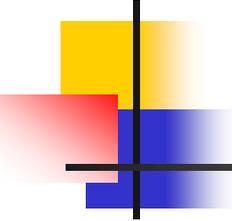
Section 1. Definitions

Definitions, *continued*:

- Stage: Each full 12-month period based on the age of the tree.

Stage	Age (of Tree)
I	1-3 years
II	4-6 years
III	7-10 years
IV	11-14 years
V	15+ years

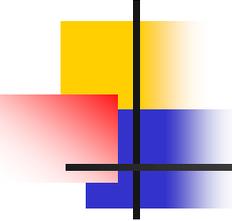
- Stage-block: A block in which at least 75 percent of the trees are the same stage.



Section 1. Definitions

Definitions, *continued*:

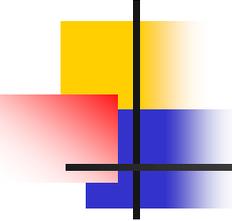
- Stand of damaged trees: The area or areas within a unit where damage due to the same insurable cause of loss occurs, as established by us for the crop year, and used to determine the damage value for the unit. If distinct areas of damaged trees within the unit cannot be established, the stand of damaged trees will be the entire unit.
- Toppled – A tree that is leaning and has an exposed root system.
- Tree reference price: The price per tree, by density practice and stage listed on the actuarial documents that is used in calculating the unit value, the amount of protection, and the damage value.
- Undamaged: A tree that does not require rehabilitation, removal, or reset.



Section 1. Definitions

Definitions, *continued*:

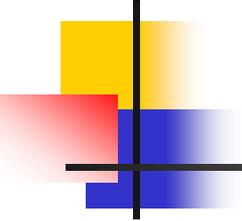
- Underreport Factor (unit): A factor determined by us and used to adjust your indemnity in section 13(a) when you have underreported the number of insurable trees. The factor is the result of dividing the amount of protection by the unit value, rounded to three decimal places, not to exceed 1.000.
- Unit Deductible: The dollar amount determined by multiplying the actual number of insurable trees in each stage-block in the unit on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times your tree reference price for each stage-block, totaling these values, and multiplying this result times the deductible.



Section 1. Definitions

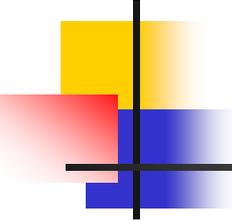
Definitions, *continued*:

- Unit Value: Unless otherwise specified on the actuarial documents, the amount determined by multiplying the actual number of insurable trees in each stage-block in the unit, as determined by us, on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times your tree reference price for each stage-block, totaling these values, and then multiplying this result times the coverage level selected by you.



Section 2. Unit Division

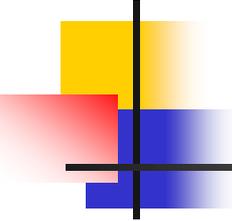
- Sections 34(a) of the Basic Provisions is not applicable.
 - In lieu of section 34(b)(1), (3), and (4) and c(1) and (2) of the Basic Provisions, optional Units may be established only if each optional unit is
 - Located on non-contiguous land;
 - A separate identifiable acreage of trees located on contiguous land that:



Section 2. Unit Division

Unit Division, *continued*

- Contains at least 40 acres of insurable age macadamia trees (see the Special Provisions);
- Is identified by a discernable boundary; and
- Is established in accordance with FCIC approved procedure; or
- Established in accordance with section 34(c)(3) (organic optional units)

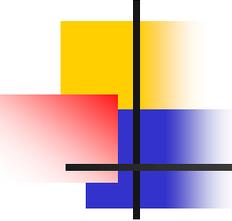


Section 3. Insurance Guarantees, Coverage Levels,...

- (b) If the actuarial documents designate separate tree reference prices by density practice, you may select one price for each practice so designated in the Special Provisions, even if the prices for each practice are the same.

The tree reference prices you choose for each practice are not required to have the same percentage relationship to the maximum price offered by us for each practice.

For example, if you choose 100 percent of the maximum price for one practice, you may choose 75 percent of the maximum price for another practice

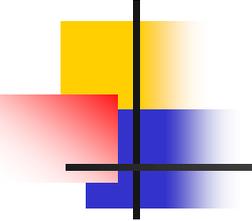


Section 3. Insurance

Guarantees, Coverage Levels,...

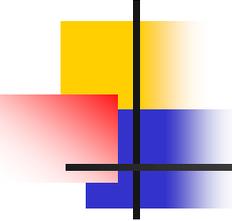
Section 3 *(continued)*

(c) After the initial crop year of insurance, the coverage level election, percentage of the tree reference price, or **optional coverage** may only be changed on or before the **November 30** sales closing date prior to the beginning of the crop year for which the change is to be effective, except as provided in sections 3(d) and (f).



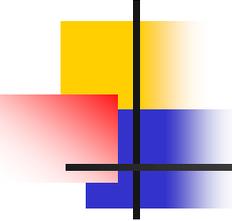
Sections 4 and 5.

- Contract Change Date
 - The contract change date is **August 31** preceding the cancellation date.
- Cancellation and Termination Dates
 - The cancellation and termination dates are **November 30** before the beginning of the crop year.



Section 6. Report of Acreage

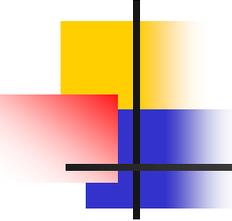
- Annual acreage report is due February 15 of the calendar year that insurance attaches.
- Must report by stage-block for each unit:
 - The stage of the trees
 - The number of trees (insurable and non-insurable)
- Must submit a pre-acceptance worksheet and grove identification map, which indicates the location of each stage-block of trees by section (or applicable legal description) and includes any trees not insurable for each unit with your application. A revised worksheet and map must be submitted by the acreage reporting date if any trees are added in a succeeding crop year, stages change, or tree damage occurs the previous crop year.



Stage-block Determination, Example

- For blocks in which **less than 75%** of the trees are the same stage, the producer **must** separate the blocks into stage-blocks and report the number of trees in each stage-block.
- Example: A producer has one unit of standard density macadamia trees with 1,400 stage III trees, 800 stage IV trees, and 800 stage V trees.
- The block must be reported as follows:

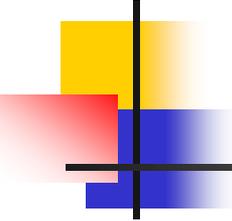
Block Number	Stage-Block	Stage	Number of Trees
1	1-III	III	1400
1	1-IV	IV	800
1	1-V	V	800



Stage-block Determination, Example

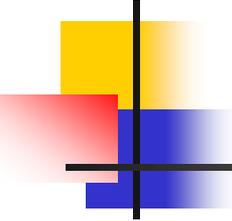
- For blocks in which **at least 75%** of the trees are the same stage, the producer **may** report the blocks as one stage-block.
- Example: A producer has one unit of standard density macadamia trees with 1,500 stage III trees, 250 stage IV trees, and 250 stage V trees.
- The block may be reported as one stage-IV block of 2,000 trees, or as follows:

Block Number	Stage-Block	Stage	Number of Trees
1	1-III	III	2,000



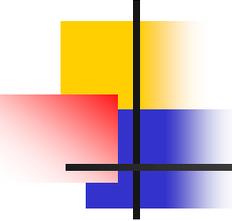
Stage-block Determination

- Applicants for insurance certify the numbers and ages of trees to be insured by completing a Macadamia Tree Orchard Producer Pre-Acceptance Worksheet (shown in Exhibit 3 of the CISH with instructions for completion.)
- The applicant identifies the blocks of trees in each unit and provides information about the numbers of trees and planting dates used to designate the stage-blocks that comprise each unit.
- The applicant also provides a Grove Identification Map (shown in Exhibit 4 of the CISH with instructions for completion) that shows locations of the stage-blocks identified in the worksheet..
- Policyholders are not required to submit worksheets or maps in subsequent years unless changes occur which alter the numbers of trees, stage-block designations, or previous crop year damage.



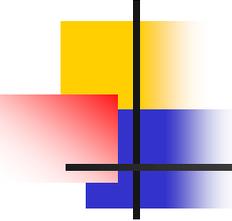
Stage-block Determination

- Producers are not required to submit copies of their records to the insurance provider unless required by the loss adjuster at the time of claim settlement due to discovery of a discrepancy between the stage blocks that were established for the unit and the actual numbers and stages of trees in the unit.
- The following types of records are acceptable:
 - Planting records (grove management records); and
 - Insurance provider recorded evidence, i.e., any documentation of tree ages used to establish insurance coverage for the trees.



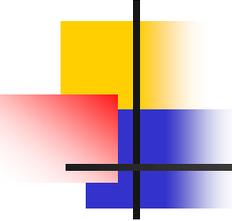
Section 7. Annual Premium

- Annual premium is determined by multiplying the amount of protection for the unit times the share, times the applicable premium rate, and times any applicable premium adjustment percentages shown in the actuarial documents.



Section 8. Insured Crop

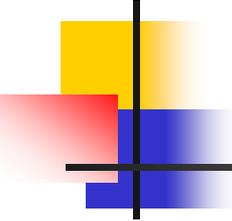
- Insured Crop: All macadamia trees in the county for which a premium rate is quoted in the actuarial:
 - Listed on your application
 - In which you have a share
 - Are at least one year of age when the insurance period begins
 - Have the potential to produce a yield typical of a healthy tree
 - Are grown to produce a commodity intended to be sold for human consumption



Section 8. Insured Crop contd.

In addition to the exclusions listed in section 8 of the Basic Provisions, we do not insure any trees that:

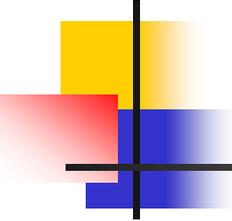
- (1) Are non-grafted seedlings (grown from seed);
- (2) Are unsound, diseased, or unhealthy;
- (3) Are toppled or leaning and not reset (see the definition of reset);



Section 8. Insured Crop contd.

- (4) Were damaged before the beginning of the insurance period. (If trees suffered damage the previous crop year, then insurance will not attach until the previous year's damage is determined, you submit a revised acreage report, and the trees are accepted by us); or
- (5) Are inspected by us and considered unacceptable.

(Note: A PAIR is required for all new applicants and must be completed by December 31.)

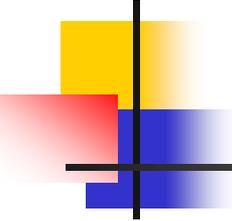


Section 10. Insurance Period

For new insureds, coverage begins **January 1** after the sales closing date unless we notify you that all or part of the trees are not insurable .

For carryover insureds, coverage begins on **January 1**.

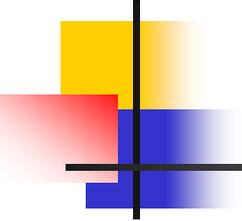
Changes in share (acquire or relinquish share) before the acreage reporting date retroactively permits insurance to attach to acquired acreage (subject to inspection and acceptance) or not attach for the crop year.



Section 10. Insurance Period Contd.

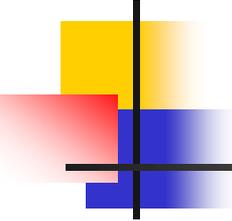
The calendar date for the end of the insurance is

December 31 of the crop year.



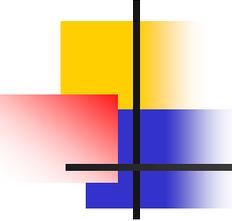
Section 11. Causes of Loss

- (1) Adverse Weather;
- (2) Flood;
- (3) Earthquake;
- (4) Volcanic eruption (including volcanic gases);
- (5) Fire (if weeds and brush are controlled and and prunings are removed);
- (6) Wildlife, unless proper measures to control wildlife have not been taken;
- (7) Insects, diseases, and other pathogens, if allowed by the Special Provisions;
- (8) Failure of the irrigation water supply due to an insured cause.



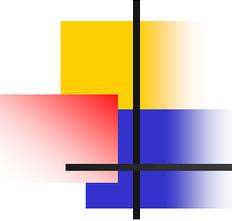
Section 11. Causes of Loss Contd.

- Excluded Causes of Loss
 - Other than actual damage to the tree from an insurable cause specified in this section.



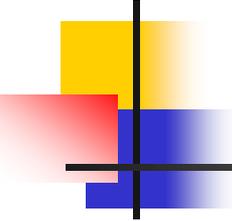
Section 12. Duties in the Event of Damage or Loss

- (a) If you intend to claim an indemnity, you must not prune, reset, or remove any damaged trees until we have inspected the unit, which will normally occur within 10 days of the notice of loss.
- (b) In lieu of section 14(e)(3)(i) of the Basic Provisions, submit a claim not later than:
 - (1) 60 days of the latest date for the end of the insurance period for all acreage in the unit as specified in the Basic Provisions; or
 - (2) **12 months** (maybe extended) after the calendar date for the end of the insurance period in which the damage occurred.
 - (i) If the amount of damage cannot within the 60-day period or
 - (ii) The period of time to remove rehabilitate, or reset damaged trees exceeds 60 days
- (c) A claim submitted under section 12(b)(2) must include all the information we require to determine your indemnity.



13. Settlement of Claim

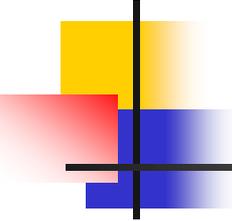
- Step 1: Calculate the Unit Value and Underreport Factor
- Step 2. Calculate the Unit Deductible
- Step 3. Calculate the Damage Value (for all losses since the beginning of the crop year including the current loss)
- Step 4. Subtract the Unit Deductible from the Damage Value
- Step 5. Multiply the difference (the result of 4) times the Underreport Factor and Share
- Step 6. Subtract any previous indemnities for the current crop year to determine the indemnity due for the most recent cause of loss



Section 13. Settlement of Claim Contd.

Percent of Damage

- (b) Percent of damage for each stage-block in the stand of damaged trees is determined separately for 100 percent damaged trees (destroyed or fully damaged) and partially damaged trees:
- (c) Trees which are 100 percent damaged or partially damaged will be determined as follows:



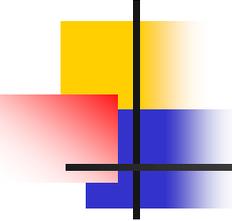
Section 13. Settlement of Claim Contd.

Percent of damage *(continued)*

(c)(1) Any **destroyed** tree will be considered **100 percent damaged** if it is:

- Dead
- Toppled and reset is not possible – Stage I – III trees
- Toppled or leaning – Stage IV – V (not practical to reset)
- The tree is missing
- More than eighty (80) percent damage to the canopy.

The percent of damage may be limited [see section 13(i)] of the Crop Provisions.



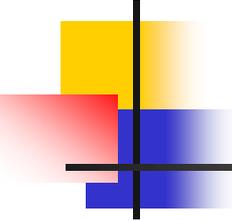
Section 13. Settlement of Claim Contd.

Percent of damage *(continued)*

(c)(2) Trees are considered **FULLY DAMAGED (100 percent)** if the trees are:

- Leaning or toppled and reset (stage I –III) is possible

The percent of damage may be limited [see section 13(i)] of the Crop Provisions.



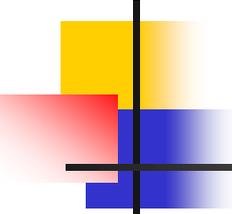
Section 13. Settlement of Claim

Contd.

Percent of damage (*continued*)

- (c)(3) Trees are considered **PARTIALLY DAMAGED** if:
- The insurable tree does not have more than 80 percent canopy damage and requires rehabilitation.

The percent of damage may be limited [see section 13(i)] of the Crop Provisions.

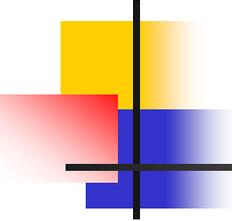


Section 13. Settlement of Claim Contd.

(d) Percent of damage *(continued)*

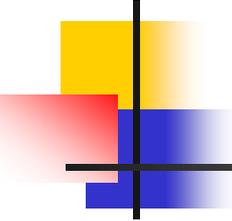
(1) To determine the percent of damage for **100 percent damaged trees**:

(i) Separately divide the number of **destroyed and fully damaged** trees by the number of trees in the appraisal sample for each stage block within the stand of damaged trees.



Section 13. Settlement of Claim Contd.

- (d) Percent of damage (*continued*)
 - (ii) Multiply each applicable result of section 13(d)(1)(i) by:
 - (A) 1.0 for destroyed trees; and
 - (B) The applicable adjustment factor for fully damaged trees (reset trees) contained in the Special Provisions.

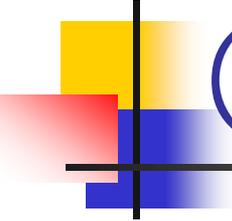


Section 13. Settlement of Claim

Contd.

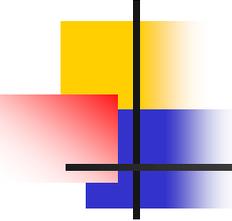
(d) Percent of damage *(continued)*

- (2) To determine the percent of damage for **partially damaged** trees for each stage:
 - (i) Divide the number of partially damaged trees by the number of trees in the each stage block for the stand of damaged trees; and
 - (ii) Multiply the result by the applicable adjustment damage factor contained in the Special Provisions.



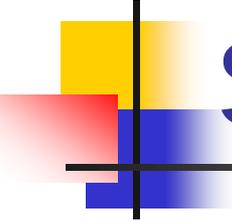
Percent Damage Determination (from the LASH)

- Four damage categories:
 - Undamaged (0%)
 - Partially Damaged (not more than 80%)
 - Fully Damaged (100%)
 - Destroyed (100%)
- Percent damage is determined based on representative samples from each stage-block that is within the stand of damaged trees (SDT)



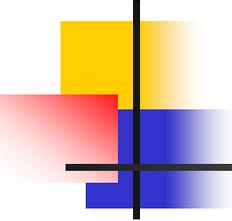
Percent Damage Determination (from the LASH)

- For Destroyed Trees
 - The number of trees meeting the definition of a destroyed tree
- For Fully Damaged Trees
 - The number of trees toppled or leaning (stage I – III) that can be reset
- For Partially Damage Trees
 - The number of trees with not more than 80% canopy damage



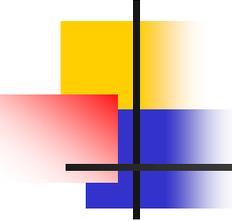
Section 13. Settlement of Claim

- (e) If the total percent of damage for destroyed, fully damaged, and partially damaged trees for the stand of damaged trees is greater than 80 percent within the stage-block due to an insured cause of loss, the percent of damage for the stage block within a stand of damaged trees will be considered to be 100 percent unless reduced in accordance with section 13(i) of the Crop Provisions.
- (f) The applicable percent damage for the crop year will not exceed 100% for any stage-block or portion of a stage-block within a stand of damaged trees.



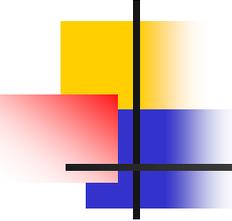
Section 13. Settlement of Claim

- (h) Percent of damage will be determined the earlier of:
- (1) Our determination of the total destruction of insured trees on the unit; or
 - (2) December 31 of the crop year unless the percent of damage cannot be determined and in such cases it will be determined not later than twelve (12) months after the calendar date for the end of the insurance period of the crop year in which the damage occurred.
- (i)(1) – (3) A tree damaged by an insured cause, which we authorize to be removed, rehabilitated, or reset must be removed, rehabilitated, or reset to be included in determining the percent of damage.



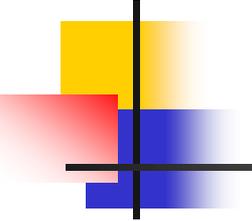
Section 14. Late and Prevented Planting, Written Agreements

- No prevented planting
- No late planting
- No written agreements



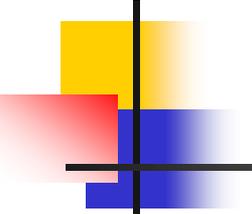
Section 15. Occurrence Loss Option (OLO)

- Available with buy-up coverage for additional premium
- Eliminates Unit Deductible from indemnity calculation if a minimum damage threshold is met
- The OLO may not be elected with CAT
- The OLO may be elected with the CTVE



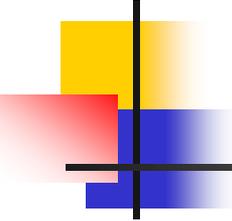
Section 15. OLO

- OLO Indemnity Calculation
 - Step 1: Calculate Unit Value and Underreport Factor
 - Step 2: Multiply the Unit Value by 3%
 - Step 3: Calculate the Damage Value
 - Step 4: Calculate the Amount of Insured Damage
 - If Amount of Insured Damage \geq 3% of Unit Value,
Indemnity = Amount of Insured Damage x
Underreport Factor x Share
 - If Amount of Insured Damage $<$ 3% of Unit Value, no
indemnity is due



Examples, Assumptions

- Producer insures
 - 3,000 Macadamia trees in a standard density orchard
 - 600 Stage I
 - 200 Stage II
 - 2,200 Stage III
- Elects 75% coverage level
- Elects 100 price percentage
- Has 100% share
- Actuarial documents provide:
 - .07% base premium rate
 - Tree Reference Prices (TRP) for the standard density practice are:
 - \$102 (Stage I)
 - \$137 (Stage II)
 - \$165 (Stage III)
- Insured's reference price = the price % X the applicable TRP



Example – Base Policy

Amount of Protection and Premium

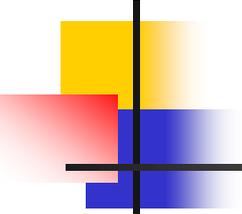
- The amount of protection provided by the policy for the unit will be calculated as follows:

Insured's reference price = \$165, \$137, \$102,
respectively X 100% price percentage

\$338,700 amount of insurance = [(2,200
trees x \$165) + (200 x \$137) + (600 x \$102)]
x 75-percent coverage level.

- The premium due on the insured crop is:

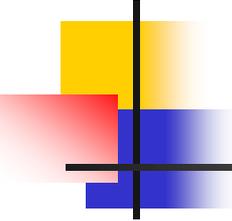
\$2,371 = \$338,700 amount of protection x
100-percent share x 0.007 premium rate.



Example

Calculation of OLO Premium

- Producer insures
 - 3,000 Macadamia trees in a standard density orchard
 - 600 Stage I
 - 200 Stage II
 - 2,200 Stage III
- Elects 75% coverage level
- Elects 100 price percentage
- Has 100% share
- Actuarial documents provide:
 - Producer is charged a premium rate of .015 (base policy with Occurrence Loss Option rate)
 - Tree Reference Prices (TRP) for standard density practice are:
 - \$102 (Stage I)
 - \$137 (Stage II)
 - \$165 (Stage III)
- Insured's reference price = the price % X the applicable TRP



Example – OLO

Amount of Protection and Premium

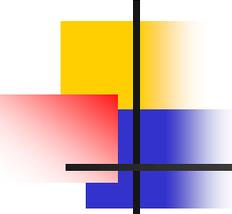
- The amount of protection provided by the policy for the unit will be calculated as follows:

Insured's reference price = \$165, \$137, \$102, respectively X the 100% elected price percentage

\$338,700 amount of insurance = [(2,200 trees x \$165) + (200 x \$137) + (600 x \$102)] x 75-percent coverage level.

- The premium due on the insured crop is:

5,081 = \$338,700 amount of protection x 100 percent share x 0.015 premium rate.



Claim Example – Base Policy

- Wind damage to macadamia trees
 - 100% damage (destroyed) to a block of 1,000 stage III trees that are removed
 - No previous losses during crop year

- Calculation

Unit Value = \$338,700 = Amount of Protection

Underreport Factor = 1.000

Unit Deductible = \$112,900

= [(600 x \$102) + (200 x \$137) + (2,200 x \$165)] x 25%

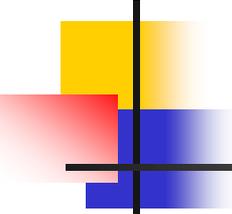
Damage Value = \$165,000

= (1,000 x \$165 x 100% damage)

Damage Value – Unit Deductible = \$52,100

= \$165,000 - \$112,900

Indemnity = **\$52,100** = \$52,100 x 1.000 URF x 100% share



Claim Example – Prior loss

- Wind damage to remaining 1,200 stage III trees – 45% canopy damage
 - 35% damage (45% - 10% limb adjustment %) – trees rehabilitated – percent of damage = 0.90 percent (35% x .015 adjustment factor)
 - With prior loss during crop year

- Calculation

Unit Value = \$338,700 = Amount of Protection

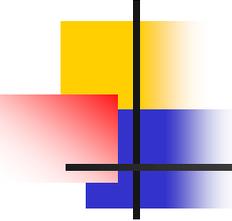
Underreport Factor = 1.000

Unit Deductible = \$112,900 = [(600 x \$102) + (200 x \$137) + (2,200 x \$165)] x 25%

Damage Value = \$1,782 = (1,200 x \$165 x 0.0090)

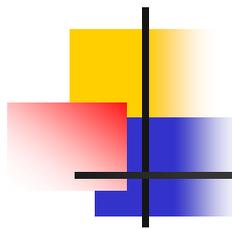
Total Damage Value for the crop year – Unit Deductible = \$166,782 [(\$165,000 + \$1,782) – \$112,900]

Indemnity for most recent cause of loss = **\$1,782** = (\$53,882 x 1.000 x 100% share) - \$52,100 prior indemnity



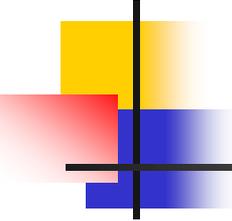
Example of Claim with OLO

- Wind damage to 2,200 stage III trees – 85% canopy damage
 - Tree considered destroyed - 100% damage – trees removed
- Calculation
 - Unit Value = \$338,700 = Amount of Protection
 - Underreport Factor = 1.000
 - 3% of Unit Value = \$10,161 = \$338,700 x 0.03
 - Damage Value = \$363,000 = (2,200 x \$165)
 - Amount of Insured Damage = \$272,250 = \$363,000 x 75%
 - Amount of Insured Damage > 3% of Unit Value
($\$272,250 > \$10,161$)
 - Indemnity = **\$272,250** = \$272,250 x 1.000 URF x 100% share



Comprehensive Tree Value Endorsement (CTVE)

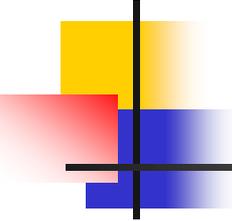
- Section 1. In return for payment of additional premium, this endorsement is attached to and made part of the MT Crop Provisions
- Section 2. Must be elected on or before November 30 continues in effect until cancelled by the policyholder or insurance provider by giving written notice to the other party on or before December 31
- Section 3. To be eligible for the CTVE, must have MT policy in force and not have elected coverage under the CAT endorsement
- Section 4. All eligible insurable trees within the county will be insured



CTVE Definitions, Section 5

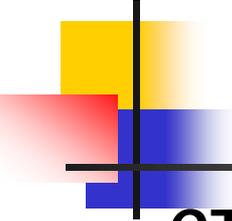
- **Block** – Not defined - Same as the Crop Provisions.
- **CTV amount of insured damage** – The dollar amount determined by multiplying the CTV damage value by the coverage level.
- **CTV amount of protection** – The dollar amount (by unit) calculated by multiplying the number of insurable trees reported by you in each stage III – V block times your maximum CTV reference price for the stage, adding these values, and then multiplying the result by the coverage level selected by you.

(Your CTV reference price for purposes of the endorsement will be the applicable CTV reference price (maximum or minimum) multiplied by your price percentage elected under the base policy.)



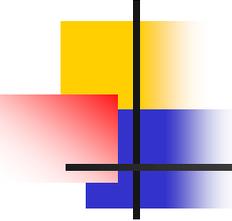
CTVE Definitions, Section 5

- **CTV damage value** – The dollar amount determined by multiplying the actual number of destroyed trees and the actual number of fully damaged trees in each stage III – V block in all the stands of damaged trees (SDT) identified as a result of the most recent cause of loss times your CTV reference price for the stage, and then adding these values.
- **CTV underreport factor (unit)** – A factor determined by us and used to adjust your CTV indemnity in section 10(b)(2) when you have underreported the number of insurable trees. The factor is the result of dividing the CTV amount of protection by the CTV unit value, rounded to three decimal places, not to exceed 1.000.



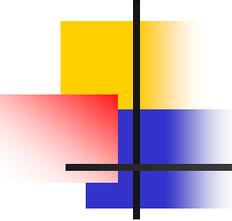
CTVE Definitions, Section 5

- **CTV unit deductible** – The dollar amount determined by multiplying the actual number of insurable trees in each stage III – V block in the unit on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times your maximum CTV reference price for the stage, adding these values, and then multiplying the result by the deductible.
- **CTV unit value** – The amount determined by multiplying the number of actual insurable trees in each stage III - V block in the unit, as determined by us, on the day before the loss (but not reduced for any insured damage that occurred during the crop year) times your maximum CTV reference price for the stage, adding these values, and then multiplying the result by the coverage level selected by you.



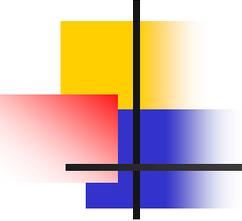
CTVE Definitions, Section 5

- **Maximum CTV reference price** – The price per tree, by density practice and stage, listed on the actuarial documents for CTV that is used in calculating the CTV unit value, the CTV amount of protection, and the portion of the CTV damage value for destroyed trees for this endorsement.
- **Minimum CTV reference price** – The price per tree, by density practice and stage, listed on the actuarial documents for CTV that is used in calculating the portion of the CTV damage value for fully (100-percent) damaged trees for this endorsement.



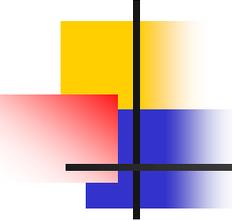
Comprehensive Tree Value Endorsement (CTVE)

- Section 6. Coverage level and price election (percentage of the tree reference price) elected under section 3 of the MT Crop Provisions applies to the CTVE.
- Section 7. Trees in Stage I and II blocks are not insurable.
- Section 8. Only macadamia trees in stage III through V blocks considered fully (100 percent) damaged or destroyed are eligible for an indemnity.



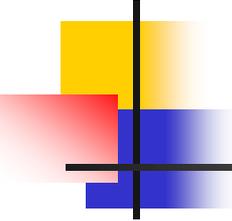
CTVE, Section 9

- For all trees considered **destroyed**, to receive the full indemnity under this endorsement:
 - An equivalent number of trees must be planted within four calendar years of the date of the removal or destruction
 - The trees planted do not have to be the same crop as the destroyed trees but must be grown to produce fruit or nuts intended to be sold for human consumption
 - The trees must be planted in accordance with good farming practices and in an area within the state of Hawaii considered to be suitable for the production of the specific fruit or nut crop
 - Policyholder will receive 50% of the indemnity within 30 days after claim approval and the remaining 50% upon verification by insurance provider that the requirements of this section have been met.



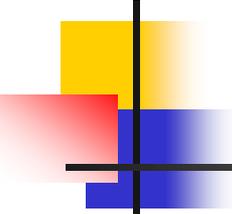
CTVE, Section 10

- CTVE claim will only be payable if an indemnity is paid on the same unit under the MT policy.
- If no indemnity is due under the MT policy, then no indemnity will be due under this endorsement.



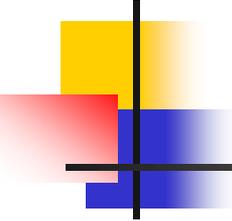
CTVE Example

- Assume that a standard density macadamia orchard owner:
 - Buys 75-percent coverage level (25-percent deductible) and 100 percent price percentage.
 - Insures three stages of trees under the endorsement: stage III - V.
 - Reports the following numbers and types of trees: 2,000 stage V trees, 800 stage IV trees and 200 stage III trees.
 - Holds 100-percent interest.
 - Is charged an additional premium rate of 0.005.



Example CTVE Amount of Protection and Premium

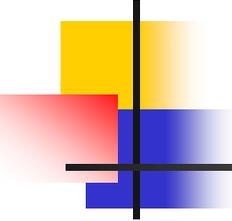
- FCIC's actuarial documents show the following maximum CTV reference prices for the standard density practice:
\$115/tree, stage V; \$111/tree, stage IV; \$81/tree, stage III.
- The CTV amount of protection provided by the endorsement for the unit will be calculated as follows:
Insured's reference price = \$115, \$111, \$81, respectively X the 100% elected price percentage
\$251,250 CTV amount of insurance = [(2,000 trees x \$115) + (800 x \$111) + (200 x \$81)] x 75-percent coverage level.
- The additional premium due on the insured crop is:
 $\$1,256 = \$251,250 \text{ CTV amount of protection} \times 100\text{-percent share} \times 0.005 \text{ premium rate.}$



Example, CTVE Indemnity Calculation

- Hurricane damages the Macadamia trees
 - 350 stage III and 350 stage IV were destroyed
 - 700 stage III were fully damaged
 - Use **Maximum** CTV Reference Price to calculate CTV Damage Value for **destroyed** trees; replant required
 - Use **Minimum** CTV Reference Price to calculate CTV Damage Value for **fully damaged trees**; replant not required

(Note: Only stage III trees considered fully damaged (100 percent damage – reset only) and stage III - V trees considered destroyed are eligible for an indemnity under this endorsement.)



Example, CTVE Indemnity Calculation

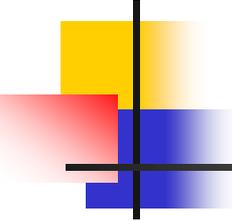
- Calculations

CTV Underreport Factor = 1.000

CTV Unit Deductible = \$83,750 = [(2,000 x \$115) + (800 x \$111) + (200 x \$81)] x 25-percent deductible

CTV Damage Value for destroyed trees = \$79,100
= [(350 x \$115) + (350 x \$111)]

CTV Damage Value for fully damaged trees = \$28,700 = (700 x \$41)



Example, CTVE Indemnity Calculation

Continued

CTV Damage Value for destroyed trees = \$79,100

CTV Damage Value for fully damaged trees = \$28,700

Total CTV Damage Value = \$107,800

= \$79,100 + \$28,700

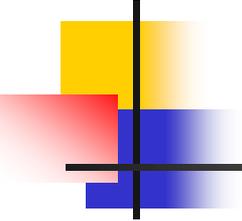
CTV Damage Value - CTV Unit Deductible = \$24,050

= \$107,800 - \$83,750

Multiplying by the URF and your share is \$24,050 =

\$24,050 x 1.000 x 1.000.

= \$24,050 x 1.000 x 100%



Example, CTVE Indemnity Calculation

- *Continued*

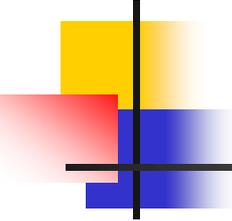
Percent of Damage Value due to destroyed trees
= 73% = $\$79,100 \div \$107,800$

Percent of Damage Value due to fully damaged trees
= 27% = $\$28,700 \div \$107,800$

Indemnity due at time of claim = 100% indemnity for fully damaged trees + 50% indemnity for destroyed trees = **\$15,272** = $(\$24,050 \times 27\%) + (\$24,050 \times 73\% \times 50\%)$

Indemnity due upon verification of replant = **\$8,778** = $\$24,050 \times 73\% \times 50\%$

Total Indemnity Payable = **\$24,050** (**\$15,272** + **\$8,778**) subject to replant requirement



Example, Indemnity Calculation CTVE with OLO

- Hurricane damages the Macadamia trees
 - 350 stage III and 350 stage IV were destroyed
 - 700 stage III were fully damaged

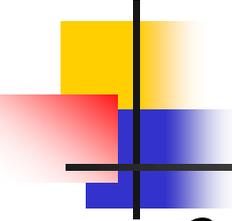
- Calculations

Underreport Factor = 1.000

CTV Damage Value for destroyed trees = \$79,100 =
[(350 x \$115) + (350 x \$111)]

CTV Amount of Insured Damage destroyed trees
= \$59,325 = \$79,100 x 75% coverage level

Indemnity for destroyed trees = \$59,325
= \$59,325 x 1.000 x 100% share



Example, Indemnity Calculation CTVE with OLO

- *Continued*

CTV Damage Value for fully damaged trees = \$28,700 =
(700 \$41)

CTV Amount of Insured Damage for fully damaged trees
= \$21,525 = \$28,700 x 75% coverage level

Indemnity for fully damaged trees = \$21,525

= \$21,525 x 1.000 x 100% share

Total indemnity = \$80,850 = \$59,325 + \$21,525

Indemnity due at time of claim = \$51,188

= (\$59,325 x 50%) + \$21,525

Indemnity upon verification of replant = \$29,663

= (\$59,325 x 50%)