

Objective Analysis for Informed Decision Making

# Nursery Crop Insurance in Wyoming

James B. Johnson and John Hewlett\*

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\* University of Wyoming, Extension Educator

#### Introduction

Multiple peril crop insurance for nursery production has been available since 1989 for nurseries that received at least 50 percent of their gross income from wholesale marketing of nursery plants. Multiple peril nursery crop insurance is available to wholesale nurseries in all Wyoming counties (Figure 1). In June 2005 a final rule was published in the *Federal Register* that made major policy and implementation changes to the nursery crop insurance policy.

Nursery crop insurance covers field grown and containerized nursery plants. Structures, equipment and supplies are not covered by this insurance. Nursery crop insurance functions as an asset-based form of insurance coverage. Each insured nursery grower provides a *plant inventory value report* (*PIVR*) that establishes the plant inventory value for all plants in each *basic unit*. Nursery growers report plant inventory values yearly.

#### Figure 1: Nursery Crop Insurance Coverage



#### **Insurable and Non-insurable Losses**

Nursery plants are insured against losses from: (a) adverse weather; (b) fire, if undergrowth by plants and buildings have been controlled; (c) wildlife; (d) earthquake; (e) volcanic eruption; (f) failure of water supply if caused by an insurable cause of loss; (g) failure or reduction in power supply if induced by an insurable cause of loss; and, (h) a loss in plant values because of the inability to market such plants, provided such plants would be marketed during the crop year.

Nursery crop insurance does not insure against any loss caused by: (1) disease or insect infestation unless a disease or insect infestation occurs for which no effective control measure exists; (2) inability to market nursery plants as a result of refusal of the buyer to accept production, a boycott, or an order by a public official prohibiting sales including, but not limited to a stop sales order, quarantine, or phytosanitary restriction on sales; (3) cold temperatures, if cold protection is required in the eligible plant list, unless (a) the nursery grower installed adequate cold protection equipment or facilities and there is a failure or breakdown of the cold protection equipment or facilities resulting from an insurable cause of loss or (b) the lowest temperature or its duration exceeded the capacity of the required cold protection equipment to keep the insured plants from sustaining cold damage; (4) collapse or failure of buildings or structures unless the damage to the building or structure resulted from an insurable cause of loss; (5) any cause of loss, if the only damage suffered is the failure of the plants to grow to an expected size; or (6) failure of the nursery grower to follow recognized good nursery practices. Good nursery practices include the use of labeled products to control disease or insect infestations.

#### **Insurable and Non-insurable Crops and Plants**

The insured nursery plant inventory will be all nursery plants that are shown on the *eligible plant list* and meet other requirements for insurability specified in the nursery crop insurance policy. Among these requirements are that (1) the nursery be a *wholesale nursery*, (2) the plants be produced under irrigation unless specifically exempted, (3) the plants be grown in an appropriate medium, and (4) the plants be grown in accordance with *good nursery practices*.

To be insured under the nursery crop insurance, the nursery plants cannot (1) be grown for sale as Christmas trees, (2) be stock plants or plants being grown solely for buds, flowers, or greenery, or (3) plants produced in a nursery container that contains two or more different genera, species, subspecies, varieties, or cultivars.

#### Terms Used in Nursery Crop Insurance

Terms that take on particular meaning in the implementation of nursery crop insurance are described.

*Amount of insurance*: For each *basic unit*, the nursery grower's *basic unit value* multiplied by the *coverage level percentage* the nursery grower elects and multiplied by the nursery grower' share in the production.

**Basic unit**: **Basic units** are delineated by a nursery grower's share in nursery production that may be further divided by each insurable plant type into additional **basic units** when additional crop insurance is purchased.

**Basic unit value**: The full value of all insurable plants in each basic **unit** as shown by the nursery grower's **plant inventory value report**, including any revision that increases the value of the nursery grower's insurable plant inventory.

*Container grown*: Nursery plants planted and grown in standard nursery containers either above the ground or that are paced in the ground, either directly or in another pot in the ground, i.e., pot-in-pot.

*Coverage levels*: A nursery grower may choose a coverage level for each *basic unit*. They may select 50, 55, 60, 65, 70, or 75 percent of the value of the nursery inventories.

*Crop year deductible*: The deductible percentage multiplied by the sum of all plant inventory values for each *basic unit*.

*Eligible Plant List* --This list includes the botanical and common names of insurable plants, the winter protection requirements for container grown material and the areas to which these requirements apply, the hardiness zone to which field grown material is insurable, the designated hardiness zone for each county, and the unit classification for each plant on the list. There are approximately 20,500 plants included on this list. The Federal Crop Insurance Corporation list is published on the Risk Management Agency (RMA) website, <u>www.rma.usda.gov</u>. This list is also available on compact disc from crop insurance agents.

*Field grown*: Nursery plants planted and grown in the ground without the use of an artificial root containment device. Plants grown in in-ground fabric grow bags, plants that are balled and burlapped or plants grown in containers that allow plants to root (excluding fibrous roots) into the ground (for

example, a container without a bottom) are considered field grown.

*Field Market Value A*—The value of undamaged insurable plants, based on the lesser of: (1) the prices contained in the *plant price schedule;* or (2) the prices contained in the nursery grower's catalog or price list in their basic unit immediately prior to the occurrence of any loss, as determined by appraisal approved by RMA.

*Field Market Value B*—The value of the insurable plants based on the lesser of: (1) prices contained in the *price plant schedule*; or (2) the prices contained in the nursery grower's catalog or price list in the basic unit following the occurrence of a loss, as determined by an approved appraisal plus any reduction on value due to uninsured causes.

*Good nursery practices*: The horticultural practices generally in use in the area for nursery plants to make normal progress toward the stage of growth at which marketing can occur and: (1) for conventional practices, generally recognized by agricultural experts in the area as compatible with the nursery plant production practices and weather conditions in the county; or (2) for organic practices, generally recognized by the organic agricultural industry for the area as compatible with the nursery plant production practices and weather conditions in the county or the area as compatible with the nursery plant production practices and weather conditions in the county or contained in the organic plan.

*Liners*: Plants produced in standard nursery containers that are equal to or greater than 1 inch in diameter (including trays with 200 or fewer individual cells) but less than 3 inches in diameter at the widest point of the container or cell interior, have an established root system reaching the sides of the containers, are able to maintain a firm root ball when lifted from the containers, and meet all other specified conditions.

*Monthly proration factors*: Factors contained in the actuarial documents that are used to calculate premiums when producers do not insure nursery plants for an entire crop year.

*Nursery*: A business enterprise deriving at least 50 percent of its gross income from the marketing of wholesale nursery plants.

*Occurrence deductible*: This deductible allows a smaller deductible than the *crop year deductible* to be used when the inventory value is less than the reported *basic unit value*. The *occurrence deductible* is the lesser of: (1) the deductible percentage multiplied by *field market value A* multiplied by the *under-report factor;* or, (2) the *crop year deductible*.

*Peak inventory value report*: A report that increases the value of insurable plants over the value reported on the Plant Inventory Value Report, and declares the coverage commencement and termination dates.

*Plant inventory value report (PIVR)*: In this report the nursery grower declares the value of insurable plants. This report must include, by basic unit, all growing locations, basic unit value, coverage level selected, as applicable and the grower's share in the nursery production. This report, including any revisions and the Peak Inventory Value Report, is used to determine the nursery grower's amount of insurance and premium. The nursery grower must also submit two copies of their most recent wholesale catalogs or price lists.

*Price election*: This election is limited to 100 percent of the plant price. The price for each plant and size listed on the nursery grower's *plant inventory value report* will be the lower of the *plant price schedule* price or the lowest wholesale price in the nursery grower's catalog or price list. [Growers may confer with insurance agents or Risk Management Agency personnel on format requirements for their catalogues and price list submissions].

*Plant price schedule (PPS)*: This is a schedule of insurable plant prices published by the Federal Crop Insurance Corporation on the RMA web site that establishes the maximum insurable value of undamaged insurable plants.

*Practice*: A cultural method of producing plants. *Container grown* and *field grown* are considered separate insurable practices.

*Standard nursery containers*: Rigid containers not less than one inch in diameter at the widest point of the container interior (including trays that contain 200 or fewer individual cells). Above-ground fabric grow bags, and other types of containers specified in the Special Provisions that are appropriate in size and provide adequate drainage for the plant.

*Under-report factor*: This factor is used to adjust a nursery grower's indemnity for under-reporting inventory values. For each *basic unit*, the *under-report factor* is the lesser of: (a) 1.000 or (b) the *basic unit* value, including the peak inventory value report during the coverage term of a peak inventory endorsement, minus the total of all previous losses, as adjusted by a previous under-report factor, divided by *field market value A*.

*Wholesale*: To sell nursery plants in large quantities at a price below that offered on low quantity sales to retailers, commercial users governmental end-users, and other end-users for business purposes, i.e., to a landscaper. The determination of wholesale status will be made on a county-by-county basis.

#### **Insurable Units**

Nursery production can be grouped into one or more units in order to calculate guarantees, premiums and indemnities. Neither *enterprise* nor *optional* units are available for nursery crop insurance. *Basic units* are the only unit delineation available for nursery production.

A *basic unit* may include a nursery grower's nursery production in a county by share agreement. Nursery production may be further divided by plant type into *basic units* when additional crop insurance is purchased.

*Field grown* and *container grown* nursery plants are treated as two different crops for nursery production crop insurance. There are 14 plant types applicable to *field grown* nursery plant material. There are 15 plant types for *container grown* nursery plant material including *liners*.

The plant types are: (1) Deciduous Trees, shade and flower; (2) Broad-leaf Evergreen trees; (3) Coniferous Evergreen trees; (4) Fruit and Nut Trees; (5) Deciduous Shrubs; (6) Broadleaf Evergreen Shrubs; (7) Coniferous Evergreen Shrubs; (8) Small Fruits; (9) Herbaceous Perennials; (10) Roses; (11) Ground Cover and Vines; (12) Annuals; (13) Foliage; (14) Palms and Cycads; and (15) *Liners (container grown,* only).

## **Other Considerations**

Catastrophic Risk Protection (CAT) is available for nursery crop production. CAT is available at the 50 percent *coverage level* and 55 percent of *maximum price elections*.

*Written agreements* may be available for plant types not listed on the plant price schedule.

*Late planting* and *prevented planting* provisions of multiple peril crop insurance are not applicable to nursery crop production.

A *peak inventory endorsement* is available for an additional premium charge. It allows growers to cover temporary increases in inventory. Growers declare the amount of inventory value increase for the peak inventory period. The grower pays premium for the months, including portions of months, the endorsement is in effect. A grower must have buy-up coverage to be eligible to purchase this endorsement.

There is a *rehabilitation endorsement* is available for insured *field grown crops* damaged by an insured cause of loss. An additional premium charge above that incurred for the initial insurance coverage will apply. Rehabilitation costs are limited to expenditures for labor and materials for pruning and setup (righting, propping and staking).

#### **Insurance Period**

The 2007 crop year for nursery crop insurance began June 1, 2006 and continues through May 31, 2007. For nursery growers who carry insurance as ongoing coverage, in subsequent years nursery crop insurance will be applicable to the crop year that begins June 1 and ends May 31.

New nursery crop production insurance applications may be filed any time. However, all applications including those for new or amended coverage are subject to a 30-day waiting period before coverage begins. Applications filed after May 1 but before June 1 will not provide coverage until the next crop year.

The insurance period ends the earlier of: (1) the date of final adjustment of a loss when the total indemnities equal the amount of insurance; (2) removal of the bare root nursery material from the field; (3) removal of all other insured crop materials from the nursery; or (4) at 11:59 pm May 31.

Therefore, the maximum time an insurance period can extend in a crop year is from June 1 in one calendar year to May 31 in the next calendar year.

#### **Example of Nursery Production Crop Insurance**

A nursery grower has 100 percent share in a single basic unit of nursery production located in Converse County, Wyoming. The grower reports \$200,000 in inventory on the *plant inventory value report*. The grower selects a 75 percent *coverage level*. This producer's crop insurance coverage is shown (Table 1).

# Table 1: Example of Nursery Production CropInsurance

<b>Contract Data</b>	Value	Calculation
Plant inventory	\$200,000	Producer
value		
Coverage level	75 %	Producer
Producer's	100 %	Producer
share		
Price election	100 %	Producer (no other
		% allowed)
Amount of	\$150,000	\$200,000 x 0.75 x
Insurance		1.00 x 1.00

#### **Nursery Crop Production Insurance Premiums**

Premiums for nursery crop insurance are based on the *amount of insurance*. The *gross premium* is the *amount of insurance* times the premium rate. Premiums may be determined by grower interaction with crop insurance agents or through the use of the premium calculator available on the RMA web site.

The federal government subsidizes multiple peril crop insurance premiums to the producer. The *coverage level* selected by the nursery grower determines the level of the subsidy (Table 2).

# Table 2: Subsidy Rates by Coverage levels,Individual Plans

Coverage Level (%)	Subsidy Rate
50	0.67
55	0.64
60	0.64
65	0.59
70	0.59
75	0.55

The premium calculations for the example producer are shown (table 3).

# Table 3: Example Premium Calculations forNursery Crop Production

<b>Contract Data</b>	Value	Calculation
Amount of	\$150,000	\$200,000 x 0.75 x1.00
Insurance		x 1.00
Gross Premium	\$9,000	\$150,000 x 0.06, an
		assumed premium
		rate
Premium	\$4,950	\$150,000 x 0.55, the
Subsidy		subsidy rate at 75
		percent coverage level
Producer	\$4,050	\$9,000 - \$4,950
Premium		

## **Indemnity Calculations**

During the crop year, the nursery grower suffered an insurable loss to part of the plant inventory. At the time of the loss, the *field market value A* was

\$250,000. This value represents the market value of the nursery inventory in the insured unit just prior to the insured loss. At the time of the loss, *field market value B*, as determined through an RMA-approved appraisal, was \$160,000. This is the value of the inventory just after the loss was incurred.

The indemnity calculations for this loss are shown by step (Table 4).

In this one basic unit example the grower's indemnity for this one insurable loss would be \$22,000. Unlike most multiple peril crop insurance policies, nursery crop insurance may pay again in the same crop year if there was another insurable loss. With this \$22,000 indemnity, there remains \$128,000 of insurance coverage, (\$150,000 - \$22,000).

#### Summary

The nursery crop insurance policy and its implementation have recently undergone substantial revision.

Nursery crop insurance is asset-based with coverage based on plant inventory values determined by a FCIC price list or the nursery grower's catalog or price lists.

Unlike most other multiple peril crop insurance policies, nursery crop insurance will cover multiple insurable losses during the crop year up to the *amount of insurance* purchased.

## Table 4: Nursery Insurance Indemnity Calculations

Contract Data	Value	Calculation
Step 1: Under-report factor	0.80	<i>PIVR/field market value A;</i> \$200,000/\$250,000 = 0.80
Step 2: Crop Year Deductible	\$50,000	<b>PIVR x (1.00</b> – <i>coverage level</i> ); \$200,000 x 0.25 = \$50,000
Step 3: Occurrence deductible	\$50,000	<b>Deductible % x</b> <i>field market value A x under-report factor;</i> 0.25 x
		\$250,000 x 0.80
Step 4: Difference in Market	\$90,000	<i>Field market value A – field market value B;</i> \$250,000 - \$160,000 =
Values		\$90,000
Step 5: Market value difference	\$72,000	<b>Market value difference x</b> <i>under-report factor</i> : \$90,000 x 0.80 =
times under-report factor		\$72,000
Step 6: Step 5 value – occurrence	\$22,000	<b>Step 5 value</b> – <i>occurrence deductible</i> : \$72,000 - \$50,000 = \$22,000
deductible		
Step 7: Step 6 value x grower's	\$22,000	<b>Step 6 value x grower's share</b> ; \$22,000 x 1.00 = \$ 22,000
share		

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