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HAWAII TROPICAL TREE (PILOT) CROP INSURANCE UNDERWRITING GUIDE

2011 and Succeeding Insurance Years
Underwriting Guide for Hawaii Tropical
Tree (Pilot) Crop Insurance Contracts

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SUBJECT: Hawaii Tropical Tree (Pilot) Program Insurance Underwriting Guide for the 2011 and succeeding crop years	APPROVED: <i>/s/ Tim B. Witt</i> DATE: <i>9/30/2010</i> Deputy Administrator for Product Management

Reason for Issuance

This handbook provides the official FCIC-approved 2011 and succeeding crop years underwriting and administration standards for the Hawaii Tropical Tree (Pilot) Program. All approved insurance providers electing to offer the Hawaii Tropical Tree (Pilot) Program must utilize these standards.

SUMMARY OF CHANGES

Major Changes:

Section 5.B. – Changed section regarding production limitation guarantee for new acreage.

1. PURPOSE AND OBJECTIVE

To provide clarification and supplementary instructions for establishing fruit tree crop insurance coverage in accordance with the Hawaii Tropical Tree Pilot Crop Insurance Provisions (11-0265) and the Hawaii Tropical Tree Pilot Loss Adjustment Standards Handbook (FCIC-25850).

This Underwriting Guide is a supplement to the Crop Insurance Handbook (CIH). The CIH applies, except as designated in this Underwriting Guide.

2. CANCELLATION

Effective Date: Upon Approval.

DISTRIBUTION: RMA Deputy Administrators, Directors, Washington D.C. and Kansas City; RMA Regional and Risk Compliance Offices; National Appeals Division (NAD); Reinsured Companies, and National Crop Insurance Services (NCIS).

3. DEFINITIONS

Age (Year of Growth) – (Year of Growth) - For insurance purposes, tree age (growth stage) 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 the insured, and then multiplying this result times the insured’s share.

Banana Daughter Plant – The younger or smaller stalk residing in a single banana mat that is not insurable.

Banana Mother Plant – The oldest or tallest stalk considered as the banana tree.

CTV Amount of Insurance – The dollar amount (by unit) calculated by multiplying the number of insurable trees of each crop reported by tree age times the CTV reference price for the age of the trees, totaling these values, multiplying the result times the coverage level selected by the insured, and then multiplying this result times the insured’s share.

CTV Reference Price – The price per tree by tree age listed on the actuarial documents for tree value replacement that is used in calculating the CTV unit value, the CTV amount of insurance, and the indemnity.

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

Crop – Each of the following tropical trees is a separate crop under the HTT Crop Provisions:

- banana trees (*Musa acuminata*);
- coffee trees (*Coffee 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. The crop year will be designated by the calendar year in which the period begins.

Dead (Death) – Trees that die or will die due to insurable causes of loss specified in section 11 (a) – (i) of the HTT 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 the HTT Pilot 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 the HTT Pilot Crop Provisions.

HTT – Hawaii Tropical Trees.

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

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 insurable trees 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 prices contained in the actuarial documents for the applicable tree ages, totaling these values, multiplying the result times the coverage level selected by the insured, and then multiplying this result by the insured's share.

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

4. BACKGROUND INFORMATION

RMA implemented a Hawaii Tropical Tree Pilot Program for selected tropical fruit trees beginning in Crop Year 2007 for the state of Hawaii, encompassing all counties (Hawaii, Honolulu, Kauai, and Maui). The pilot program is structured to indemnify insureds for dead and destroyed trees when death or destruction is caused by an insured peril during the insurance period.

5. COVERAGE INFORMATION

A. Amount of Insurance

- (1) For each crop, the dollar amount for the unit calculated by multiplying the number of insurable trees reported at each age times the tree reference price (TRP) for the age, totaling these values, multiplying the result times

the coverage level selected by the insured and then multiplying this result times the insured's share.

Amount of Insurance = sum (number of trees at each age x TRP for each age) x coverage level x share

(2) Example

Joe Farmer has 2000 insured coffee trees (1,000 are 2 years old with a \$19 TRP and 1,000 are 6 years old with a \$30 TRP). He has a coverage level of 75 percent and his share is 100 percent.

The amount of insurance is determined as follows:

$$\begin{aligned} &= [(1000 \times \$19) + (1000 \times \$30)] \\ &= [19,000 + 30,000] \times 0.75 \times 1.000 \\ &= \$36,750 \end{aligned}$$

B. Amount of Insurance Limitation for Additional Trees

(1) To mitigate the risk of producers increasing their acreage due to the availability of insurance, a coverage limitation applies if the insured increases the number of insurable trees above a specified limit. This limit applies to all insurable acreage of the insured crop in the county for the crop year unless the total increase is 5,000 or fewer trees.

(2) If the insured's insurable tree count for the current crop year exceeds 175 percent of the greatest number of insurable trees (in which the insured had experience growing the crop in the county) for any one of the three previous crop years, the amount of insurance for the current crop year will be reduced as follows:

Step 1) Multiply the greatest number of insurable trees insured of each crop in which the insured had growing experience in the county in any one of the three previous crop years times 1.75;

Step 2) Divide the result by the number of insurable trees of each crop in which the insured had a share in this county in the current crop year; and

Step 3) Multiply the resulting factor (rounded to two decimal places and not to exceed 1.00) for each insured crop by the amount of insurance for the crop for the current crop year.

(3) Example

For each of the five previous crop years, Joe Farmer had 1,000 insurable coffee trees. He acquires 1000 more insurable trees.

$$\text{Greatest number of insurable trees in past 3 years} = 1,000$$

Additional insurable trees = 1,000
 Current crop year insurable trees = 2,000
 Amount of Insurance = \$36,750*

* from section 5A(2) Example

To determine the amount of insurance for the crop for the current crop year with the additional acreage:

Step 1) $1,000 \times 1.75 = 1,750$
 Step 2) $1750 / 2,000 = 0.88$
 Step 3) $0.88 \times \$36,750 = \mathbf{\$32,340}$

C. Determining Age

- (1) For insurance purposes, tree age (growth stage) will be determined on December 31st according to the table below:

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

(2) Examples

- (a) A papaya tree grown from seed planted (set out) in a field 6 months prior to January 1 of the crop year is considered 1 year old.
 (b) A coffee tree that was transplanted (set out) into a field 38 months prior to January 1 of the crop year is considered 4 years old.

D. Important Dates:

- (1) Contract Change Dates: September 30 preceding the cancellation date.
 (2) Cancellation, Termination, and Sales Closing Dates: December 31.
 (3) Acreage Reporting Dates: February 15.
 (4) Beginning of the Insurance Period Dates: January 1 of each crop year.
 (5) End of the Insurance Period Dates: December 31 of the crop year.

6. INSURED CROP

A. Insurability

- (2) The trees insured will be those of each crop (banana, coffee, and papaya) in the county for which the producer elects coverage and a premium rate is provided on the actuarial documents:
 - (a) That are grown to produce a crop intended to be sold for human consumption;
 - (b) For which the producer provides evidence of at least 4 consecutive years of experience growing the crop, excluding the year of setout;
 - (c) That are inspected and accepted by the Insurance Provider; and
 - (d) In which the producer has a share.

- (2) Insurable trees include trees that are interplanted with other trees or other perennial crops are insurable, unless the Insurance Provider inspects the acreage and determines that it is not.

- (3) The following trees are not insurable:
 - (a) Any trees determined by the Insurance Provider to be dead, unsound, diseased, unhealthy, toppled or uprooted;
 - (b) Grown on acreage designated on the actuarial documents as uninsurable;
 - (c) Papaya trees:
 - (i) That were planted (set out) less than 12 months prior to the beginning of the crop year (January 1); or
 - (ii) That have reached age 4 before the beginning of the crop year.
 - (d) Coffee trees that were transplanted (set out) on acreage where coffee trees were determined to be dead in accordance with the HTT Crop Provisions due to a nematode infestation, unless:
 - (i) The destroyed trees have been either chipped and mulched or removed from the intended replanting site;
 - (ii) The soil treated in accordance with practices recommended by an agricultural expert; and
 - (iii) The site was fallowed for the period of time contained in the Special Provisions.

B. Insurance Period

Coverage begins on:

- (1) January 1 of each crop year; or
- (2) The 30th day after the insured's properly completed application is received in our local office if the application is submitted between December 2 and January 1 unless the acreage is inspected and does not meet the insurability requirements contained in the HTT Pilot Crop Provisions.

C. Unit Determination:

- (1) Units are available by:
 - (a) Basic units; and
 - (b) Optional units (unless limited by the Special Provisions) for:
 - (i) Noncontiguous land (except papaya); and
 - (ii) Type (if types are specified in the Special Provisions).
- (2) Enterprise units, whole farm units, and optional units by irrigated and non-irrigated practices, legal descriptions or farm serial numbers are not available.

7. ENDORSEMENTS AND OPTIONS

A. Occurrence Loss Option (OLO)

- (1) Coverage provided by the OLO is available for coffee trees, if:
 - (a) The insured has obtained coverage for coffee trees provided by the HTT Pilot Crop Provisions;
 - (b) The OLO is elected at the time of application, or on or before December 31, preceding the initial crop year for which the option will be effective (for carryover insureds). If the applicant/insured elects the OLO, all coffee trees within the county insured by the HTT policy will be covered by this option;
 - (c) The additional premium indicated on the actuarial documents for this optional coverage is paid; and
 - (d) The insured has not elected coverage under the Catastrophic Risk Protection Endorsement.
- (2) The provisions of this option are continuous and may be cancelled or terminated in accordance with the cancellation and termination provisions of the HTT Pilot Crop Provisions.

- (3) If the OLO is elected, and the number of coffee trees that are dead or destroyed due to an insured cause is more than three (3) percent of the insured trees in the unit, the indemnity will be determined by:
 - (a) 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;
 - (b) Multiplying the result of (a) times the coverage level;
 - (c) Multiplying the result of (b) times the share;
 - (d) Multiplying the result of (c) times the underreport factor; and
 - (e) Subtracting any indemnity previously paid for the current crop year from (d) to determine the indemnity owed as a result of the most recent insurable cause of loss.

B. Comprehensive Tree Value Endorsement

- (1) The Comprehensive Tree Value Endorsement (CTVE) provides an additional amount of insurance for coffee and papaya trees, in addition to the amount of insurance provided by the HTT Pilot Crop Provisions.
- (2) The insured may elect the CTVE if he/she has not elected coverage under the Catastrophic Risk Protection Endorsement.
- (3) The CTVE is elected at the time of application, or on or before December 31, preceding the initial crop year for which the option will be effective (for carryover insureds).
- (3) The coverage level elected by the insured for the HTT Pilot Crop Provisions will apply to the CTVE.
- (4) The CTV amount of insurance is calculated by multiplying the number of insurable trees of each crop by age in the unit times the applicable CTV reference price for the age, totaling these values, multiplying the result times the coverage level, and then multiplying this result times the insured's share.

CTV Amount of Insurance = sum (number of trees at each age x CTV reference price for each age) x coverage level x share.

(5) Example

Joe Farmer has 1,000 insured coffee trees (500 are 2 years old with a \$3 CTV reference price and 500 are 6 years old with a \$6 CTV reference price). He elects the 75% coverage level and has 100% share in the trees.

The amount of insurance is determined as follows:

$$\begin{aligned} &= [(500 \times \$3) + (500 \times \$6)] \\ &= [1,500 + 3,000] \times 0.75 \times 1.000 \\ &= \$3,375 \end{aligned}$$

8. REPORTING REQUIREMENTS

In order to verify that the insurability requirements for each crop have been met, the Insurance Provider will conduct a pre-acceptance inspection. The forms listed below, or other forms approved by RMA, can be used to report the required information and any other information determined to be necessary by the Insurance Provider.

A. Orchard Location Plat Map:

- (1) Completed by the producer, with the assistance of the Insurance Provider, at the time of application, and updated by the policyholder in subsequent years on or before the acreage reporting date.
- (2) An example and instructions are provided in Exhibit 1.

B. HTT Orchard Inspection Report

- (1) Completed by the Insurance Provider for:
 - (a) The initial crop year for all new insureds;
 - (b) Subsequent crop years for carryover policyholders:
 - (i) If the acreage or tree count within a unit increases by 10 percent or more from the previous crop year. (See section 9.); and
 - (ii) Other conditions listed in section 9.
- (2) An example and instructions are provided in Exhibit 2.

C. Acreage Report:

- (1) In addition to the acreage report requirements contained in Section 6 of the Basic Provisions, the applicant/policyholder is required to report by unit for each insured crop the following additional information:
 - (a) The number of trees of each age on separate lines within each unit.

- (b) The rate class designation associated with tree ages from the actuarial documents.
 - (c) The date set out was completed.
 - (d) In the Remarks section the number of trees that have been replaced and the number of trees that have been removed and not replaced during the previous crop year.
- (2) The producer will report the ages of insured trees based on his/her records and the definition of age found in the HTT Pilot Crop Provisions.
 - (3) The agent will assist the insured in correctly reporting his/her trees (by age) and tree acreage as required by the crop provisions.

9. INSPECTION REQUIREMENTS

- A. Orchard inspections are required to be performed by an Insurance Provider inspector:
 - (1) For all new applicants;
 - (2) For added land units (land not previously in the operation);
 - (3) Whenever there is an acreage increase within an existing unit of 10 percent or more from the previous crop year;
 - (4) Whenever there is a tree count increase within the existing unit of 10 percent or more from the previous crop year; and
 - (5) Whenever initiated by the Insurance Provider.
- B. Timeliness:
 - (1) Orchard inspections involving applications filed between December 22 and January 1 (of the INITIAL crop year) will be completed immediately so that the application, if accepted, can be processed before the 10th day following the date of application.
 - (2) See Section 16E of the CIH for deadlines applicable for all other circumstances.
- C. Tree Count:
 - (1) Identify and explain any uninsured trees and/or acreage in the Remarks section.
 - (2) Any uninsurable trees and/or acreage must be shown on the Orchard Location Plat map.

EXHIBIT 1: ORCHARD LOCATION PLAT MAP

Instructions for completion:

Item:

- (1) Enter the name of the insured or applicant.
- (2) Enter the county in which the insured trees are located.
- (3) Enter the policy number.
- (4) Enter the crop and type as specified on the actuarial documents.
- (5) Enter the unit number.
- (6) Enter the insured's or applicant's address.
- (7) Maps: Cross through "Section" and identify the acreage to be mapped using an orchard designation.
 - (a) Orchards should be separated into sub-orchards (or blocks as defined in the CIH) according to tree age and type.
 - (b) Outline orchard location or sub orchard location and identify each sub orchard by orchard number and letter (e.g., 1A). Draw orchard or sub orchards in actual shapes and as close to scale as possible. Indicate which acreage has been excluded from coverage by outlining it and labeling it as "excluded" (uninsurable).
 - (c) Outline land ownership boundaries in red for each orchard involved. Indicate land ownership across orchard boundaries with tie bars.
- (8) Use continuation plat maps to identify additional orchard locations, as required.
- (9) Page numbers (Example: Page 1 of 1, Page 1 of 2, etc.)

**Exhibit 1, cont.
ORCHARD LOCATION PLAT MAP, cont.**

Page ____ of ____

Section: _____

Section: _____

Section: _____

Section: _____

Section: _____

Section: _____

EXHIBIT 2: HTT ORCHARD INSPECTION REPORT

Instructions for completion:

PART I: HEADING

Item

No. Information Required

1. **Name of Applicant or Insured:** Name of the insured that identifies EXACTLY the person (Legal entity) to whom the policy is issued.
2. **County:** Name of county where the trees are physically located.
3. **Crop:** Name of insured crop.
4. **Contract Number:** Insured's assigned contract number.

PART II: ORCHARD INFORMATION

5. **Verify Acreage Report:** MAKE NO ENTRY.
6. **Address and Phone Number of Applicant or Insured.**
7. **Note condition of Other HTT orchards owned or operated by the applicant/insured.**
Enter "not applicable"
8. **Is Orchard Managed by Owner:** Check "Yes" or "No," as applicable. If "No" is checked, enter manager's name, address, and telephone number.
9. **Is Orchard Located In An Established HTT Area:** Answer "Yes" or "No." If "No" is entered, explain general growing conditions and where the orchard is physically located. If additional space is needed, enter additional comments in item 21 "Remarks."

PART III: INDIVIDUAL ORCHARD DATA

10. **Unit Number:** The five digit number from the Summary of Coverage after it is verified to be correct (e.g., 00100).
11. **Type:** Enter the appropriate name of type as specified on the actuarial documents.
12. **Acres in Plot:** Enter the number of acres in the orchard (sub orchard).
13. **Tree Spacing:** Enter the spacing in feet (e.g., 15 x 15). If spacing varies, enter "varying" and explain in item 21 "Remarks."
14. **Tree Count:** Enter the total number of trees in each orchard (sub orchard).
15. **Trees by Year Set Out:** Enter the number of trees by the month and year of set out.

16. **Tree Condition:** Enter “acceptable” or the following, as applicable:
- a. Trees damaged;
 - b. Not rotated, for papaya trees replanted in an orchard or sub orchard, where papaya trees were grown the previous crop year;
 - c. Coffee nematodes, for coffee trees replanted in an orchard or sub orchard where coffee trees were removed due to nematode infestation and the required cultural practices (see HTT Pilot Crop Provisions, section 9(b)(1)) were not performed; or
 - d. Other circumstances.

Explain any of the above tree conditions in item 21 “**Remarks.**”

17. **Rate Area:** Enter the correct rate class from the actuarial documents. Verify with the Summary of Coverage, and if the rate class is found incorrect, revise according to Insurance Provider instructions.
18. **Crop Year:** Enter the crop year for which the inspection is performed.
19. **Excluded Acreage:** List acreage of trees excluded from coverage and complete items 10-15.
20. **Check “A”** if there is nothing indicating a change in the data reported.
Check “B” if there are changes needed and enter “A Revised Acreage Report” as applicable.
21. **Remarks:** Note any of the following that may be applicable:
- a. The number of trees in the original planting.
 - b. The trees on a unit which have been replaced or removed. Enter the total number of new trees set out with the appropriate dates.
 - c. Any unusual conditions in the orchard or local growing area.
 - d. Variations in tree spacing within an orchard.
 - e. Any reasons for not recommending insurance coverage.

If more space is needed, enter additional information on a Statement of Facts form and attach it to the inspection report.

22. **Is Application/Acreage Report Recommended For Acceptance:** Check “Yes” or “No” box, as applicable.
23. **Code Number:** Enter the Inspector’s code number.
24. **Orchard Inspector’s Signature:** Inspector signs report.

25. **Date:** Inspector enters date of report (MM/DD/YYYY).
26. **Page:** Page numbers (Example: Page 1 of 2, Page 2 of 2, etc.)

Exhibit 2

**(FOR ILLUSTRATION PURPOSES ONLY)
HAWAII TROPICAL TREES ORCHARD INSPECTION REPORT**

PART I – HEADING								
1. NAME OF APPLICANT OR INSURED I.M. INSURED			2. COUNTY HAWAII		3. CROP COFFEE		4. CONTRACT NUMBER XXXXXXX	
PART II – ORCHARD INFORMATION								
5. CHECK AND VERIFY ALL ENTRIES ON THE ACREAGE REPORT. IF ANY ENTRIES ARE QUESTIONABLE, DETERMINE ACCURACY AND CORRECT IF NECESSARY.								
6. ADDRESS AND PHONE NUMBER OF APPLICANT RR ONE HILO, HI PHONE NUMBER (808) XXX-XXXX					7. NOTE CONDITION OF OTHER HAWAII TROPICAL TREE ORCHARDS OWNED OR MANAGED BY APPLICANT OR INSURED not applicable			
8. IS ORCHARD MANAGED BY OWNER? ___NO ___X YES IF NO, WHO MANAGES IT? PHONE NUMBER:					9. IS ORCHARD LOCATED IN AN ESTABLISHED HAWAII TROPICAL TREE AREA? Yes			
PART III – INDIVIDUAL ORCHARD DATA								
UNIT NUMBER 10	TYPE 11	ACRES IN PLOT 12	TREE SPACING 13	TREE COUNT 14	TREES BY YEAR SET OUT 15	TREE CONDITION 16	RATE AREA 17	CROP YEAR 18
00100	No type specified	10.1	15x10	2,400	January 2008	acceptable	DO1	2008
00100	No type specified	5.5	15x10	1,600	March 2003	acceptable	DO4	2008
19. EXCLUDED ACREAGE								
20. THE ACREAGE COVERED BY THE ABOVE CONTRACT WAS INSPECTED ON DATE SHOWN BELOW WITH THE FOLLOING RESULTS: A. ___ NOTHING FOUND TO REQUIRE A CHANGE IN THE DATA REPORTED B. ___ DATA REPORTED WAS FOUND TO BE SUCH THAT _____ WAS PREPARED					21 REMARKS:			
22 IS APPLICATION/ACREAGE REPORT RECOMMENDED FOR ACCEPTANCE? ___X___ YES ___NO			23 CODE NUMBER XXXXXX		24 ORCHARD INSPECTOR'S SIGNATURE I.M. Inspector		25 DATE MM/DD/YYYY	

