UNITED STATES DEPARTMENT OF AGRICULTURE
Federal Crop Insurance Corporation
PECAN 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 Pecan 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 Pecan Tree insurance policy in force and have not elected coverage under the Catastrophic Risk Protection Endorsement. If at any time your Pecan Tree insurance policy is cancelled or terminated, this endorsement is automatically cancelled or terminated as of the same date.
4. If you elect this endorsement, all eligible insurable pecan trees within the county will be insured.
5. Definitions:
   (a) **Average revenue value** – The value per tree for each applicable stage as determined in section 7(b) and (c) of this endorsement.
   (b) **CTV amount of insured damage** – The dollar amount determined by multiplying the CTV damage value times the coverage level.
   (c) **CTV amount of protection** – The dollar amount (by unit) calculated by multiplying the number of insurable trees reported by you in each stage II through stage V-block times the applicable maximum CTV reference price for the stage, adding these values, and then multiplying the result times the coverage level selected by you.
   (d) **CTV damage value** – The dollar amount determined by multiplying the number of destroyed trees and the number of fully damaged trees determined by us in each stage II through stage V-block in all the stands of damaged trees identified as a result of the most recent cause of loss times the applicable CTV reference price, and then adding these values. The applicable 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.
   (e) **CTV underreport factor (URF)** – A factor determined by us (by unit) and used to adjust your CTV indemnity in section 11(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.
   (f) **CTV unit deductible** – The dollar amount determined by multiplying the actual number of insurable trees in each stage II- through stage 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 the maximum CTV reference price, adding these values, and then multiplying the result times one (1) minus the coverage level.
   (g) **CTV unit value** – The amount determined by multiplying the number of actual insurable trees in each stage II- through stage 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 the maximum CTV reference price for the stage, adding these values, and then multiplying the result times the coverage level selected by you.
   (h) **Maximum actual CTV reference price** – The price per tree, by stage, determined in accordance with section 7 of this endorsement 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.
   (i) **Minimum actual CTV reference price** – The price per tree, by stage, determined in accordance with section 7 of this endorsement that is used in calculating the portion of the CTV damage value for fully (100-percent) damaged trees for this endorsement.
   (j) **Maximum CTV reference price** – The price per tree, by stage, contained in 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.
   (k) **Minimum CTV reference price** – The price per tree, by stage, contained in 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.
   (l) **Reference revenue value** – The value per tree, by stage, contained in the actuarial documents for CTV that is used in calculating the actual CTV (minimum/maximum) reference prices for producers using their actual records of production and sales.

(m) **Share** – In addition to the definition in section 1 of the Crop Provisions, an insured tenant or operator for purposes of this endorsement, must have a long-term lease of not less than 5 years beyond the current crop year that requires him or her to maintain the pecan orchard using accepted tree management practices including complying with the requirements of this endorsement. The lease agreement must clearly state the tenant or operator is entitled to his or her insured share of any indemnities under this endorsement. A copy of the lease must be on file with us at the time insurance attaches. However, only for the purpose of determining the amount of indemnity, your share will not exceed your share at the time of loss.

6. The coverage level elected by you under section 3 of the Crop Provisions will apply to this endorsement.
7. Your CTV reference prices may be based on your actual records of sales of pecans (converted to a tree basis).
   (a) Such records must:
      (1) Be verifiable;
      (2) Be provided for all trees insured under your policy for the four most recent crop years (commingled records for insured and uninsured trees will be used if such records cannot be separated);
      (3) Be submitted by the applicable sales closing date contained in the Special Provisions; and
      (4) Show the dates of sale, the buyers' name and address, and the pounds and dollar amount sold.
   (b) All references in section 7(c) and (d) to maximum and minimum CTV reference prices, average revenue value, and calculated results apply on a stage and type basis except as otherwise specified.
   (c) For insurable acreage containing one stage of trees, your maximum and minimum actual CTV reference prices will be the lesser of:
      (1) The prices determined by:
         (i) Dividing the gross sales reported by you by the number insurable trees under your policy (see section 7(a)(2) for commingled records) for each crop year and rounding the result to two decimal places;
         (ii) Adding the results of subsection (c)(1)(i) and dividing by four (4);
         (iii) Rounding the result of subsection (c)(1)(ii) to two decimal places to determine the average revenue value;
         (iv) Dividing the result of subsection (c)(1)(iii) by the reference revenue value for the stage;
         (v) Dividing the applicable maximum and minimum CTV reference prices contained in the actuarial documents by 0.60 and rounding the results to two decimal places;
         (vi) Multiplying the unrounded result of subsection (c)(1)(iv) times the results of subsection (c)(1)(v); and
         (vii) Rounding the results of subsection (c)(1)(vi) to nearest whole dollar; or
      (2) The prices determined by multiplying the applicable maximum and minimum CTV reference prices contained in the actuarial documents times 1.833 rounded to the nearest whole dollar.
   (d) For insurable acreage containing two or more stages of trees, your maximum and minimum actual CTV reference prices for each stage will be the lesser of:
      (1) The prices determined by:
         (i) Dividing the gross sales reported by you by the number insurable trees under your policy (see section 7(a)(2) for commingled records) for each crop year and rounding the result to two decimal places;
         (ii) Adding the results of subsection (d)(1)(i), dividing by four (4) and rounding the result to two decimal places;
         (iii) Multiplying the result of subsection (d)(1)(ii) times the applicable factor for each stage shown in the table below;

Stage	II	III	IV	V
Stage Factor	.433	.888	1.039	1.689

         (iv) Rounding the results of subsection (d)(1)(iii) to two decimal places to determine the average revenue values;
         (v) Dividing the results of subsection (d)(1)(iv) by the reference revenue value for the stage;
         (vi) Dividing the applicable maximum and minimum CTV reference prices contained in the actuarial documents by 0.60 and rounding the results to two decimal places;
         (vii) Multiplying the unrounded results of subsection (d)(1)(v) times the applicable results of subsection (d)(1)(vi); and
         (viii) Rounding the results of subsection (d)(1)(vii) to nearest whole dollar; or
      (2) The prices determined by multiplying the applicable maximum and minimum CTV reference prices contained in the actuarial documents times 1.833 rounded to nearest whole dollar.

Example:

A pecan orchard contains 1000 insurable improved variety trees consisting of stage II, III, and V trees. The insured provides the most recent four years of acceptable sales records.

The average gross sales per tree for the 4-year period are:

Crop Year	
2017	$ 95.25
2016	$142.85
2015	$130.95
2014	$110.95
Average Gross Sales	$120.00

The average revenue value for each stage is:

Stage II $120.00 ×.433 (stage factor) = $51.96
Stage III $120.00 ×.888 (stage factor) = $106.56
Stage V: $120.00 ×1.689 (stage factor) = $202.68

The reference revenue value for each stage is:		CTV reference prices Minimum	Maximum
Stage II:	$34.10	$78	$102
Stage III:	$79.43	$177	$212
Stage V:	$232.46	$455	$471

The maximum and minimum actual CTV reference prices for each stage are:

Preliminary maximum actual CTV reference price = Stage II = $259 = {($51.96 ÷ $34.10) × ($102 ÷ 0.60)}
Stage III = $474 = {($106.56 ÷ $79.43) × ($212 ÷ 0.60)}
Stage V = $684 = {(202.68 ÷ $232.46) × ($471 ÷ 0.60)}

Final maximum actual CTV reference price =
Stage II = $187 {the lesser of the preliminary price $259 or $187 ($102 × 1.833)}
Stage III = $389 {the lesser of the preliminary price $474 or $389 ($212 × 1.833)}
Stage V = $684 {the lesser of the preliminary price $684 or $863 ($471 × 1.833)}

Preliminary minimum actual CTV reference price = Stage II = $198 ($51.96 ÷ $34.10) × ($78 ÷ 0.60)}
Stage III = $396 ($106.56 ÷ $79.43) × ($177 ÷ 0.60)}
Stage V = $661 ($202.68 ÷ $232.46) × ($455 ÷ 0.60)}

Final minimum actual CTV reference price =
Stage II = $143 {the lesser of the preliminary price $198 or $143 ($78 × 1.833)}
Stage III = $324 {the lesser of the preliminary price $396 or $324 ($177 × 1.833)}
Stage V = $661 {the lesser of the preliminary price $661 or $834 ($455 × 1.833)}

(e) In addition to requirements of section 6 of the Crop Provisions, you must report your maximum and minimum actual CTV reference prices by stage block for each unit.

8. In addition to the exclusions in section 8(b) of the Crop Provisions, trees in stage I-blocks are not insurable under this endorsement.
9. All stages of pecan trees, except stage I, that are considered fully (100-percent) damaged or destroyed are eligible for an indemnity under this endorsement.
10. 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 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 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.
11. 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 Pecan 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.
        (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 section 11(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 section 11(b)(2)(ii)(C) and section 11(b)(2)(iii);
(v) Subtracting the result of section 11(b)(2)(i) from the result of section 11(b)(2)(iv);
(vi) If the result of section 11(b)(2)(v) is less than or equal to zero, no indemnity is due for this loss occurrence. If the result of section 11(b)(2)(v) is greater than zero, multiply the results of section 11(b)(2)(v) times the CTV URF and your share;
(vii) Subtracting any previous CTV indemnity for the current crop year from section 11(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 section 11(b)(2)(ii)(A) by the result of section 11(b)(2)(ii)(C), and rounding to two decimal places;
(ix) Dividing the result of section 11(b)(2)(ii)(B) by the result of section 11(b)(2)(ii)(C), and rounding to two decimal places;
(x) Multiplying the result of section 11(b)(2)(vii) by section 11(b)(2)(viii) and multiplying the result times 50 percent; (xi) Multiplying the result of section 11(b)(2)(vii) by section 11(b)(2)(ix); and
(xii) Totaling the results of section 11(b)(2)(x) and section 11(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 10 of this endorsement and will be equal to the result of section 11(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.

12. If you have elected the Occurrence Loss Option under section 15 of the Pecan 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 section 12(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 section 12(b)(5) times the CTV URF times your share;
(7) Multiplying the result of section 12(b)(3) times 50 percent; and
(8) Totaling the results of section 12(b)(6) and 12(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 10 of this endorsement and will be equal to the result of section 12(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 an orchard owner:

- Buys 75-percent coverage level (25-percent deductible).
- Reports 1000 trees in unit one and reports the actual stages as follows:
  200 stage I trees; 400 stage III trees; 400 stage V trees.
- Holds 100-percent interest in the pecan tree crop.
- Is charged an additional premium rate of 3 percent for the endorsement.

FCIC's actuarial documents show the following CTV reference prices for improved pecan varieties (different prices apply to native pecans):

Maximum –$212/tree stage III; $471/tree stage V
Minimum – $177/tree stage III; $455/tree stage V

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

- $204,900 (maximum CTV reference price) = [(400 stage V trees x $471) + (400 stage III trees x $212)] x 75-percent coverage level.

The additional premium due is:
- $6,147 = $204,900 CTV amount of protection x 100-percent share x 3-percent premium rate.

Loss Example:
The pecan orchard has damage to 400 stage-V trees and 400 stage-III trees due to wind (hurricane) in September. Three hundred (300) of the stage V and 100 of the stage III trees were considered destroyed, and the remaining stage III (300) and V (100) 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 $68,300 = [(400 stage V trees x $471) + (400 stage III trees x $212)] x 25-percent deductible.
- The CTV damage value for the destroyed trees is $162,500 = [(300 stage V trees x $471) + (100 stage III trees x $212)].
- The CTV damage value for the fully damaged trees is $98,600 = [(100 stage V trees x $455) + (300 stage III trees x $177)].
- The CTV damage value for the most recent cause of loss is $261,100 = $162,500 + $98,600.
- The total CTV damage value for the unit since the beginning of the crop year is $261,100. (no prior indemnities)
- Subtracting from the total CTV damage value the CTV unit deductible is $192,800 = $261,100 – $68,300.
- Multiplying $192,800 times the CTV URF and your share is $192,800 = $192,800 x 1.000 x 1.000.
- The percent of the indemnity that is attributed to the destroyed trees is 62 percent = $162,500 ÷ $261,100.
- The percent of the indemnity that is attributed to the fully damaged trees is 38 percent = $98,600 ÷ $261,100.
- One-hundred percent of the indemnity for the fully damaged trees ($73,264 = $192,800 x 38 percent) and 50 percent of the indemnity for the destroyed trees ($59,768 = $192,800 x 62 percent x 50 percent) will be paid within 30 days of the time of claim and is equal to $133,032.
- 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 10 of this endorsement and is equal to $59,768 = $192,800 x 62 percent x 50 percent.

Loss Example– Occurrence Loss Option:
The pecan orchard has damage to 400 stage-V trees and 400 stage-III trees due to wind (hurricane) in September. Three hundred (300) of the stage V and 100 of the stage III trees were considered destroyed, and the remaining trees stage III (300) and V (100) 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 $162,500 = [(300 stage V trees x $471) + (100 stage III trees x $212)].
- The CTV amount of insured damage for the destroyed trees is $121,875 = $162,500 x 75-percent coverage level.
- The CTV amount of insured damage for the destroyed trees multiplied times the CTV URF and share is $121,875 = $121,875 x 1.000 x 1.000.
- The CTV damage value for the fully damaged trees is $98,600 = [(100 stage V trees x $455) + (300 stage III trees x $177)].
- The CTV amount of insured damage for the fully damaged trees is $73,950 = $98,600 x 75-percent coverage level.
- The CTV amount of insured damage for the fully damaged trees multiplied times the CTV URF and share is $73,950 = $73,950 x 1.000 x 1.000.
- The CTV amount of insured damage for destroyed trees times 50 percent is $60,938 = $121,875 x 50 percent.
- One-hundred percent of the indemnity for the fully damaged trees ($73,950) and 50 percent of the indemnity for the destroyed trees [$60,938 ($121,875 x 50 percent)] = $134,888 will be paid within 30 days of the time of claim and is equal to $134,888.
- 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 10 of this endorsement: $60,638 = $121,875 x 50 percent.