

UNITED STATES DEPARTMENT OF AGRICULTURE
Federal Crop Insurance Corporation
MACADAMIA TREE CROP INSURANCE
COMPREHENSIVE TREE VALUE (CTV) ENDORSEMENT
(This is a Continuous Endorsement.)

1. In return for payment of the required additional premium as contained in the actuarial documents, this endorsement is attached to and made part of your Macadamia Tree Crop Provisions (Crop Provisions) subject to the terms and conditions described herein. In the event of a conflict between the Crop Provisions and this endorsement, this endorsement will control.
2. You must elect this endorsement on or before sales closing date. This endorsement:
 - (a) Will continue in effect until canceled.
 - (b) May be canceled by either you or us for any succeeding crop year by giving written notice to the other party on or before the cancellation date contained in the Crop Provisions.
3. To be eligible for this endorsement, you must have a Macadamia Tree insurance policy in force and have not elected coverage under the Catastrophic Risk Protection Endorsement. If at any time your Macadamia Tree insurance policy is cancelled or terminated, this endorsement is automatically cancelled or terminated as of the same date.
4. All eligible insurable trees within the county that you elect to cover under this endorsement will be insured.
5. Definitions:
 - (a) **CTV amount of insured damage** – The dollar amount determined by multiplying the CTV damage value by the coverage level.
 - (b) **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 the your maximum CTV reference price for each stage-block, adding these values, and then multiplying the result by the coverage level selected by you.
 - (c) **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 identified as a result of the most recent cause of loss times your CTV reference price for each stage block, and then adding these values. The CTV reference price will be the maximum CTV reference price for trees destroyed and the minimum CTV reference price for trees fully (100-percent) damaged.
 - (d) **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.
 - (e) **CTV unit deductible** – The dollar amount determined by multiplying the actual number of insurable trees in each stage II - 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 each stage-block, adding these values, and then multiplying the result by the deductible.
 - (f) **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 each stage-block, adding these values, and then multiplying the result by the coverage level selected by you.
 - (g) **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.
 - (h) **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. The minimum CTV reference price applies only to stage III trees.
6. The coverage level and price percentage elected by you under section 3 of the Crop Provisions will apply to this endorsement.
7. In addition to the exclusions in section 8(b) of the Crop Provisions, trees in a stage I – II blocks are not insurable under this endorsement.
8. Only those trees in stage III blocks considered fully damaged (100 percent damage – reset only) and stage III - V blocks considered destroyed are eligible for an indemnity under this endorsement.
9. In order to receive the full indemnity for destroyed trees under this endorsement:
 - (a) You must plant an equivalent number of trees within four calendar years of the date of the removal or destruction, unless otherwise specified on the Special Provisions;
 - (b) The trees you plant 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; and
 - (c) The trees must be planted in accordance with recognized good farming practices and in an area within the state of Hawaii considered by us to be suitable for production of the specific fruit or nut crop.
 - (d) You will receive fifty (50) percent of the indemnity within 30 days after we approve your claim for indemnity; the remaining 50 percent will be paid upon our verification that you have met the requirements of this section.

10. In lieu of the requirements of section 13(a) of the Crop Provisions, we will settle your claim for this endorsement as follows:
- (a) A claim for a unit under this endorsement will only be payable if you receive an indemnity for the same unit on your Macadamia Tree insurance policy. If no indemnity is due under such policy, no indemnity will be due under this endorsement.
 - (b) We will determine your loss on a unit basis. In the event of loss or damage covered by your policy, we will settle your claim as specified below:
 - (1) Determine the CTV unit value and the CTV underreport factor (URF).
 - (2) For trees within a unit that are damaged by an insurable cause of loss, your loss will be determined by:
 - (i) Calculating the CTV unit deductible;
 - (ii) For the most recent cause of loss:
 - (A) Calculating the CTV damage value resulting from the destroyed trees;
 - (B) Calculating the CTV damage value resulting from the fully damaged trees;
 - (C) Adding the results of 10(b)(2)(ii)(A) and (B);
 - (iii) Totaling the CTV damage value for each prior loss that has occurred since the beginning of the crop year;
 - (iv) Totaling the results of 10(b)(2)(ii)(C) and (iii);
 - (v) Subtracting the result of 10(b)(2)(i) from the result of 10(b)(2)(iv);
 - (vi) If the result of 10(b)(2)(v) is less than or equal to zero, no indemnity is due for this loss occurrence. If the result of 10(b)(2)(v) is greater than zero, multiply the results of 10(b)(2)(v) by the URF and your share;
 - (vii) Subtracting any previous CTV indemnity for the current crop year from 10(b)(2)(vi) to determine the indemnity due for the damage as a result of the most recent insurable cause of loss;
 - (viii) Dividing the result of 10(b)(2)(ii)(A) by the result of 10(b)(2)(ii)(C), to two decimal places;
 - (ix) Dividing the result of 10(b)(2)(ii)(B) by the result of 10(b)(2)(ii)(C), to two decimal places;
 - (x) Multiplying the result of 10(b)(2)(vii) by 10(b)(2)(viii) and multiplying the result by 50 percent;
 - (xi) Multiplying the result of 10(b)(2)(vii) by 10(b)(2)(ix); and
 - (xii) Totaling the results of 10(b)(2)(x) and 10(b)(2)(xi) to determine the amount of the indemnity due at the time of claim.
 - (xiii) The remaining 50 percent of the indemnity for any destroyed trees will be paid out upon our verification that you have met the requirements specified in section 9 of this endorsement and will be equal to the result of 10(b)(2)(x).
 - (3) The total amount of indemnities payable on a unit during the crop year is limited to:
 - (i) The lesser of the CTV amount of protection for the unit or the CTV unit value;
 - (ii) Times your share.
11. If you have elected the Occurrence Loss Option under section 15 of the Macadamia Tree Crop Provisions, and paid the additional premium indicated on the actuarial documents for this optional coverage, those provisions will apply to this endorsement. Your indemnity under this endorsement in the event of a loss will be determined as follows:
- (a) Determine the CTV unit value and the CTV URF;
 - (b) For trees within a unit that are damaged by an insurable cause of loss, your loss will be determined by:
 - (1) Calculating the CTV damage value resulting from the destroyed trees;
 - (2) Calculating the CTV amount of insured damage resulting from the destroyed trees;
 - (3) Multiplying the result of 11(b)(2) times the CTV URF times your share;
 - (4) Calculating the CTV damage value resulting from the fully damaged trees;
 - (5) Calculating the CTV amount of insured damage resulting from the fully damaged trees;
 - (6) Multiplying the result of 11(b)(5) times the CTV URF times your share;
 - (7) Multiplying the result of 11(b)(3) by 50 percent; and
 - (8) Totaling the results of 11(b)(6) and 11(b)(7) to determine the amount of the indemnity due at the time of claim.
 - (9) The remaining 50 percent of the indemnity for any destroyed trees will be paid out upon our verification that you have met the requirements specified in section 9 of this endorsement and will be equal to the result of 11(b)(7).
 - (c) The total amount of indemnities on a unit during the crop year is limited to:
 - (1) The lesser of the CTV amount of protection for that unit or the CTV unit value;
 - (2) Times your share.

Example of Additional Coverage and Premium:

Assume that a standard density macadamia orchard owner:

- Buys 75-percent coverage level (25-percent deductible).
- Selects the 100% 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 0.5 percent.

FCIC's actuarial documents show the following maximum and minimum CTV reference prices for the standard density practice:

- Maximum \$115/tree, stage V; \$111/tree, stage IV; \$81/tree, stage III.
- Minimum \$41/tree, stage III (only stage III trees are considered fully damaged)
- Your maximum and minimum tree reference prices are the applicable maximum and minimum reference prices for the applicable stage and density practice contained in the actuarial documents times the 100% price percentage you selected.

The CTV amount of protection provided by the endorsement for the unit will be calculated as follows:

- \$251,250 CTV amount of insurance = [(2,000 stage V trees x \$115) + (800 stage IV trees x \$111) + (200 stage III trees x \$81)] x 75-percent coverage level.

The additional premium due on the insured crop is:

- \$1,256 = \$251,250 CTV amount of protection x 100-percent share x 0.005 premium rate.

Loss Example:

The macadamia orchard is damaged and the trees have damage to 700 stage-IV trees and 700 stage-V trees due to hurricane in September. Three hundred fifty (350) of the stage IV and 350 of the stage V trees were considered destroyed, and the remaining 700 stage III trees were considered fully (100-percent) damaged. The CTV unit value is determined to be the same as the CTV amount of protection, and the CTV URF is 1.000. The indemnity will be calculated as follows:

- The CTV unit deductible is \$83,750 = [(2,000 x \$115) + (800 x \$111) + (200 x \$81)] x 25-percent deductible.
- The CTV damage value for the destroyed trees is \$79,100 = [(350 x \$115) + (350 x \$111)].
- The CTV damage value for the fully damaged trees is \$28,700 = (700 x \$41).
- The CTV damage value for the most recent cause of loss is \$107,800 = \$79,100 + \$28,700.
- The total CTV damage value for the unit since the beginning of the crop year is \$107,800. (no prior indemnities).
- Subtracting from the total CTV damage value the CTV unit deductible is \$24,050 = \$107,800 – \$83,750.
- Multiplying by the URF and your share is \$24,050 = \$24,050 x 1.000 x 1.000.
- The percent of the indemnity that is attributed to the destroyed trees is 73 percent = \$79,100 ÷ \$107,800.
- The percent of the indemnity that is attributed to the fully damaged trees is 27 percent = \$28,700 ÷ \$107,800.
- One-hundred percent of the indemnity for the fully damaged trees (\$6,494 = \$24,050 x 27 percent) and fifty percent of the indemnity for the destroyed trees (\$8,778 = \$24,050 x 73 percent x 50 percent) will be paid within 30 days of the time of claim and is equal to \$15,272.
- The remaining 50 percent of the indemnity for the destroyed trees will be paid upon verification that you have met the requirements specified in section 9 of this endorsement and is equal to \$8,778 = \$24,050 x 73 percent x 50 percent.

Loss Example– Occurrence Loss Option:

The macadamia orchard is damaged and the trees have damage to 700 stage-IV trees and 700 stage-V trees due to hurricane in September. Three hundred fifty (350) of the stage IV and 350 of the stage V trees were considered destroyed, and the remaining 700 stage III trees were considered fully (100-percent) damaged. The CTV unit value is determined to be the same as the CTV amount of protection, and the CTV URF is 1.000. The indemnity will be calculated as follows:

- The CTV damage value for the destroyed trees is \$79,100 = [(350 x \$115) + (350 x \$111)].
- The CTV amount of insured damage for the destroyed trees is \$59,325 = \$79,100 x 75-percent coverage level.
- The CTV amount of insured damage for the destroyed trees multiplied by the CTV URF and share is \$59,325 = \$59,325 x 1.000 x 1.000.
- The CTV damage value for the fully damaged trees is \$28,700 = (700 x \$41).
- The CTV amount of insured damage for the fully damaged trees is \$21,525 = \$28,700 x 75-percent coverage level.
- The CTV amount of insured damage for the fully damaged trees multiplied by the CTV URF and share is \$21,525 = \$21,525 x 1.000 x 1.000.
- The CTV amount of insured damage for destroyed trees times 50 percent is \$29,663 = \$59,325 x 50 percent.
- One-hundred percent of the indemnity for the fully damaged trees (\$21,525) and fifty percent of the indemnity for the destroyed trees [\$29,663 = (\$59,325 x 50 percent)] will be paid within 30 days of the time of claim and is equal to \$51,188.
- The remaining 50 percent of the indemnity for the destroyed trees will be paid upon verification that you have met the requirements specified in section 9 of this endorsement: \$29,663 = \$59,325 x 50 percent.