Managing Risk for Nursery Producers – Tools to Consider

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Nursery producers constantly balance many risks related to production, employees, the market, and the climate. Workshops on Nursery Risk Management held in Tucson and Phoenix this spring discussed several tools growers can use to evaluate and manage some risks in their business.

Nursery crop insurance is a complex program that has been available to growers for several years. Insurance for nursery crops is available in 2006 in all 15 counties in Arizona. By spring 2006, 19 policies for nursery crop insurance were sold in Arizona through the federal Risk Management Agency (RMA) program. The number of annual sales has been relatively stable since 1999 when 18 policies were sold statewide. More information on the federal nursery crop insurance program can be found on the Risk Management Agency website: http://www.rma.usda.gov.

Nursery crop insurance is subsidized by the federal government and subsidies cover 100% of the total premium at the 27.5% coverage level under a catastrophic coverage plan for a $100 administrative fee. Growers can also elect to buy-up the coverage level but premium rates and subsidies will vary and will not be fully covered as with the catastrophic coverage option. Coverage levels for insurable crops are available from 50% to 75% of the plant inventory value and premium subsidies range from 65% for the lowest coverage level to 55% for the highest coverage level. Both, the basic catastrophic or the buy-up plans require a one time per year $100 administrative fee from the producer. The eligible plant list contains more than 20,000 plants which can be grown from liners with a 1" minimum diameter up to containers with a capacity of greater than 100 gallons, as well as field-grown plants. Starting in 2007, the crop year will start June 1 and end on May 31, while currently the crop year is based on the federal fiscal year, starting October 1.

The insured crop and plants have to be grown according to acceptable production practices for which they are insured. A typewritten wholesale catalog or price list with the issue date must be available. At the time an application for crop insurance is submitted, a plant inventory value report must be submitted. Below is an example from the RMA 2005 Commodity Insurance Fact Sheet for nurseries in all states of how a loss is calculated under the program.

*Loss Calculation Example:

\[ \$100,000 \times 0.65 = \]$
$ 65,000  Unit Amount of Insurance

In the Event of Loss:

$100,000  Field Market Value before loss
- $ 50,000  Field Market Value after loss
$ 50,000  Value of Loss
- $35,000  Deductible**
$ 15,000  Indemnity

* The above is a simplified example of how to calculate a loss. Please consult an insurance agent for more in-depth analysis.

** (1-coverage level) X inventory = (1-.65) X $100,000 = $35,000

In the example, the insurance plan covers a plant inventory of $100,000 at a 65% level. After a calamity, the market value of the insured crop after the loss amounts to $50,000. The deductible amounts to 35% of the total inventory, in this case $35,000. Indemnity payment for the loss of plants would amount to $15,000. Causes of loss covered by insurance are adverse weather conditions such as wind, hurricane, and freeze, provided adequate freeze protection measures were taken. Failure of irrigation water supply, delay in marketability of plants, fire, and wildlife damage are covered as well under the specific conditions listed in the contract. For specific information on RMA crop insurance policies, an agent should be consulted. The RMA website includes agent locators by city and zip code.

Why are only a few growers taking advantage of this type of subsidized insurance in Arizona? The last couple of years show very little loss for nursery crops insured with the RMA program. Maybe growers have taken sufficient precautions in protecting their crop through cultural practices to minimize loss and therefore forego purchasing crop insurance. Other crop insurance programs can be purchased from insurance agencies and may meet the needs of growers. Nursery crop insurance is a risk management tool which should be considered in a plant production operation.

Production costs have a great effect on profitability of a nursery business. A spreadsheet has been developed in cooperation between Trent Teegerstrom, University of Arizona and Stuart Nakamoto, University of Hawaii. This tool allows growers to input costs in the four main categories of capital and investment, materials, machinery and equipment, and overhead.

Using production costs and projected high or low sales prices, the spreadsheet determines whether a plant will make a profit or result in a net loss for the business. Production costs for each individual species or group products, such as all 1" pots or 5 gal. pots can be calculated. One feature of the program assesses the amount of space and time allocated for a plant to reach either the next stage of production or saleable size. Using the spreadsheet tool, growers can estimate how much it costs for a plant to take three months more or less to finishing and whether this may need to be reflected in
the wholesale price. Calculations can determine what container size yields the highest profit for a species, and for how long the plant will remain profitable at that size. A projected profit comparison of growing plants in the nursery versus buying stock in is also included.