

MINNESOTA FRUIT & VEGETABLE GROWERS ASSOCIATION

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October, 2003 Volume 17, No. 4

A Note From The Board

Terry Nennich – Ter-Lee Gardens, Bagley, MN

As you read the October newsletter, many of you will be working feverishly in the height of the fall produce season of pumpkins, mini-pumpkins, gourds and cornstalks along with the rest of the fall produce. I hope every one of you is reaping the rewards for all your hard efforts this year.

No matter what kind of season you had, there is always room for improvement. The fact is with most operations there are more ideas for improvements than we can usually remember when the snow starts flying. It is important to write these ideas down with some notes so that when the snow does fly you have time to analyze them and come up with solutions. Consider doing a preliminary 2004 production and business plan for your operation, due to your operation board (usually you) by November 15th or December 1st at the latest. Among other things, list what went well, what didn't go so well and what must be changed. When I was in high school, my Vo-Ag teacher's favorite saying was, "Spring is sprung, the hay has riz, I wonder where my mower is." Most of us don't make hay, but the same principle applies – planning occurs too late.

Where can you get some of your questions answered? There are University publications and other different articles, but for me the best way is to rub shoulders with other producers, University specialists and industry people. There is no better place to do this than the Upper Midwest Regional Fruit and Vegetable Growers Conference and Trade Show, starting with the growers' bull session on Wednesday evening, February 4th. The Conference is scheduled for February 5 – 7 and the Trade Show will be Thursday and Friday, February 5 & 6, 2004.

Consider coming Wednesday night to the growers' bull session. Ask any questions you want to to the group. Maybe you can get some of those hard impossible questions answered.

MFVGA members recently received, or will soon receive, the 2004 membership renewal / application. I urge you to send in your dues as soon as possible and encourage others involved in the produce industry to join.

The MFVGA is your voice and representation in Minnesota and nationally for the produce industry. Just a few things your association did last year besides the conference and summer tour is sponsor many grants and research projects such as strawberry disease research, high tunnel research, new publications and web site work. The association is your political voice. In numbers there is strength.

The association takes an active role in new herbicide research and releases. In 2003, the MFVGA was instrumental in the release of Stinger herbicide for strawberry growers for thistle control.

As the produce industry becomes more competitive with international trade and crop inputs become harder to clear, it is important that the Minnesota produce growers band even tighter together to help the industry remain profitable.

MFVGA Membership – What Is It Worth?

What's it worth to have Stinger registered for use on strawberries? What's it worth to have current information from the *Minnesota Vegetable IPM Newsletter* at your fingertips so you know when to take appropriate action to control pests? What's it worth to better promote your farmers' market? What's it worth to have the opportunity to meet with other growers and specialists to exchange ideas and information? What's it worth to get results from current research addressing your problems?

Do you have thistles in your strawberries? MFVGA was successful in getting a Section 24 (c), Special Local Needs Registration, for the use of Stinger on Minnesota strawberries to control thistles and other labeled weeds. The process for a Special Local Needs Registration must be initialized by a grower organization. This would not have happened without MFVGA's involvement and the much appreciated efforts of Terry Nennich, an Extension Educator and MFVGA Board member. For more information on the Stinger registration, see Terry's article on the back page.

MFVGA applied for and received grant funds from the USDA – Risk Management Agency to help offset increasing costs for the 2003 educational conference. This allowed us to bring in additional speakers, offer scholarships and keep your registration fees reasonable.

Have you seen the new Minnesota Grown Produce Bag? MFVGA coordinated orders for more than 350,000 bags that were distributed to growers and markets licensed to use the Minnesota Grown logo. Many of the orders were for customized bags that included specific grower or market information. From the reports we have received, people have been very pleased with the bags and we plan to continue the program. If you didn't order produce bags and haven't seen them at a stand or market near you, plan to check them out at the 2004 conference. Produce bag order forms for the 2004 growing season will be included in the MFVGA Newsletter this winter.

And speaking of group orders, almost 365,000 strawberry and raspberry plants were ordered through MFVGA this year. Proceeds from the berry plant orders help fund small fruit research conducted through the University of Minnesota.

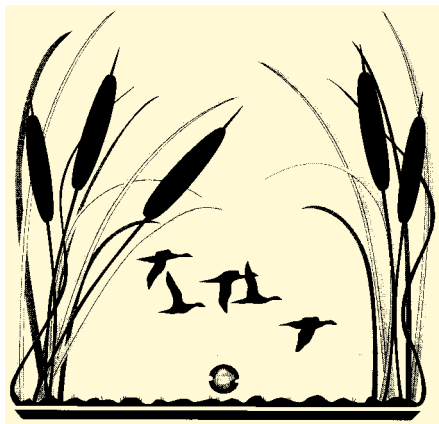
MFVGA Membership continued on page 3

FDA and Extension Host Food Safety Workshops for Small Food Processors

Thinking about producing and selling foods like jam, jelly, salad dressing, sauce, salsa, or a pickled product? Do you know the FDA regulations for acidified foods and how to produce a safe product? Food manufacturers, small-scale processors of specialty foods, farmers interested in value-added processing or anyone interested in starting a small-scale food manufacturing business should attend one of the five hands-on practical training workshops called "**Food Safety Techniques: Acidified and Low-Acid Canned Foods**," conducted by the Food and Drug Administration and area Extension Services. The workshop is designed to provide current and future small processors with the basic elements needed to understand the main processing steps, FDA regulations, critical control points and record keeping to safely manufacture specialty foods for the marketplace.

Dressings, sauces, marinades, and similar food products depend on their acidity to prevent spoilage. They may consist of naturally acid foods, such as fruit juice or tomatoes, or they may be formulated by combining acid foods with other foods to achieve the desired acidity. Because foods without adequate acidity may allow the growth of microorganisms that cause foodborne illness, the FDA requires that all acidified foods be tested to determine pH level and water activity, which is the amount of moisture available to support bacterial growth.

Amy Johnson, Public Affairs Specialist at the FDA's Minneapolis District Office, stresses the importance of these workshops. "Our ability to partner with local Extension experts to provide low-cost and informative training to small food processors is critical to preventing future foodborne illness outbreaks," states Johnson. The trainings are funded in part by a food safety education grant from FDA's Center for Food Safety and Nutrition.



"This training provides an excellent, inexpensive opportunity for small entrepreneurs to get the important food safety information needed to produce a safe product" says Joellen Feirtag, Ph.D., University of Minnesota Extension Food Technologist.

The **Food Safety Techniques: Acidified and Low-Acid Canned Food** workshop with instruction from FDA National Experts and Extension professionals will provide both technical information and practical training by demonstrating the production of pickled foods. Course attendees will have access to equipment to test the pH of their product.

The workshops will begin in October, 2003 at the following locations:

- Minnesota: October 6th in St. Paul and October 8th in St. Cloud. Contact Joellen Feirtag at 612-624-3629 or jfeirtag@umn.edu to register or download a brochure at <http://www.extension.umn.edu/foodsafety>. A registration fee of \$35 includes course materials and two refreshment breaks.
- South Dakota: October 17th at the Minnehaha Extension Office in Sioux Falls. Contact Joan Hegerfeld at 605-688-6233 or HEGERFELD.JOAN@ces.sdstate.edu to register. A registration fee of \$30.00 includes course materials and two refreshment breaks.
- North Dakota: October 21st in Fargo and October 22nd in Bismarck. Contact Julie Garden-Robinson at 701-231-7187 or jgardenr@ndsuxt.nodak.edu to register. A registration fee of \$40 includes course materials and two refreshment breaks.

Another Record for Strawberry and Raspberry Plant Orders

Over 364,000 high quality strawberry and raspberry plants were ordered through MFVGA this spring and delivered to area growers.

Proceeds from the plant sales help fund several small fruit breeding and management studies, including cultivar and selection trials in strawberries and blueberries. This funding also supports the strawberry and blueberry breeding and evaluation projects directed by Dr. Jim Luby at the Horticulture Research Center in Victoria and the Sand Plains Station in Becker. Funds also support projects at the West Central Research & Outreach Center in Morris and the North Central Research and Outreach Center in Grand Rapids.

As you make plans for 2004, consider ordering your strawberry and raspberry plants through MFVGA. You get quality plants at affordable prices and the proceeds help fund small fruit research at the University of Minnesota, which benefits you and berry growers throughout the region. Berry order forms will be mailed out later this winter.

The MFVGA Newsletter is published five times a year (February, April, July, October and December) in cooperation with the University of Minnesota Extension Service and the Minnesota Department of Agriculture. Editorial office: MFVGA, c/o Marilyn Nysetvold Johnson, Exec. Coordinator, 15125 W. Vermillion Cir. NE, Ham Lake, MN 55304. Phone: 763-434-0400 Fax: 763-413-9585. Please address all correspondence, advertising and membership inquiries to MFVGA at the above address. Deadlines for future issues: The first day of the month preceding publication (For example: Jan. 1st for the February issue).

The information in this MFVGA Newsletter is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Minnesota Fruit and Vegetable Growers Association is implied.

Noninsured Crop Disaster Assistance Program Sign Up Dates

The Noninsured Crop Disaster Assistance Program (NAP) sign up dates for 2004 are coming soon. United States Department of Agriculture's (USDA) NAP provides financial assistance to eligible producers affected by natural disasters. This federally funded program covers noninsurable crop losses and planting prevented by disasters. An eligible producer is a landowner, tenant, or sharecropper who shares in the risk of producing an eligible crop. Eligible crops include commercial crops and other agricultural commodities produced for food (including livestock feed) or fiber for which the catastrophic level of crop insurance is unavailable. Also eligible for NAP coverage are controlled-environment crops (mushroom and floriculture), specialty crops (honey and maple sap), and value loss crops (aquaculture, Christmas trees, ginseng, ornamental nursery, and turfgrass sod).

The last day to apply for coverage for 2004 apples, asparagus, blueberries, caneberrries, cherries, chestnuts, grapes, nectarines, peaches, pears, plums, strawberries, honey and maple sap is November 20, 2003. The last day to apply for coverage for spring planted crops is March 15, 2004. These crops include dry peas, potatoes, and all spring planted crops grown for food. The final reporting date for crop acreage for which NAP assistance may be paid for 2004 ornamental nursery and aquaculture is September 30, 2003. The final reporting date for 2004 honey and maple sap is January 2, 2004.

Further information on NAP is available from your local Farm Service Agency (FSA) office or on FSA's web site at www.fsa.usda.gov.

Thanks for Another Year at the Fair

THANK YOU to all who helped make it another successful year for the Minnesota Grown booth at the State Fair. The booth would not be possible without the help, support and cooperation of the many people who donate items for the display and time to staff the booth.

Produce for the display was donated by Afton Apple Orchard (Hastings, MN), Dehn's Garden, Inc. (Andover, MN), Green Barn Garden Center (Isanti, MN), Hydrosun USA (Grasston, MN), Jewel Lane Farm (Chisago City, MN), Pahl Farms, Inc. (Apple Valley, MN), and Pine Tree Orchards, Inc. (White Bear Lake, MN).

The following people volunteered their time to staff the booth during the 12 days of the Fair:

Jami Adcock, Bill & Nancy Bauer, Mavis Berg, Bob & Ann Bielenberg, Tom Bilek, Karen Buchite, Marilyn & David Boorsma, Sonia Dickerson, Lorraine Englund, Betty Grossklas, Sylvia Hasse, Dennis Havlicek, Buster & Luke Johnson, Charlie Johnson, Sam Kedem, Steve Kley, Bob & Jane Lau, Lucille Lauer, Ed & Mary Lorentz, John Luhman, Tim & Marie Mack, Anne Mayall, Travis & Amanda McDonald, Alice & Gary McDougall, Dottie McKinley, Sharon Pogreba, Bruce & Betty Schmidt, L. R. Schwarz, Bernie Shapiro, Maria Stewart, Leslie Sweningson, Tom Tennant, Scott & Susan Wagner, Cory Whitmer, and Sheryl Williams.

To everyone who helped make the 2003 Minnesota Grown booth possible – Thank You.

MFVGA Membership continued from front page

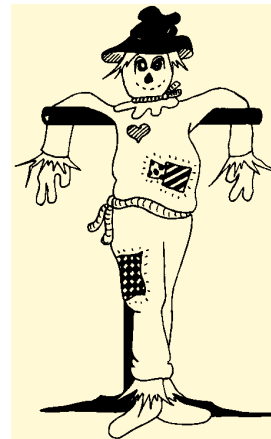
MFVGA received grant dollars from the Minnesota Department of Agriculture through a federal specialty crops grant program. These dollars allowed us to provide funds to continue the *Minnesota Vegetable IPM Newsletter*. Specialty Crop grant dollars provided the resources for research on high tunnel vegetable production, organic blueberry production, alternative weed control strategies in strawberries (flame burning for weed control and renovation and the use of wool/canola mulch for weed control), continuing research on small fruit cultivars, blueberry pruning systems, strawberry bacterial angular leaf spot (BALS) and the evaluation of winter hardiness of apples in Zone 3.

Grant dollars from the specialty crop program also allowed us to help fund the Minnesota Grown Passport Program to encourage consumers to make multiple trips to area stands and markets. We were able to provide cost-share dollars to help area farmers' markets increase their promotional efforts. We partnered with the Midwest Food Alliance to increase the exposure of Minnesota Grown products in grocery stores. We helped fund the Minnesota Grown berry cost-share program. We developed the Minnesota Grown produce bag.

MFVGA aggressively sought federal grant dollars to help fund some on-going projects and some new projects for 2004. We're excited about these possibilities and look forward to sharing the details with you soon. Watch future issues of the MFVGA Newsletter for updates on how these projects will directly benefit the members of MFVGA.

Why pay dues and support this association? Because without MFVGA, none of these things would have been possible. In addition to tangible member benefits, your membership is used to leverage dollars that are used on your behalf.

As you can see, MFVGA is working very hard for its members. Support your association. Send in your membership dues today. If you would like to join MFVGA, a membership application can be found on page 6.



Whoever retains the natural curiosity of childhood is never bored or dull.

Anonymous



Directory Sponsorship Delivers Results

The 2003 *Minnesota Grown Directory* is officially sponsored by Infinity Broadcasting, which includes WCCO-AM, WLTE-FM, KCCO-AM and WXPT-FM. Each station has already run at least 80 ads and promotional announcements on behalf of the *Directory*. The first ads in May featured landscaping plants while one week of June ads highlighted berries and the week before the July 4th holiday promoted the *Directory* as a source for farm-fresh meats. From September 15th to October 1st, ads featured fall activities, including visiting apple orchards, pumpkin patches and wineries. In addition to on-air promotion, each station has a link from its website to the *Minnesota Grown Directory*.

The Minnesota Grown Program is already in discussions with several media outlets regarding sponsorship of the 2004 *Directory*. We hope to have a sponsor on board by the time *Directory* renewals are mailed in early December.

Roughly 160,000 of 170,000 of the *Minnesota Grown Directories* printed this year have already been distributed across the state. Growers and others can still get bulk quantities of the 2003 book to distribute (for free) by calling 651-296-4939. If you have never distributed Minnesota Grown Directories on your farm, you may be surprised by the reaction from your customers. We've had several distributors comment that their customers are very happy to receive a directory on the farm. In fact, some folks go back to the same location year after year to get their copy.

We will begin assembly of the 2004 *Directory* in December. At that time, you will automatically receive a *Directory* application if you are licensed to use the Minnesota Grown logo or if you are listed in the 2003 *Directory*.

Custom Banners

The Minnesota Grown Promotion Group has a new cost sharing program for custom Minnesota Grown banners printed by Banner Galaxy. Each banner includes the Minnesota Grown logo along with whatever text the producer chooses. In addition to their own text, producers choose the banner size and material. There is no minimum quantity and prices start at roughly \$60 for a 2ft x 6ft vinyl banner (including delivery). To choose your text and order a banner, visit www.bannergalaxy.com Click on the "partners" tab and enter "mngrown" as the username and "banners" as the password. You will then be able to add your text, choose the size of your banner and customize the material and other trim options. Once on the web site,

you will be able to enter a discount code to reduce the total cost by \$10 per banner (the Minnesota Grown Promotion Group is contributing \$10 to offset the cost of each banner). Banners are usually delivered within 7-10 days. Contact Paul Hugunin with questions at 651-297-5510.

Dress-up Your Website With the Minnesota Grown Logo

When consumers type a search word into their computer when looking for a particular Minnesota Grown product such as strawberries or Christmas trees, how likely are they to find the Minnesota Grown Directory? That's not a simple question to answer, given the multitude of search engines and browsers being used. We are working to make our website show up more consistently when consumers search for Minnesota Grown products. **You can help** by linking to the www.minnesotagrown.com website on your website because many search engines give higher rankings to sites that receive links from many other sites. Simply link to the address, and be sure to dress up your site by downloading the Minnesota Grown logo and adding it to your site.

Apple Promotional Materials Available

Kwik Lok bag closures and PLU stickers with the Minnesota Grown logo are available from UAP-LaCrescent again this season. Minnesota apple growers purchased over 900,000 stickers and bag closures featuring the logo during 2002. Contact UAP directly at 1-800-551-5708 to order.

The Minnesota Grown Program also has free apple posters and price cards. The price cards are available for Haralson, Honeycrisp, Fireside, Regent, Cortland, and McIntosh. There is also a generic apple price card that can be used for any Minnesota Grown variety. These items are available free of charge to marketers who are licensed to use the Minnesota Grown logo. Contact Paul Hugunin at 651-297-5510 with any questions.

Minnesota Grown Summer TV Ads

Nearly \$35,000 of television ads promoting Minnesota Grown produce available at farmers' markets and grocery stores were aired this summer. KMSP-TV (channel 9) received most of the campaign; WFTC (channel 29) and KSTP (channel 5) aired the balance of the schedule. The 5-week schedule started on July 14th and was seen an average of 6 times by roughly 65% of females between the ages 25-64 years old in the viewing area.

Roughly 2/3 of the ads feature farmers' markets and are funded jointly by Minnesota Grown, the Minneapolis Farmers Market and the St. Paul Farmers Market. The other 1/3 features Minnesota Grown produce available in grocery stores and is funded by Minnesota Grown and the MFVGA.

More Producers Use the Logo

A record number of marketers have received licenses to use the Minnesota Grown logo. The MDA has mailed over 750 licenses so far in 2003, up from the previous record of 715 for all of 2002. Contact Paul Hugunin at 651-297-5510 if you produce a Minnesota Grown product and would like information about using the Minnesota Grown logo and free point-of-sale materials.

Minnesota Grown information is supplied to MFVGA by Paul Hugunin (651-297-5510) and Brian Erickson (651-296-4939) from the Minnesota Department of Agriculture, Ag Marketing Services Division. If you have any questions about Minnesota Grown, contact them at the numbers listed above.

MFVGA MEMBERSHIP APPLICATION

October 1, 2003 - September 30, 2004

Farm/Company Name _____

Phone (_____) _____

Address _____

City _____ State ____ Zip Code _____

E-mail Address _____

Primary Crop Apples Berries Vegetables

Crops _____

Names of direct members:

(grower, spouse, employees, partners)

MEMBERS:

Gross Sales	Dues	
Up to \$25,000	\$ 75.00	
\$25,000 - \$75,000	125.00	
\$75,000 - \$225,000	225.00	
Over \$225,000	325.00	\$ _____

Direct Membership includes a subscription to one of the following periodicals. Please indicate which publication you would like to receive. Choose one.

- ____ American Fruit Grower
- ____ The Fruit Growers News
- ____ American Vegetable Grower
- ____ The Vegetable Growers News
- ____ Northland Berry News

(An additional \$10.00 fee is required to receive the Northland Berry News.) \$ _____

TOTAL AMOUNT ENCLOSED \$ _____

ASSOCIATE MEMBERS:

(Dues are \$25.00 per year.)

Associate members are related agri-business firms, educators, and suppliers. \$ _____

Contributions or gifts to MFVGA are not tax deductible as charitable contributions; however, they may be tax deductible as ordinary and necessary business expenses.

MAKE CHECKS PAYABLE TO MFVGA

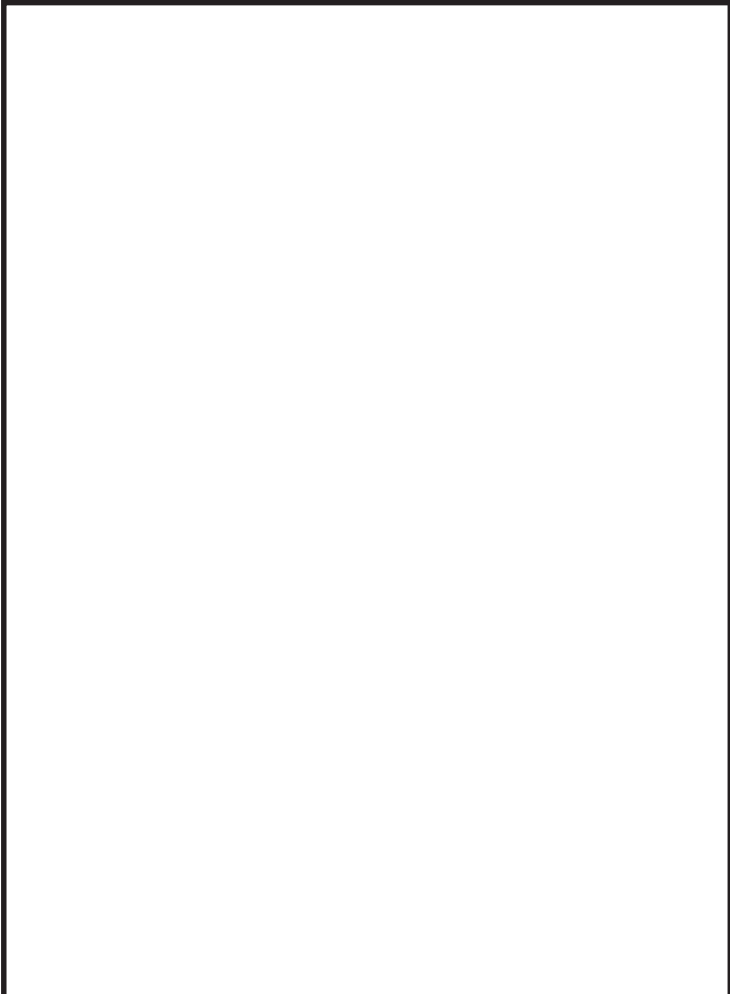
Mail to: MFVGA
 c/o Marilyn Nysetvold Johnson, Exec. Coordinator
 15125 W. Vermillion Cir. NE
 Ham Lake, MN 55304
 Questions? Call 763-434-0400 Fax: 763-413-9585

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Number _____

Expiration Date _____

Signature _____



**Be sure to tell our advertisers
 "I saw your ad in the MFVGA Newsletter"**

U of M GLEANINGS

Dr. Cindy Tong
Dept. of Horticultural Science
University of Minnesota

Flavor can be a big marketing tool, and something that many people say can't be found in the produce section of most American grocery stores. Supposedly Americans shop with their eyes, but return to a vendor if their purchase tasted great.

Both taste and smell are involved in determining flavor. Taste includes sweetness, sourness, saltiness, and bitterness, but what makes a banana recognizable as a banana are the chemicals they emit and that our noses smell. Usually only a few volatile chemicals are characteristic of a particular fruit or vegetable. For example, the major character volatiles in apples are 2-methylbutyrate, hexanal, and 2-hexenal. Blueberries have trans-2-hexenal, hexenol, and linalool, while raspberries emit 1-(p-hydroxyphenyl)-3 butanone. Cabbage produces isothiocyanates, some of which have anticancer benefits, while potato volatiles include 2-methoxy-3-ethyl pyrazine and 2,5-dimethyl pyrazine. As you might guess, measuring the amounts of these chemicals requires fancy and expensive equipment.

However, fancy and expensive equipment is not needed to measure the sugars that make something taste sweet. The main sugars in fruits and vegetables are sucrose, glucose, and fructose. For most fruits these sugars make up what are called soluble solids, which can be measured using a hydrometer or refractometer (hand-held ones cost about \$100, available from science equipment suppliers, International Ripening Co. at QAsupplies.com, and McCormick Fruit Tech). The units of measurement are °Brix, named after the German scientist who developed the scale, Adolf Brix. Florida orange juice must have a minimum of 8.5 °Brix, and in California, Hayward kiwi fruit must have at least 6.5 °Brix at harvest. The range of °Brix in strawberries is 8-11.5 °Brix, 18-20 °Brix in grapes, 8-11 °Brix in carrots, and at least 8.5 °Brix in edamame (green soybeans). Soluble solids as measured by refractometers can also include amino and organic acids, so when using °Brix to judge vegetables, be aware that values may be due to chemicals other than sugars. Measuring °Brix is very easy - make sure the prism on the refractometer is clean, then squeeze a drop of juice onto the prism and look through the eyepiece to read the °Brix off the scale. Be aware that some refractometers require a temperature adjustment, but others don't. My brother-in-law, who farms in Oregon, used to measure the °Brix in his melons, comparing them to supermarket melons. If his melons had a greater °Brix than the supermarket melons, then he'd use that fact in his advertising.

Acidity is generally measured by titrating juice with a base to a predetermined pH. This requires some basic chemical equipment, so is generally not done outside a laboratory. We use titration instead of absolute pH because different plant juices have different buffering capacities. Usually, the sugar to acid ratio (soluble solids to titratable acidity) ratio is a better indicator for taste than acidity alone.

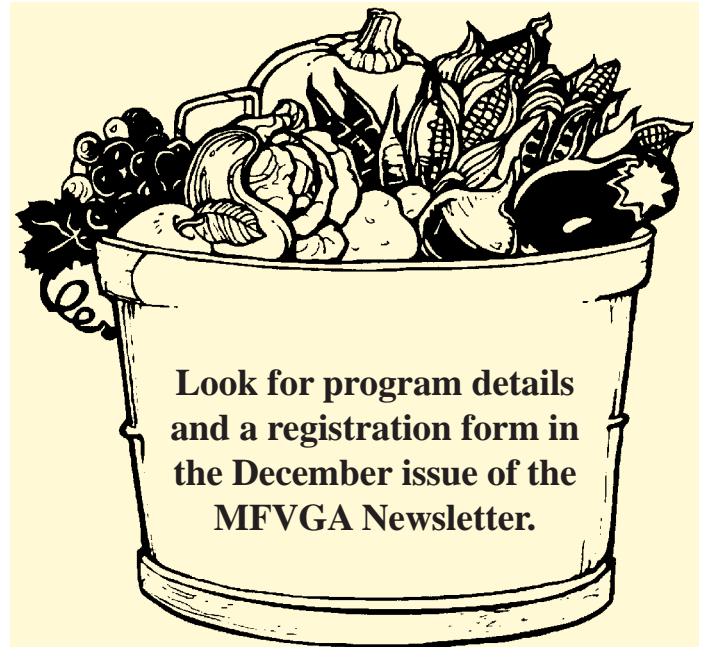
However, nothing beats checking flavor than taking a bite out of something, so if you think you have produce that tastes really good, consider offering samples to your customers.

Upper Midwest Regional Fruit & Vegetable Growers Conference

February 5-7, 2004

St. Cloud Civic Center
St. Cloud, MN

The Trade Show will be held
February 5th & 6th.



An exciting program is being planned.

Topics include:

High Tunnel Production

Pumpkins & Other Cucurbits

Sweet Corn

Tomatoes & Peppers

Root Crops

Berries -

 Winter Damage

 Black Root Rot

 Alternative Cultural Management Strategies

Fruit & Vegetable Research Updates

Organics

Beginning Grower Sessions

Apples & Tree Fruit

Marketing

Business & Risk Management

Plus much more!

Plan now to attend.

Summer Field Day Draws Large Crowd

Over 60 people participated in the Summer Tour / Field Day held on Friday, August 8, 2003. The day began at the North Central Research and Outreach Center in Grand Rapids, Minnesota where Dr. David Wildung led discussions on the small fruit breeding program as well as various research projects being conducted at NCROC. Some of the research projects discussed during the field day were sponsored by MFVGA with grant dollars made available through the Specialty Crops grant.

The Field Day continued with a picnic lunch and a tour of Nordic Ridge Gardens near Bovey, Minnesota. Nordic Ridge Gardens is owned and operated by Gene Eklin. Thank you, Gene, for opening your farm to us and for sharing some of the things that make Nordic Ridge Gardens unique.

Although the afternoon got a little warm, the day was enjoyed by all. Thank you, Dave, Gene, and all who contributed to making the day a success.



ATTENTION TRADE SHOW EXHIBITORS

The 2004 Upper Midwest Regional
Fruit and Vegetable Growers Conference and Trade Show
will be held February 5 & 6, 2004 at the St. Cloud Civic Center in St. Cloud, MN.

Have we received your application? Return it as soon as possible to reserve the booth(s) you want.

If you need an application or more information, contact the MFVGA office at 763-434-0400.

Risk and Risk Management

(A Risk Management Agency Fact Sheet –
Program Aid Number 1667-03)

What is Risk?

Every business and every person faces risks each day, but what is risk? People have different attitudes about risk. Some will wager a week's pay at a casino, while others will hide their money under a mattress. A person's aversion to risk is a key factor in the extent to which they will try to manage their risks. In general terms, people often think of risk as the chance of something bad happening. "Bad" and "chance" are two key elements of risk. In financial terms, risk is the possibility of financial loss.

"Bad" is the first element, and it refers to an event or outcome that is adverse, such as a crop failure. "Bad" is also relative – losing more money is worse than losing less money.

"Chance" is the second element. Risk involves uncertainty that an adverse event will occur. If something "bad" is absolutely, positively, guaranteed to happen, there is no risk because uncertainty isn't present. For example, there is no risk associated with jumping out of an airplane without a parachute. You will perish, guaranteed. It's stupid, but not "risky." Jump out of the plane with a parachute, and you'll probably live, but there's a chance you won't. Thus, most people consider sky-diving risky and jumping out of the plane without the parachute suicide. This example is extreme, but it is important to note that risk management will not help the individual intent on jumping without a chute. In business terms, a business must be economically viable and the individual must be willing to use risk management for risk management to be effective.

Risk management, in a business context, is about reducing the cost of risk, which includes the cost of managing risk. No business is risk-free, and risk management won't eliminate all risks. Risk management is about 3 R's: returns, risks, and ruin.

What is Risk Management?

Risk management, in a business context, is about reducing the cost of risk, which includes the cost of managing risk. Business, including farming, is about making profits or gains. Farmers need money to make a living for themselves and their families. To make a living, farmers must take risks, investing \$200,000 or more worth of seed, fertilizer, and herbicides and hoping for rain but not too much rain. Farming is risky; one doesn't know what the outcome will be when the crop is planted (the "chance" element), as all or a portion of the crop could be lost (the "bad" element). Because farmers take this risk, we have a plentiful food supply.

The first key concept of risk management can be expressed by the old saying "nothing ventured, nothing gained." Risk management involves asking the question, "**Is the risk appropriate for the return?**" Is the farmer venturing too much for too little gain, i.e., will the farmer make enough profit to reasonably justify the risk? The word "reasonable" is key. Across America, there are thousands and thousands of people who spend money believing they will win the lottery. The chances of winning a lottery are usually remote; hence, it is not reasonable to assume you will win the lottery.

Usually, people want a higher return on their investment in exchange for taking a greater risk. Simply put, they "**don't want to risk a lot for a little.**" Banks, for example, charge higher interest rates to customers who they believe are less likely to pay back a loan. A simple example of this concept follows.

Suppose you were to bet money on the outcome of a coin flip. You pay a dollar to play. If it's heads, you win \$1.10. If it's tails, you get nothing. Want to play this game? Probably not. If you could play this game a hundred times, on average you'd end up at the end of the game with \$0.45. Why risk a dollar for a 50-50 chance to come out 10 cents ahead or a dollar behind?

Let's change the game a little. Heads, you get \$2, tails you get nothing. Many people might play this game with a friend just for the fun of it. The chances of winning or losing are 50-50, but the effect of losing is not much. Risks are low as the outcome – even if one loses – is only to lose a dollar. Further, chances are that if you play it many times, you'll come out even. After all, you know that with a coin there's a 50-50 chance of winning or losing, and you know how much you could win or lose. Simply put, you "**know the chances of the possible outcomes.**"

Suppose the game paid \$3 if you win. Would you be more likely to play? Probably so. The odds are the same, but the payoff is more: the same risk as before but a higher expected return. If you had a chance to choose between the \$2 game and the \$3 game, you'd choose the \$3 game.

Now, suppose it's a bet for \$3 million. You pay a million to maybe win \$3 million. Most people wouldn't take this bet, even though the chances are exactly the same of winning or losing as with a dollar. It's still a 50-50 chance, but losing would be much worse.

Again, simply put, most people "**don't risk more than they can afford to lose.**" In other words, they try to avoid ruin. These are the introductory guiding principles of risk management (see box).

Don't Risk a Lot for a Little

The more risk you take, the greater the reward you should expect. It doesn't make sense, for example, to play the coin-flipping game mentioned earlier if at the end of the game you've paid a dollar to net 55 cents. Are there any risk-free investments? Yes. U.S. Treasury bills are generally considered "risk-free." The U.S. Government is unlikely to default on its bills. If you buy a T-bill, you can be as absolutely certain as anyone can be that you will be paid exactly what you are owed. The dollar may not be worth as much, but you will get paid. A T-bill is about as risk-free an investment as you can find. In January 2000, a T-bill paid about a 5-percent return.

Corporate bonds aren't quite as safe, as some companies go bankrupt. If they do, however, whatever assets are left go to pay creditors, such as the bondholders, first. Bonds are debt – you are loaning the company money. You are not an owner of the company. If you're going to invest and you can buy a T-bill with a 5-percent return, what would make you buy a corporate bond that may or may not pay you back? Probably a higher rate of return.

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Risk Management continued from page 10

For taking a greater risk, you should want a higher return. What about stocks? Over the past 60 years or so, stocks have returned roughly 10 percent per year. Some companies have gone bankrupt; others have grown tremendously. If a company goes bankrupt, bondholders get paid first from whatever money is left.

Thus, there's a greater chance that stockholders will get nothing. Therefore, an investor should expect to make more money investing in a company's stock than in its bonds, because there is more risk for stockholders. Again, if you can obtain a 5-percent return with no risk (T-bill) would it be financially wise to invest in a stock that would only make a 4-percent return? No – why incur a higher chance of losing your money to make less than you could get with no risk? This is a key concept of risk management. In order to justify making a higher risk investment, one should expect a higher return on the investment. The more risk, the higher the chance of a loss, so the potential gains from other similar investments need to be high enough to make up for the losers.

How do the returns from farming fit into this? Averaged over all farmers, farming yields a return on equity of 2 to 3 percent. Like any average, some farmers earn much more while others earn much less. Many farmers earn less on their equity than they could make by investing in a risk-free T-bill.

Planting a crop is an investment decision. Any business person, including a farmer, should continually ask if they could use their assets to make money some other way, if financial gain is important to them. When the returns don't justify the risk, enrolling in the Conservation Reserve Program (CRP) or cash renting their land are ways farmers can earn a less risky return on their assets.

Don't Risk More Than You Can Afford To Lose

Few people think it wise for retirees to invest their life's savings in an internet stock. If they lose, there is no opportunity to make back the loss. Few people have much patience with those who encourage senior citizens to gamble the money saved for their golden years. Thus, many legitimate investment advisors encourage their retired clients to hold "safe" investments, such as T-bills and bonds.

Yet, the casinos, horse tracks, day-trading establishments, and even Chambers of Commerce have customers and members who will gamble more than they can afford to lose. Who hasn't seen movies of the gambler who loses, but just needs that last "score" to get even. It never seems to work out for this person. No matter how good the odds, sometimes bad stuff still happens.

No one should invest more than they can afford to lose, unless they want a drastic change in their lifestyle, because sometimes they'll lose.

Ruin is the result of losing more than you can afford.

Unfortunately, to support a family by farming, some farmers must face the possibility of ruin each year. Crop insurance helps reduce the chance of ruin by reducing the maximum amount of money they can lose. Still, in today's economic climate, ruin is a real issue for farmers.

Know the Odds

A coin toss is a 50-50 proposition. A roll of a die is a 1-in-6 event. What are the chances that this year will bring a drought? And, if it does, how much revenue will be lost? No one knows precisely, but estimates can be made based on historical data, and these estimates can be invaluable in making an investment decision. RMA has developed and is developing tools to help farmers estimate the chances of profit or loss. The odds may be in a farmer's favor, but sometimes

1-Minute Risk Management

What

The effective risk manager assures financial solvency against the consequences of risk at the lowest possible cost.

How

Understanding financial statements provides the foundation on which a sound risk management plan can be devised and appropriate risk management tools employed.

Guiding Rules

- Don't risk more than you can afford to lose.
- Don't risk a lot for a little.
- Understand the likelihood and severity of possible losses.

Source: Mehr and Hedges, *Risk Management in the Business Environment*, Irwin Press, 1963.

they still lose. That is why avoiding ruin is important – it allows a farmer to keep farming. A loss doesn't put them out of business.

It is very important to realize that the odds of making a profit or of ruin change every year, and a losing year can make the odds of either much worse the next year. "Losing years" must be paid for by borrowing or by using equity built up in good years. The greater the debt or the less equity a farmer has, the harder it will be for the farmer to pay the bills if another loss occurs. Thus, it is very important that farmers understand their true financial situation, including not only preparing cash flow projections, but also preparing a balance sheet and income statement. One can have a positive cash flow and still lose money.

Putting It All Together

A good set of financial statements is critical and is a prerequisite for risk management. Financial statements describe the assets and liabilities, sources of financial risk, and the profit or loss of the business. For risk management to be effective, the business must have a reasonable expectation of making a profit (assuming financial returns are important).

Risk management cannot make a business that is fundamentally not profitable, profitable. With financial statements, a farmer can then apply these guiding principles to assess his or her risk in the context of other financial investments. Then, a farmer can analyze various risk management strategies to help bring the expected financial returns in line with the risks. Done well, risk management can help protect a farmer's hard-earned money from the risks associated with farming.

Conclusions

RMA's mission is to encourage farmers to proactively manage their risks. Farming is risky, more so than many other businesses. For taking these risks – and feeding the world – some farmers earn a good return on their investment. Others do not. By practicing risk management, farmers can gain greater control over their risks, financial returns, and solvency. (For more information, see *About the Risk Management Agency* (PA-1667-02) or visit RMA online at www.rma.usda.gov).



This issue of the MFVGA Newsletter is sponsored, in part, by the USDA – Risk Management Agency. For more information on the Risk Management Agency, visit their website at www.rma.usda.gov. Information on the Farm Service Agency can be found at www.fsa.usda.gov.

Minnesota Receives Special Needs Registration for Stinger Use on Strawberries

By Terrance T. Nennich,
Regional Extension Educator, Commercial Horticulture/Marketing

A Section 24 (c), Special Local Needs Registration, for Stinger (clopyralid) to control thistles and other labeled weeds in strawberries in Minnesota has been approved. This is excellent news for strawberry growers who struggle with Canadian thistle and other thistles. Stinger will also give good control of dandelions, smartweed, ragweed, clover, common groundsel and nightshade related weeds. Stinger will give no control of pigweed, lambsquarters and other common weeds.

Stinger is a post-emergent foliar applied herbicide. That means only weeds that are up and growing when Stinger is applied will be controlled. After Stinger is applied it moves to the roots and kills. Thistles will usually start to show damage within 48 hours after use.

When using Stinger to control thistle, apply 1/3 to 2/3 pint per acre any time after harvest through early fall. (Mid-September to Mid-October.) Do not mix Stinger with other herbicides. A single 2/3-pint rate or two 1/3-pint rate applications will give excellent results. While there are many strawberry renovation methods used in Minnesota, two general rules apply. 1) Apply Stinger before thistles flower, and 2) wait at least 30 days after using 2-4D at renovation. Use a minimum of 10 gallons of water per acre, 20-25 gallons is preferred.

In the spring, one application of Stinger may be applied at the 1/3-pint rate up to 30 days before harvest. It is important to allow the thistles to develop adequate foliage before applying Stinger. Any thistles not contacted with Stinger will not be controlled. It is extremely important to observe the 30 day pre-harvest interval when using Stinger in the spring. Always allow for an early harvest when timing Stinger for spring use.

In most fields, only spot treatments may be necessary where the thistle colonies exist. It is important when spot treating with Stinger to calibrate equipment properly. For example, when using Stinger at the 2/3-pint per acre rate use only one quarter of an ounce to treat 1,000 square feet.

Stinger may be used in first year plantings but delay applications until the planting is well established, usually September or October. I recommend the 1/3 rate on first year plantings.

Some strawberry leaf cupping can be expected. If leaves become severely distorted after application, check your rates and calibration.

Other facts concerning Stinger:

- Do not add a surfactant to Stinger for strawberries.
- Do not tank mix Stinger.
- Stinger has a 30-day to harvest limit.
- Maximum use is 2/3 pints Stinger per acre per year.
- Stinger has excellent control with thistles and other labeled weeds. It is not a cure-all.
- Consider spot spraying whenever possible.
- Do not over apply.

Dow requires that growers obtain and sign the waiver of liability certificate before using Stinger, releasing Dow AgroSciences from liability for damages caused by Stinger on strawberries. A waiver of liability certificate is being distributed with the supplemental labeling. Growers should have the complete Stinger label and the Supplemental Label for Strawberries so that they have complete information before using this material.

Labels and waiver paperwork can be found at: <http://www.cdms.net/manuf/products.asp> and at Dow AgroSciences Web site at <http://www.dowagro.com>.

If you cannot obtain the label on the WEB, you may contact Terry Nennich, regional extension educator, commercial horticulture at 218-694-6151 or the Minnesota Fruit and Vegetable Growers Association at 763-434-0400.



Why Do You Join An Association?

You don't buy a newspaper, you buy news.

You don't buy life insurance, you buy security.

You don't buy glasses, you buy vision.

You don't buy awnings, you buy shade.

You don't buy membership in an association... You buy the cooperation of people in your profession with whom you can join hands to do the things you can't do alone.

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