

News & Views

for New Hampshire's Green Industry

January, 2002

Risk Management

In recent years, "risk management" has become a common phrase at Land Grant Universities and within USDA. Risk management recognizes a new, expansive vision for agriculture. A vision taking into account the interdependency between family, business and community. The comprehensive nature of risk management requires addressing the subject by key themes.

Six themes are often used to provide a guideline for initial risk assessments. Production risk examines the variability associated with yield or output. Marketing risk deals with price fluctuations and the possibility of losing sales outlets. Financial risk addresses securing the business investment while meeting cash flow needs. Human resource risk focuses on the role of people in the business. Legal risk considers family and business agreements and contracts. Environmental risk centers on the quality of natural resources.

Upon identifying risks, the severity and likelihood of undesirable outcomes provide a basis for prioritizing management strategies. Alternative actions may involve taking steps to reduce the chance or impact of an undesirable occurrence, such as following recommended practices or maintaining a cash reserve. In addition, steps may be taken to transfer part or all of the risk, such as carrying insurance or contracting production.

The general concept of risk management is based on matching family members' goals and expectations of business success with their ability and willingness to accept risk. This is not a new concept to agricultural producers. However, the

process has evolved into a more comprehensive procedure to help insure success of family farms in our local communities.

Mike Sciabarrasi

Insurance Options for Nursery and Greenhouse Operations

Does insurance make good business sense for New Hampshire growers? Crop and revenue insurance policies provide growers with cash when production or revenues are less than the guarantee. These funds reduce the need for emergency borrowing following a bad year. The results are less fluctuation in net income, improved credit worthiness, and greater peace of mind. New Hampshire growers should review the Nursery Crop Insurance and Adjusted Gross Revenue programs to determine if either makes economic sense for their operations.

The Nursery Crop Insurance Program is relatively new for this area. This insurance covers many container and field-grown plants and trees. In order to be eligible for this program 50% of your gross income must come from the wholesale marketing of plants. The nursery policy is effective October 1st, 2001: It may be purchased after this date with a 30-day wait period up until May 31, 2002. It renews automatically each year. An inventory valuation is required when you sign up and then by September 1st of each year thereafter. You can elect to cover from 50% to 75% of your eligible nursery plant inventory value. The annual premium is not due until July 1, 2002. The premium may be tailored for those operations



Wilbur and King in Guilford, CT was one of eight stops on the 2nd Biennial Garden Center & Nursery Tour in September. Here, the group was welcomed at the entrance to the brand new retail building and English-style display garden. The tour was co-sponsored by UNH Cooperative Extension and the New Hampshire Plant Growers Association.

Insurance Options for Nursery and Greenhouse Operations (cont.)

with fluctuating inventory values and is subsidized by the federal government to make it affordable as a risk management tool.

Unlike many standard greenhouse insurance policies, Nursery Crop Insurance covers loss of plants inside the greenhouse and in the field. Perils covered include adverse weather (such as hurricane, wind, hail, flood, snow and freezes), insects and disease for which no effective control exists, fire and wildlife damage.

The Adjusted Gross Revenue Program is a pilot program developed over the past several years. AGR provides protection against low revenue due to unavoidable causes. Covered farm revenue includes income from most crops and plants (with limited amounts from livestock products). Insurance levels and premiums are based on past years' earnings. Insurance begins January 1, 2002 for calendar year filers. The sales closing date is January 31, 2002. When you sign up, an average Adjusted Gross Revenue is calculated based on your five most recent years of tax returns. Premiums vary with the coverage level you select (65%, 75%, or 80%) and the payment rate you choose (75% or 95%). Substantial federal government subsidies for this pilot program reduce premium costs significantly.

Unlike other crop insurance programs, Adjusted Gross Revenue provides protection against the loss of revenue due to unavoidable

causes. Covered losses may arise from production or market risks. There is no limitation on retail sales of nursery plants or any other crops to qualify for AGR, but no more than half of allowable income can be derived from agricultural commodities purchased for resale.

If you qualify for the Nursery Crop Insurance program and a substantial part of sales result from covered trees and plants, you may be required to purchase a nursery policy before participating in the AGR program. However, AGR often compliments other crop insurance programs by coordinating benefits and reducing premium costs. Adjusted Gross Revenue and Nursery Crop Insurance policies are available from private insurance agents. A list of agents is available at your local USDA Farm Service Agency office.

Michael Sciabarrasi & Colleen Kisselburgh

Correcting High Medium-pH Problems in Bedding Plant Crops

The most common nutritional problems occur in greenhouse crops when pH of the growing medium is outside the optimum range. Crops that are particularly sensitive to high pH (above 6.4) include calibrachoa, diascia, nemisia, pansy, petunia, snapdragon, vinca. If you sometimes see chlorosis (yellowing) and stunting of these plants, even though roots are healthy and you are providing normal fertilizer rates, this article explains the probable cause and solution.

Plants only take up dissolved nutrients through their roots. When the medium-pH is high, micronutrients (especially iron) are less soluble and are unavailable for uptake by plant roots. At high pH, iron deficiency can develop within 1-2 weeks resulting in chlorosis of new growth and overall stunting. This problem occurs not because plants need more "feed"—instead it occurs because the high medium-pH causes iron supplied in fertilizer to become insoluble.

Here at UNH, we have undertaken considerable research to develop strategies to rescue crops that are stressed from high medium-pH. First you need to test the pH and electro-conductivity (EC) of the growing medium, using the UNH Soil Testing Laboratory, a commercial lab, or your own recently-calibrated meters. Checking the pH and EC will tell you whether the problem is nutritional, and also if it is caused by inadequate fertilizer concentration (EC) or a high medium-pH.

When you have established that the medium-pH is too high (above 5.4 for sensitive crops):

1. Use a high-ammonium fertilizer combined with low alkalinity. Check with your fertilizer supplier to select a high-ammonium (very acidic) fertilizer (e.g. 9-45-15 or 21-7-7). The effect on medium-pH can sometimes be slow (> 1-2 weeks) especially in cool wet conditions, or with small plants growing in large containers. Repeated applications of ammonium in cool, dark conditions may also cause toxic levels of ammonium to accumulate in leaf tissue.

The alkalinity of your irrigation water can be thought of as the "lime content" of the water—this is a key piece of information that you can find out by sending in a water sample to the UNH Soil Testing Lab. When you send in that sample, UNH Cooperative Extension can help you select a general fertilizer that is well-matched to your water quality. High alkalinity in water (>150 ppm calcium carbonate equivalents) will tend to increase medium-pH over time. If your alkalinity is above 150 ppm, then acidification of the water may be necessary. UNH Cooperative Extension can provide recommendations on the appropriate type and concentration of acid. (Contact Paul Fisher at 603-862-4525 or Paul.Fisher@unh.edu.)

2. Correct micronutrient deficiencies. Masking the symptoms of high pH with micronutrient applications can be very effective for keeping plants alive and healthy when grown under high medium-pH conditions. Unless your customers continue the iron sprays or drenches, or transplant the plants soon after receiving them, however, quality will suffer. When plants show chlorosis, send in a tissue analysis to test which nutrient is deficient. Although iron deficiency is most common, if a different nutrient (e.g. manganese) is limiting then application of iron may worsen the problem because of antagonistic effects.

The recommended application rate for an iron drench is 10 oz./100 gal. of either Iron-EDDHA (Sprint 138™, which provides 45 ppm iron), or Iron-DTPA (Sprint 330™, which provides 75 ppm iron). The solutions should be applied with generous leaching, followed immediately by washing of foliage to avoid leaf spotting. All options are low cost, at less than 0.1 cents per 4-inch-diameter pot. Iron-DTPA (Sprint 330) can be purchased from greenhouse and nursery suppliers. Ask for Iron-EDDHA (Sequestrene 138 or Sprint 138) from a fertilizer representative. We have found that soil drenches are more effective than foliar sprays when iron deficiency is severe.

For more information on this topic, check out <http://ceinfo.unh.edu/Agriculture/Documents/Flora.htm>.
Paul Fisher

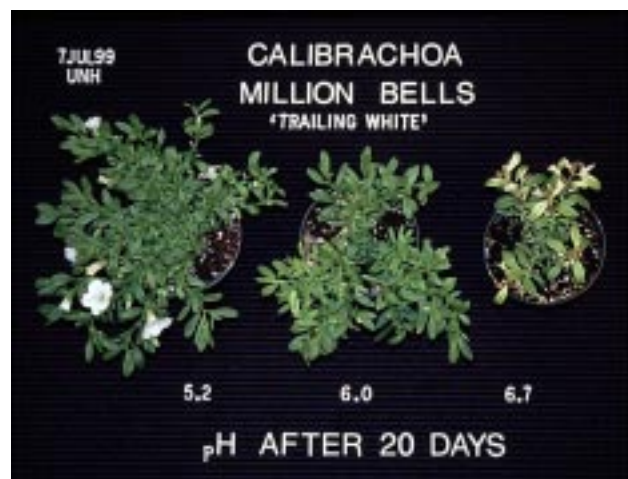


Figure 1. Effect of medium-pH on growth of Calibrachoa after 20 days. The stunting at pH 6.7 is caused by iron deficiency.




Winter Events



February 1-2 – Farm and Forest Expo. Center of NH - Holiday Inn, Manchester.
Contact UNH Cooperative Extension at 862-3200.

February 1 – *Pesticide Safety Education Seminar (Salon A at Farm and Forest Expo). No fee, no advanced registration; 5 pesticide credits.


February 5 or 26 – UMass Plant Nutrition Program – Spring Greenhouse Crops 2002.
Amherst (Feb. 5) or Waltham (Feb. 26). Contact UMass Floriculture at
413-545-5306 or (508) 295-2212 Ext. 24. 




February 7-9 – *New England Grows! Trade Show and Educational Conference. Hynes Convention Center, Boston. Contact (508) 653-3009.

February 14-15 & 19-20 – 1st Annual Course in Organic Land Care. Garden in the Woods, Framingham, MA. Contact Northeast Organic Farming Association at (781) 646-6322.

February 28 – *Integrated Pest Management for Landscape and Grounds Maintenance. Holiday Inn, Concord. Contact UNH Cooperative Extension at 862-3200. 5 pesticide credits.

March 1 – *Winter Conference: Local Actions, Global Effects: Linking the Managed Landscape with the Natural Environment. Holiday Inn, Boxborough, MA. Contact (508) 877-7630 Ext. 3303 or UMass Extension at (413) 545-0895. 

March 14 – *NHFA Spring Meeting. Urban Forestry Center, Portsmouth. Contact NHFA at 800-639-5601.

March 19 – Perennial Plant Conference, Univ. of Connecticut, Storrs, CT. Info:
www.hort.uconn.edu/IPM/ or (860) 486-2930. 



April 3 – Managing Agricultural Labor and Building Teamwork, Concord, NH. Contact UNH Cooperative Extension at 862-3234.



****Need pesticide credits???? Each of the programs marked with an asterisk offers one or more credits for selected presentations.***

This newsletter is a cooperative effort of the Ornamentals Extension Educators and Specialists at the University of New Hampshire. It is published quarterly. Its purpose is to inform and update industry members on issues and research relevant to the production, use and maintenance of ornamentals and turf in New Hampshire. Contributors for this issue:

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