

UNITED STATES DEPARTMENT OF AGRICULTURE
Federal Crop Insurance Corporation
HAWAII TROPICAL TREE PILOT CROP PROVISIONS



1. Definitions.

Age (year of growth) - For insurance purposes, tree age will be determined on December 31st according to the following table:

Year	Months After Set Out
1	≤12
2	13 – 24
3	25 – 36
4	37+

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

BBTV - Banana Bunchy Top Virus, a disease that infects banana trees.

Broken - Trunk that is snapped into two or more sections.

Crop - Each of the following tropical trees is a separate crop under these crop provisions:

- Banana trees (*Musa acuminata*);
- Coffee trees (*Coffea arabica*); and
- Papaya trees (*Carica papaya*).

Crop year - In lieu of the definition in the Basic Provisions, the period beginning January 1 and extending through December 31 of the same calendar year.

Dead (death) - Trees that die or will die due to insurable causes of loss specified in section 11 (a) – (i) of these crop provisions.

Destroyed (destruction of) trees - Live trees that are destroyed with our consent to control the spread of BBTV or PRV as specified in sections 11(j) and 12(c) of these crop provisions. This term is only used to describe the destruction of live trees to control the spread of BBTV or PRV and not trees that die as a result of other insured causes of loss specified in section 11 (a) – (i) of these crop provisions.

Nematodes (*Meloidogyne konaensis*: the Kona coffee root-knot nematode) - The small, parasitic roundworms that reside in the earth in some areas of Kona, reduce production, and could result in the death of coffee trees growing in these areas.

PPCB - Plant Pest Control Branch, an agency of the Hawaii Department of Agriculture, or a successor agency, which identifies trees with BBTV and PRV and is responsible for controlling the spread of those diseases.

PRV - Papaya Ringspot Virus, a disease that infects papaya trees.

Replacement trees - Trees set out in existing orchards to replace trees that have died, been destroyed and/or removed.

Set out - The event of the tree being transplanted or direct seeded into the orchard.

Toppled - A tree that is leaning and in danger of falling, but is not uprooted.

Tree reference price - The value per tree by age contained in the actuarial documents.

Underreport factor - The result of dividing the amount of insurance by the unit value, rounded to two decimal places and not to exceed 1.00.

Unit value - The amount determined by multiplying the number of actual insurable trees in the unit on the day before the loss (but not reduced for any insured loss that occurred during the crop year) by the tree reference prices contained in the actuarial documents for the applicable tree ages, totaling these values, multiplying the result times the coverage level selected by you, and then multiplying this result times your share.

Uprooted - A tree that is not upright, and that has an exposed root system.

Verticals - For coffee trees, branches that always grow upward from the trunk of the tree.

2. Unit Division.

(a) Provisions in section 34 of the Basic Provisions that allow for enterprise and whole farm units and the provisions that allow for optional units by irrigated and non-irrigated practices are not applicable.

(b) In lieu of establishing optional units by section, section equivalent, or FSA farm serial number, unless otherwise specified in the Special Provisions, you may elect to establish optional units by:

- (1) Non-contiguous land for all crops except papaya trees; or
- (2) Type for all crops if types are provided in the Special Provisions.

3. Insurance Guarantees, Coverage Levels, and Prices for Determining Indemnities.

(a) In lieu of the requirements of section 3 of the Basic Provisions:

- (1) You may select only one coverage level for each crop.
- (2) If the number of insurable trees of the insured crop in the county for the current crop year exceeds 125 percent of the greatest number of insurable trees in which you had experience growing the crop in the county for any one of the three previous crop years, your amount of insurance for the crop for the current crop year will be reduced as follows:
 - (i) Multiply the greatest number of insurable trees of the crop in which you had growing experience in the county in any one of the three previous crop years times 1.25;
 - (ii) Divide the result by the number of the insurable trees of the insured crop in the county for the current crop year; and
 - (iii) Multiply the resulting factor (rounded to two decimal places and not to exceed 1.00) times the amount of insurance for the current crop year.

- (b) The reduction in section 3(a)(2) will apply to all acreage of the trees insured of each crop in which you have a share in the county for the crop year unless you increase the number of trees by 100 or fewer trees.
- (c) For purposes of section 3(a)(2), you must provide written verification of tree numbers from acreage reports submitted by the acreage reporting date or from any other verifiable records to us, at the time of application if you are a new insured, or by the sales closing date if you are a carry-over insured.

4. Contract Changes.

In accordance with section 4 of the Basic Provisions, the contract change date is September 30 preceding the cancellation date.

5. Cancellation and Termination Dates.

In accordance with section 2 of the Basic Provisions, the cancellation and termination date is December 31.

6. Report of Acreage.

- (a) In addition to the provisions in section 6(c) of the Basic Provisions, you must report for each crop insured by unit:
 - (1) The number of insurable and uninsurable trees;
 - (2) The age of insurable and uninsurable trees;
 - (3) The number of trees that have been replaced during the preceding crop year; and
 - (4) The number of trees removed and not replaced during the preceding crop year.
- (b) Section 6(g)(1) of the Basic Provisions is not applicable.

7. Annual Premium.

In lieu of section 7(c) of the Basic Provisions, we will determine your annual premium by multiplying the amount of insurance for the unit times the applicable premium rate and times any applicable premium adjustment percentages shown in the actuarial documents.

8. Insured Crop.

- (a) In addition to section 8(a) of the Basic Provisions, the trees insured will be those of each crop in the county for which you elect insurance coverage and for which a premium rate is provided on the actuarial documents:
 - (1) That are grown to produce a crop intended to be sold for human consumption;
 - (2) For which you provide evidence of at least 4 consecutive years of experience growing the crop, excluding the year of setout;
 - (3) That are inspected and accepted by us; and
 - (4) In which you have a share.
- (b) In addition to the exclusions listed in section 8(b) of the Basic Provisions, we will not insure any trees that have been determined by us to be:
 - (1) Dead, unsound, diseased, or unhealthy;
 - (2) Toppled or uprooted; or
 - (3) Grown on acreage designated on the actuarial documents as uninsurable.
- (c) We will not insure papaya trees:
 - (1) That have not been setout at least 12 months prior to December 31 preceding the crop year;
 - (2) That were planted on acreage where papaya trees grew the previous year; or
 - (3) That have reached age 4 before the beginning of the crop year.
- (d) If we determine that any trees in a unit are infected with BBTv or PRV before insurance initially attaches, then none of the trees in the unit will be insured unless:

- (1) You obtain laboratory tests that indicate none of the trees in the unit identified by us are infected with BBTv or PRV; or
- (2) You destroy infected trees and our subsequent inspection finds no evidence of BBTv or PRV.
- (3) Laboratory tests must be performed on samples drawn no more than 60 days before the date insurance attaches and the results submitted to us no more than 30 days after the date of application.
- (4) Inspections of units that were previously infected with BBTv or PRV will be performed no more than 60 days before the date insurance attaches.

9. Insurable Acreage.

- (a) In lieu of section 9(a)(5) of the Basic Provisions, insurable trees interplanted with other trees or other perennial crops are insurable, unless we inspect the acreage and determine that it is not insurable.
- (b) We will not insure acreage:
 - (1) Of coffee trees where the coffee trees were considered dead due to a nematode infestation (as specified in section 13(b)(1)(iv)(D) of these crop provisions), unless the dead trees have been either chipped and mulched or removed from the intended replanting site, the soil treated in accordance with practices recommended by an agricultural expert, and the site fallowed for the period of time contained in the Special Provisions; or
 - (2) Where replacement trees or trees on new acreage have been planted after the date insurance attached for the crop year. We may insure such acreage at the beginning of the insurance period for the following crop year, except for papaya trees which are not insurable the first twelve months after set out.

10. Insurance Period.

- (a) In accordance with the provisions of section 11 of the Basic Provisions, coverage begins as follows:
 - (1) January 1 of each crop year; or
 - (2) Except that for the year of application, if your application is received after December 2 but prior to January 1, insurance will attach on the 30th day after your properly completed application is received in our local office, unless we inspect the acreage during the 30-day period and determine that it does not meet insurability requirements. You must provide any information that we require for the crop or to determine the condition of the orchard.
- (b) If our inspection prior to the initial year of coverage finds that any trees in the unit are infected with BBTv or PRV, you may reapply for insurance within 60 days of the date of rejection; and
 - (1) Coverage may begin after January 1 for the initial crop year, if we determine that all conditions for insurability in sections 8 and 9 of these crop provisions are met; and
 - (2) The annual premium amount will not be reduced for any portion of the crop year in which coverage was not in force.
- (c) The insurance period ends the earlier of:
 - (1) December 31; or
 - (2) Upon our determination of the death or total destruction of all insured trees on the unit.

11. Causes of Loss.

In accordance with the provisions of section 12 of the Basic Provisions, insurance is provided only against the following causes of loss:

- (a) Adverse weather conditions;
- (b) Disease, but not loss due to insufficient or improper application of disease-control measures;
- (c) Insects, but not loss due to insufficient or improper application of insect or pest-control measures; Nematodes are not an insured cause of loss for coffee trees that are less than five years of age (i.e., four years after setout);
- (d) Fire due to natural causes, unless weeds and other forms of undergrowth have not been controlled or pruning debris has not been removed from the field;
- (e) Earthquake;
- (f) Volcanic eruption;
- (g) Tsunami;
- (h) Wildlife, unless proper measures to control wildlife have not been taken;
- (i) Failure of the irrigation water supply, if due to a cause of loss specified in section 11(a) through (g) of these crop provisions; or
- (j) Destruction of live trees that were determined by us or by PPCB to be infected with BBTV or PRV, and for which you obtain our consent to destroy such trees in order to control the spread of BBTV or PRV.

12. Duties in the Event of Loss.

- (a) In addition to the requirements of section 14 of the Basic Provisions, if you intend to claim an indemnity on any unit, you must allow us to inspect all insured acreage before chipping or mulching any dead trees, or destroying live trees as specified in section 11(j) of these crop provisions.
- (b) In lieu of section 14(c) of the Basic Provisions, you must submit a claim for indemnity not later than 30 days after the end of the insurance period, or if the amount of loss cannot be determined by us until after the insurance period, not later than twelve full calendar months after notification of loss. This claim must include all the information we require to determine your indemnity.
- (c) You must notify us immediately upon your discovery that BBTV or PRV has infected any portion of the unit such that any insured trees in the unit will be destroyed to control the spread of BBTV or PRV.
 - (1) We will inspect the unit and identify all of the infected trees to be destroyed.
 - (2) If you do not agree with our identification of infected trees, you may request an inspection by PPCB, and you must submit a written notice from PPCB that verifies BBTV or PRV was found and identifies the trees to be removed in order to obtain our consent to destroy the trees.
 - (3) You must not destroy any live trees without our consent.

13. Settlement of Claim.

- (a) We will determine your loss on a unit basis for the crop insured. Losses include only trees determined to be dead due to, or destroyed by, an insurable cause of loss. In the event of loss covered by this policy, we will settle your claim by:
 - (1) Multiplying the actual total number of insurable trees (by age) in the unit on the day before the

loss (but not reduced for any insured loss that occurred during the crop year) times the tree reference price for the age of the tree and totaling the results;

- (2) Multiplying the number of dead and destroyed trees (by age) in the unit (since the beginning of the crop year) times the tree reference price (by age) and totaling the results;
 - (3) Dividing the result of 13(a)(2) by the result of 13(a)(1) and rounding to three decimal places to determine the percent of damage;
 - (4) Subtracting the deductible from the result of 13(a)(3) to determine the percent of loss;
 - (5) Multiplying the result of 13(a)(4) times the result of 13(a)(1);
 - (6) Multiplying the result of 13(a)(5) times your share;
 - (7) Multiplying the result in 13(a)(6) times the underreport factor; and
 - (8) Subtracting any indemnity previously paid for the current crop year from the result of 13(a)(7) to determine the indemnity as a result of the most recent insurable cause of loss.
 - (9) The total amount of indemnities payable on a unit for the crop year is limited to the lesser of the amount of insurance for the unit or the unit value.
- (b) We will determine the number of dead or destroyed trees.
 - (1) We will consider the trees dead when any of the insured causes of loss specified in section 11 of these crop provisions as applicable, result in the following conditions:
 - (i) For all crops, whenever the tree is determined by us to be dead;
 - (ii) For banana trees, whenever the tree has been uprooted;
 - (iii) For papaya trees, whenever the tree has been uprooted, all of the leaves have been stripped from the tree, or the tree is broken; or
 - (iv) For coffee trees:
 - (A) Whenever there is no live wood in any of the verticals or in the trunk;
 - (B) The tree is uprooted;
 - (C) All verticals have been broken to less than one inch above the ground; or
 - (D) If the tree has been diagnosed by a crop expert at the University of Hawaii or the State of Hawaii Department of Agriculture as infected with nematodes and who determines:
 - (1) Nematode infection level has reached 50 percent; and
 - (2) Expected production from the tree has been reduced as a result of the nematode infection by at least 40 percent over the last two years.
 - (2) We will consider destroyed trees to be any trees destroyed to control the spread of BBTV or PRV, as specified in section 11(j) and 12(c) of these crop provisions.
 - (c) Coffee and banana trees that are considered dead due to an insured cause of loss must be either chipped and mulched or removed from the field prior to the final settlement of the claim. Papaya trees may remain in the field for decomposition.

- (d) The destruction of banana and papaya trees to control the spread of BBTV and PRV, respectively, must be performed in accordance with procedures established by PPCB and completed prior to the final settlement of the claim.
- (e) For all crops, when the value of dead or destroyed trees established for the unit under this section or section 15 of these crop provisions (the result of 13(a)(2) or 15(b)(1)(i), respectively) exceeds 80 percent of the value of insured trees in the unit (the result of 13(a)(1)), the percent of damage for the unit is considered 100 percent.

Indemnity Example:

Assume that a grower has a 100 percent share of 30 coffee trees (age 4 years with a \$28 tree reference price) in the unit, and elects 70 percent coverage. The deductible is 30 percent ($1.00 - 0.70 = 0.30$). Fifteen of the trees are damaged by a hurricane and are considered dead. The underreport factor is 1.00. The indemnity will be calculated as follows:

- The value of insurable trees is \$840 ($30 \times \28).
- The value of the dead trees is \$420 ($15 \times \28).
- The percent of damage since the beginning of the year is 50 percent ($\$420$ divided by $\$840$).
- The percent of loss is 20 percent (50 percent damage – 30 percent deductible).
- The indemnity is \$168 ($\840×20 percent loss \times 100 percent share \times 1.00 underreport factor).
- No indemnity was previously paid on this unit, so the payable indemnity is \$168.

14. Late and Prevented Planting, and Written Agreements.

Provisions regarding late and prevented planting, and written agreements, of the Basic Provision are not applicable.

15. Occurrence Loss Option.

- (a) The provisions of this option are continuous and will be attached to and made a part of your insurance policy, if:
 - (1) You have applied for and obtained insurance coverage for coffee trees (this option is not available for banana or papaya trees);
 - (2) You elect the Occurrence Loss Option for coffee trees at the time of your application or on or before December 31 if you are a carryover insured, and you pay the additional premium indicated on the actuarial documents for this optional coverage; and
 - (3) You have not elected coverage under the Catastrophic Risk Protection Endorsement.
- (b) In lieu of the provisions contained in section 13(a), your indemnity in the event of a loss will be determined as follows:
 - (1) For coffee trees within a unit that we consider dead or destroyed due to an insurable cause of loss and for which the number of dead or destroyed trees for each occurrence is in excess of 3 percent of the insurable trees in the unit, your loss will be determined by:
 - (i) Multiplying the number of dead or destroyed trees (by age) in the unit (since the beginning of the crop year) times the tree reference price (by age) and totaling the results;
 - (ii) Multiplying the result of 15(b)(1)(i) times your coverage level;

- (iii) Multiplying the result of 15(b)(1)(ii) times your share;
- (iv) Multiplying the result of 15(b)(1)(iii) times the underreport factor; and
- (v) Subtracting any indemnity previously paid for the current crop year from the result of 15(b)(2)(iv) to determine the indemnity owed as a result of the most recent insurable cause of loss.

- (2) The total amount of indemnities payable on a unit during the crop year is limited to the lesser of the amount of insurance for the unit or the unit value.

- (c) This option may be cancelled by you for any succeeding crop year by giving written notice on or before the cancellation date preceding the crop year for which the cancellation is to be effective.
- (d) If you elect this option, all coffee trees within the county will be insured under this option.

Occurrence Loss Option (OLO) - Indemnity Example:

Assume that a grower with a 100 percent share has 30 coffee trees (age 4 years with a \$28 tree reference price) in the unit, and has elected 70 percent coverage and the OLO. The underreport factor is 1.00. Fifteen (15) of the trees are damaged by a hurricane and are considered dead. The number of dead trees exceeds 3 percent of the trees in the unit. The indemnity will be calculated:

- The value of the dead trees since the beginning of the crop year is \$420 (15 trees \times $\$28$).
- The indemnity is \$294 ($\420×70 percent coverage level \times 100 percent share \times 1.00 underreport factor).
- No indemnity was previously paid on this unit, so the payable indemnity is \$294.