

CROP INSURANCE

FOR NORTHEAST NURSERY AND GREENHOUSE CROPS

Crop insurance is a flexible risk management tool that allows growers to insure against losses due to adverse weather conditions, fire, earthquake, volcanic eruption, failure of irrigation water supply, uncontrollable diseases and insects, and wildlife. It shifts unavoidable production risks to an insurance company for the payment of a fixed amount of federally subsidized premium.

Crop insurance participation in the 12 Northeastern states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and West Virginia) has steadily increased over the past few years. Almost 3.4 million acres were signed up for crop insurance in 2004. In most years, the amount paid by insurance companies for crop losses has exceeded the total amount producers paid for the coverage. For every \$1 Northeast producers paid in premiums, they received back \$7.61 in 2002, \$4.02 in 2003, and \$1.94 in 2004 (Table 1).

The federal government has decided that a crop insurance program is preferable to disaster payments. Disaster programs often involve political tradeoffs that can lead to deficit spending. It is better to have an insurance program in place that is available nationwide and gives producers the freedom to choose the level of coverage they need based on inventory assets. A minimum level of crop insurance, called CAT insurance, is available to all producers regardless of size at no premium cost (all premiums are paid by the federal government). Higher levels of crop insurance (buy-up protection) are also federally subsidized, with producers paying only 33 to 62 percent of the actual cost of the insurance (depending on the level of coverage selected).

Nursery crops account for about one-quarter of the total value of crop insurance protection in force in the Northeast. Over \$239 million dollars of nursery plants in the Northeast were protected by crop insurance in 2005 (Table 2). The total cost to producers for this coverage was a little over \$123,000 because the U.S. government heavily subsidizes crop insurance.

The purpose of this publication is to introduce the types of crop insurance available to nursery crop producers by:

- describing how insurable inventory values are determined.
- comparing the cost of crop insurance and the levels of cash-flow protection available.
- listing important dates for buying nursery crop insurance in the Northeastern U.S.

Before considering a particular kind of crop insurance policy, you should first decide how much risk you are willing to accept and what you need to protect. Here are some common objectives:

- 1) Reduce year-to-year income variability.
- 2) Provide a minimum cash flow to cover input costs.
- 3) Secure adequate credit.

Crop Insurance Plans

There are three crop insurance plans available to nursery growers: 1) **Dollar Amount of Insurance**, which insures the nursery grower's nursery plants, 2) **Adjusted Gross Revenue (AGR)** insurance that is available on a whole-farm basis (limited to certain counties in the Northeast), and 3) **AGR-Lite** (revenue insurance available in most counties throughout the Northeast).

Nursery Dollar Amount of Insurance Plan.

Nursery crop insurance for both containerized and field-grown plants may be insured separately and is available for eligible nursery plants in all counties in the U.S. A nursery is insurable if at least 50 percent of the nursery's gross income is from the wholesale marketing of plants. Nursery crop insurance is available only for plants on the eligible plant list. Eligible plants may be grouped into 15 plant types, or 15 different basic units which are

Table 1. Value of insured crops, acres insured, premiums and losses paid, and producer benefit/cost ratios for all types of crop insurance in the Northeast for 1995, 2002, 2003, and 2004.

Year	Protection In Force (\$ million)	Acres Insured (million)	Total Premium (\$ million)	Producer Premium (\$ million)	Losses Paid (\$ million)	Producer Benefit/Cost Ratio
1995	350.4	3.16	20.4	5.6	15.1	2.85
2002	833.0	3.19	54.1	17.3	131.6	7.61
2003	951.3	3.22	83.7	19.4	78.1	4.02
2004	1,061.1	3.39	87.6	28.9	56.1	1.94

Table 2. Number of nursery policies sold, value of plants protected, producer premiums and fees for nursery crop insurance in the Northeastern U.S., 2005.

State	Number of CAT Policies Sold	Number of Buy-up Policies Sold	Total Policies	Protection in force (\$ thous)	Total Premium (\$ thous)	Producer Net Premium (\$ thous)	Producer Policy Fees (\$ thous)
CT	16	3	19	35,756	382.9	8.9	1.7
DE	5	1	6	2,899	41.4	0.9	0.5
MA	10	2	12	11,650	122.9	0.6	1.1
MD	35	20	55	60,510	757.8	55.7	4.1
ME	0	1	1	261	2.6	0.0	0.1
NH	4	1	5	4,492	47.7	0.6	0.4
NJ	43	3	46	56,568	664.8	8.1	4.4
NY	38	3	41	28,640	341.6	0.9	3.9
PA	54	11	65	37,544	380.8	25.0	5.7
RI	2	0	2	158	1.7	0.0	0.2
VT	2	0	2	256	2.8	0.0	0.2
WV	4	0	4	825	9.6	0.0	0.5
Total	213	45	258	239,560	2,756.7	100.6	22.7

insured separately with Buy-up coverage (Table 3).

Each insured grower is required to submit a **Plant Inventory Value Report (PIVR)**, for each practice. Nursery crop insurance is available in all counties in all states, provided certain criteria are met. Insurance coverage will apply to all nursery plants and plant types in each practice (field-grown and containers) that meet the following criteria:

- are shown on the **Eligible Plant List**
- meet all the requirements for insurability and are grown using acceptable production practices
- are grown in an appropriate medium acceptable for the plant
- have cold protection, if required by the eligible plant list for that plant in the specified hardiness zone
- liner plants have a pot size of 1 inch in diameter or greater (including trays containing 200 or fewer individual cells)

Plants not eligible for Nursery Crop Insurance are:

- stock plants or plants being used solely for harvesting of buds, flowers, or greenery
- plants grown in liners with more than 200 cells or containing 2 or more genera, species, sub species, varieties, or cultivars in the same cell or container
- plants grown for sale as Christmas trees

The **Eligible Plant List and Plant Price Schedule (EPLPPS)** is available on CD-ROM from your crop insurance agent and

Table 3. Plant types eligible for nursery crop insurance.

- Annuals
- Broadleaf Evergreen Trees
- Broadleaf Evergreen Shrubs
- Coniferous Evergreen Trees
- Coniferous Evergreen Shrubs
- Deciduous Shrubs
- Deciduous Trees (Shade and Flower)
- Fruit and Nut Trees
- Foliage
- Ground Cover and Vines
- Herbaceous Perennials
- Liners
- Roses
- Small Fruits
- Palms and Cycads

Table 4. Examples of nursery crop insurance claims paid for various levels of coverage and loss on \$100,000 of plant inventory value.

Loss	Coverage Level						
	CAT (27.5%)	50%	55%	60%	65%	70%	75%
0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25%	\$0	\$0	\$0	\$0	\$0	\$0	\$0
50%	\$0	\$0	\$5,000	\$10,000	\$20,000	\$20,000	\$25,000
75%	\$2,500	\$25,000	\$30,000	\$35,000	\$40,000	\$45,000	\$50,000
100%	\$27,500	\$50,000	\$55,000	\$60,000	\$65,000	\$75,000	\$75,000

lists all insurable plants by genus, species, subspecies, variety, or cultivar and includes approximately 20,500 insurable plants. The software allows for searching for a plant by botanical name, commercial botanical name, common name, or key word. The program also is intended to compile a plant inventory list for estimating the value of the nursery plant inventory (PIVR).

All eligible nursery plants are considered either field-grown or container-grown, with plant sizes listed for each practice. Field-grown plants are listed by plant size for height, width, or caliper. Caliper is determined by measuring tree diameter six inches above the soil line up to and including a caliper of four inches and twelve inches above the soil line for larger sizes. Plant sizes below the smallest listed in the Base Price Table are not insurable. Containerized plants are listed by the container size with volume units of measure. Each cell of insurable multiple-cell nursery containers (cell-packs, jumbo packs, six packs, pony packs, plug packs, etc.) will be valued as a separate nursery container.

Most other plants can be insured under written agreement except for cut flowers. Bulbs, aquatic plants, and air plants are not insurable unless, the bulbs, aquatic plants, and air plants have an established root system, are grown in an appropriate medium, and the bulbs, aquatic and air plants are priced as ornamental plants in the grower's wholesale catalog or price list (for example, the price is for a tulip plant, not a tulip bulb).

To avoid large fluctuations in prices for the same plant among growers, a maximum insurable price must be determined. For price verifications purposes, growers must submit two copies of their most recent wholesale catalog or price list each year.

Catastrophic crop insurance (CAT) was introduced in 1995 to replace ad hoc disaster assistance programs enacted by Congress and to provide a minimum level of protection against crop losses. The insur-

ance premium for CAT is paid totally by the federal government. For an administrative fee of \$100/county, nursery producers get a crop insurance guarantee of 27.5 percent of their insured Plant Inventory Value. Compared to higher levels of coverage, CAT provides only a low level of protection against losses. For some diversified growers this level of coverage may be enough to protect them against severe cash-flow shortfalls.

Buy-up coverage provides increased protection against plant losses. Nursery growers select from 50 to 75 percent (in 5 percent increments) of their plant inventory value to insure (growers receive 100 percent of the price election for all plant types in the practice). Plant inventory value is calculated by adding the values of all insured containerized and field-grown nursery crops. The value of each plant is the lower of the grower's wholesale price or the established price listed in the Eligible Plant List Price Schedule. With buy-up coverage, the PIVR may be amended twice during the crop year and up to 30 days prior to the end of the crop year. The premium increase for these amendments will be prorated for the appropriate time.

Payments for crop losses. If the value of the crop after the loss is less than the value before the loss, minus the deductible, then you may be eligible for a loss payment. With buy-up coverage, the loss of plants in any one of the plant types listed in Table 3 could result in a collectable loss payment since each plant type is treated as a separate basic unit for insurance claim purposes. This is not true for CAT coverage. To collect on a CAT policy, the loss is calculated for all plants within each practice (container or field grown), not on individual units by plant types. The administrative fee for buy-up policies is \$30/practice/county. Examples of insurance claims paid at various coverage levels are shown in Table 4.

Claims for crop insurance are settled after taxes are filed for the insurance year. Many

producers do not buy Buy-up or AGR coverage because they self-insure with other risk management tools. Many do not buy CAT coverage because they feel that if a catastrophic event occurs, the U.S. government will offer disaster assistance. However, disaster payments typically arrive two to three years after a disaster. Crop insurance payments occur as soon as the impact of the loss is determined. A producer can receive disaster assistance as well as crop insurance payments.

Insurable causes of loss include:

- adverse weather conditions including wind, hurricane, and flood
- fire (provided weeds and undergrowth are chemically or mechanically controlled)
- failure of the irrigation water supply (if due to an insurable loss)
- delay in marketability of plants resulting in reduced plant value (if due to an insurable loss)
- wildlife

Uninsurable causes of loss are:

- disease or insect infestation (unless effective control measures for the infestation do not exist)
- cold temperatures if cold protection is required for the plants as described on the Eligible Plant List and the required cold protection is not used
- inadequate power supply (unless such inadequacy is a result of an insurable cause of loss)
- inability to market your nursery products due to quarantine, boycott, or buyer refusal
- collapse or failure of buildings/structures (unless caused by an insurable cause of loss)
- failure of plants to grow to an expected size.

EXAMPLE OF PLANT PRICE INSURANCE CALCULATION

Botanical Plant Name: *Acer x freemanii*
 “jeffersred,” common name: Autumn Blaze Maple (5-gallon container)

Price on the nursery eligible price list schedule = \$19.78

Grower’s Lowest Wholesale Price = \$23.50

Insurance is the lesser of the Eligible Plant List Price (\$19.78) or Grower’s Lowest Wholesale Price (\$23.50)

Insurance price - \$19.78

Example of a nursery loss covered under the Dollar Amount of Insurance Plan:

$$\begin{array}{r} \$100,000 \text{ Plant Inventory Value} \\ \times .65 \text{ Coverage Level} \\ \hline \$ 65,000 \text{ Unit Amount of Insurance} \end{array}$$

In the event of a loss:

$$\begin{array}{r} \$100,000 \text{ Field Market Value before loss} \\ -\$50,000 \text{ Field Market Value after loss} \\ \hline \$50,000 \text{ Amount of loss} \\ -\$35,000 \text{ Deductible (100\% - Level of} \\ \text{Coverage) } \times \text{ Inventory Value} \\ \text{= (100\% - 65\%) } \times \text{ \$100,000} \end{array}$$

\$15,000 Insurance Claim Paid to Grower

Cold Protection Requirements

Cold protection requirements and minimum hardiness zones are listed in the eligible plant list for both container and field-grown plants. Each county is assigned hardiness zone designations for insurance purposes. Some container plants are not insurable in certain hardiness zones, and others require cold protection in certain hardiness zones to retain insurance coverage against cold damage. The eligible plant list also designates the minimum hardiness zone for each insurable field-grown plant. Field-grown plants are not insurable below the minimum hardiness zone specified for each plant. Growers must follow good nursery practices for protecting plants from cold damage; however, if you installed cold protection equipment or facilities, and low temperatures or its duration exceeds the ability of the cold protection equipment or facilities to keep the plants from sustaining cold damage, then freeze damage may be covered.

Optional Endorsements to Nursery Crop Policies:

The nursery policy contains provisions for optional peak inventory, rehabilitation, and pilot nursery grower’s price endorsements if the grower selects buy-up coverage.

Peak Inventory Endorsement. The peak inventory endorsement allows growers to cover temporarily increases the amount of inventory reported on their PIVR for a specified amount of time without paying a full year’s premium. Growers declare the amount of the inventory value increase, and the dates the peak coverage begins and ends. The grower pays premium for the whole month for any portion of a month in which the endorsement is in effect. This endorsement may be elected anytime dur-

ing the crop year, subject to a 30-day waiting period for coverage to come into effect. Growers may purchase one Peak Inventory Endorsement for each basic unit, unless you incurred an insured loss and have restocked your nursery; then an additional Peak Inventory Endorsement may be purchased after each insured loss.

Rehabilitation Endorsement. This endorsement helps growers cover the cost of rehabilitating damaged field-grown plants. If selected, the endorsement must be carried on all field-grown plants. Rehabilitation costs are limited to expenditures for labor and materials for pruning and setup of damaged plants. The plants must have been damaged by an insurable cause of loss and have a reasonable expectation of recovery.

Pilot Nursery Grower’s Price Endorsement (NGPE). This endorsement permits nursery growers who purchase buy-up coverage to insure specific plants at prices higher than those shown on the Eligible Plant List/Plant Price Schedule. Producers must purchase this endorsement at the time they apply for coverage.

Revenue Insurance Plans

Adjusted Gross Revenue (AGR) is a pilot crop insurance program that insures revenue of the entire farm rather than an individual crop by guaranteeing a percentage of average gross farm revenue, including up to 35 percent livestock revenue. The plan uses information from the past five consecutive years of a producer’s Schedule F or Schedule C tax forms to calculate the policy revenue guarantee. Individual multi-peril crop insurance policies are required in addition to AGR, if available, when crops otherwise insurable crops exceed 50 percent of the expected income for the current year. AGR coverage is currently available in counties listed in Table 5. The maximum policy liability size for AGR is \$6.5 million. The enrollment deadline for AGR is January 31.

AGR-Lite is a new whole farm revenue product that provides protection for all crops and animal revenues. It is currently available in most counties in the Northeast for eligible growers with adjusted gross revenues of up to \$2,000,000 (\$1,000,000 maximum policy liability). Unlike regular AGR, AGR-Lite is streamlined in various ways and has no limitation on livestock income or requirement for the purchase of nursery crop insurance. The enrollment deadline for AGR-lite is January 31, but

for new participants the enrollment deadline is March 15.

What Kinds of Nursery Policies are Available in My State?

The availability of crop insurance products for nursery crops is listed by state in Table 5.

Dollar Amount of Insurance, which insures the nursery grower's nursery plants, is available in every county in the Northeastern U.S. Adjusted Gross Revenue (AGR) insurance that is available in all counties in New England, but is available on a more limited basis in the Mid-Atlantic states, and is not available at all in West Virginia. AGR-Lite is available in most counties throughout the Northeast.

Where Can I Find a Crop Insurance Agent?

- Ask your neighbors for their recommendations. Other growers are one of the best sources of information on where to find a knowledgeable crop insurance agent.
- Check with the insurance agency where you purchase other types of insurance.
- Often you can obtain crop insurance through an agent you already use for your farm, automobile, liability, fire, health, or life insurance needs. Many insurance agencies have agents who specialize in crop insurance.
- Check with businesses or organizations you use for farm business management services. Your banker, cooperative, or a farm organization you belong to may be able to recommend insurance agencies that handle crop insurance.
- Use the agent locator on USDA Risk Management Agency's Web site (www3.rma.usda.gov/apps/agents/index.cfm) to locate an agent in your area. Select "Crop Insurance" as the program specialty and click on "Go." Then, select your state and click on "Go." Clicking on "Submit Search" will generate a list of the agents who are licensed to sell crop insurance in your state or you can further narrow your search to only providers in your county.

Definition of Crop Insurance Terms and Deadlines

Important dates for nursery crop insurance in the Northeastern U.S. are listed in Table 6.

Table 5. Counties where Nursery Dollar Amount of Coverage and AGR/AGR-Lite crop insurance are available in the Northeastern U.S.

Dollar Amount of Coverage	All counties in all states
AGR	
Connecticut	All counties
Delaware	All counties
Maine	All counties
Maryland	Anne Arundel, Baltimore, Calvert, Caroline, Carroll, Cecil, Charles, Dorchester, Frederick, Harford, Howard, Kent, Montgomery, Prince George's, Queen Anne's, St. Mary's, Somerset, Talbot, Wicomico, and Worcester (20 counties), and Baltimore City
Massachusetts	All counties
New Hampshire	All counties
New York	Cayuga, Chautauqua, Erie, Genesee, Monroe, Niagara, Onondaga, Ontario, Orange, Orleans, Oswego, Seneca, Suffolk, Ulster, Wayne, and Yates
Pennsylvania	Berks, Carbon, Columbia, Crawford, Erie, Fayette, Lackawanna, Lancaster, Lehigh, Monroe, Northampton, Schuylkill, Westmoreland, and York
Rhode Island	All counties
Vermont	All counties
West Virginia	Not available
AGR-Lite	
	Most counties in the Northeast (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and West Virginia)

Table 6. Important dates for nursery crop insurance in the Northeast.

	Dollar Amount	AGR	AGR-Lite
Sales closing	5/1	1/31	1/31 or 3/15 for new policies
Waiting period	30 days	10 days	10 days
Insurance year	6/1 – 5/31	1/1 – 12/31*	1/1 – 12/31*
Provide plant inventory value report (PIVR):			
Existing policy	6/1		
New policy	with application	n/a	n/a

* Fiscal year of policyholder

Amount of insurance—The result of multiplying the full value of all insurable plants in each basic unit by the selected coverage levels (plant types from Table 3 for buy-up coverage).

Eligible plant list and plant price schedule—A list of botanical and common names of insurable plants, including cold protection requirements (available at www.rma.usda.gov from your crop insurance agent).

Sales closing date—Last day to apply for coverage; the sign-up deadline.

- For Nursery Crop Insurance, May 1 or anytime for new applications; however,

coverage begins after a 30-day waiting period

- For Adjusted Gross Revenue (AGR) crop insurance, January 31. The policy renews on January 1 for existing policies. Insurance begins ten days after a properly completed application is received for new policies. The insurance year is the calendar year in which the sales closing date occurs for both calendar and fiscal year IRS filing periods.
- For AGR-Lite, January 31 for existing policies or March 15 for new policies.

Plant inventory value report (PIVR)—A report of the value of all insurable inventories produced. Growers may submit two

reports per year up to thirty days prior to the end of the crop year.

Plant inventory value reporting date—

Last day to submit the plant inventory value report (PIVR). Failure to provide a PIVR or applicable catalog/price list on or before the sales closing date will delay coverage until 30 days after the documents are received by your crop insurance agent.

Date to file notice of crop damage—

Notify your crop insurance agent within 72 hours of initial discovery of damage (but not later than 15 days after the end of the insurance period). There may be additional requirements by crop. An adjuster must have the opportunity to inspect the crop before it is destroyed or put to another use.

Payment due date—Last day to pay the premium without being charged interest (April 1 for Nursery Crop Insurance).

Cancellation date—Last day to request cancellation of policy for the next year (September 30 for Nursery Crop Insurance).

Debt termination date—Date insurance company will terminate policy for non-payment.

Billing date—Date crop insurance premiums are due. Crop insurance premiums are not due until after the cropping season is over and any losses have been paid.

End of Insurance Period—Nursery coverage will end the earliest of the following:

- The date of final adjustment of a claim when total indemnities equal the amount of insurance.
- Removal of bare root nursery plant material from the field.
- Removal of all other insured plant material from the nursery,
- 11:59 p.m. on May 31.

This publication is for educational purposes only and does not cover all aspects of the crop insurance products described. For specific information about crop insurance products and how they could help you manage risk on your operation, visit your local crop insurance agent.

More information on crop insurance and risk management can be found on the Internet:

United States Department of Agriculture, Risk Management Agency

<http://www.rma.usda.gov>

National Ag Risk Education Library

<http://www.agrisk.umn.edu>

Northeast Center for Risk Management Education

<http://www.necrme.org>

Cornell Risk Management Web Site

<http://www.agrisk.cornell.edu>

Garden State Crop Insurance Education Initiative

<http://salem.rutgers.edu/cropinsurance>

New Jersey Department of Agriculture Web Site

<http://www.state.nj.us/agriculture>

Penn State Crop Insurance Education Web Site

<http://cropins.aers.psu.edu>

Pennsylvania Department of Agriculture Web Site

<http://www.pda.state.pa.us>

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