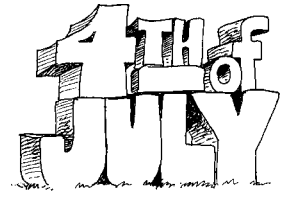


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July, 2005 Volume 19, No. 3

A Note From The Board

By Foster Mooney – Jewel Lane Farm, Chisago City, MN

I have always enjoyed reading real estate ads and then interpreting what they really mean. For example: The ad says, “Corner lot, close to school.” This means that 300 screaming kids will be cutting across your front yard twice a day, five days a week for nine months out of the year. Or, “This property could use a little TLC.” Which means, if you buy this, you should start with a bulldozer and a burning permit. However, my all-time favorite is, “Close to Carlos Avery where wildlife abounds.” This means, don’t even think of growing anything here because the raccoons and deer will eat it all long before it is ready to pick.

Yes, Jewel Lane Farm adjoins Carlos Avery Wildlife Management Area and I can attest to the fact that a clan of raccoons can consume seven acres of nearly ripe sweet corn in just two nights and a herd of deer can wipe out ten acres of pumpkin plants before they have time to vine out.

My raccoon problem started in the 80’s when their pelt value diminished to near zero and their population exploded. My first attempt to keep the raccoons out of my sweet corn was the old “put a radio out in the field” and as the story goes, the raccoons just changed stations and kept on eating corn. Next, I tried putting dogs out in the fields, but the raccoons soon figured out where the dogs were and just ate on the other end of the fields. Also, my neighbor called the cops on me because the barking dogs were keeping her up all night. After trying various electric fence set ups, I have found that a temporary fence consisting of five strands of 17-gauge wire spaced three to four inches apart with alternating hot and ground wires supported by vinyl step down posts placed in the ground approximately 30 degrees out from the vertical creates an impossible barrier from a raccoon’s perspective. And, it is cost and labor effective.

When I finally had my raccoon problem solved, the combination of urban sprawl, back-to-back mild winters, and a neighbor who picks hundreds of acres of his corn in the spring, all contributed to a deer hunter’s bonanza and a vegetable grower’s nightmare.

My first approach to saving my crops was the use of chemical deer repellent. I think I must have tried them all plus some suggested “home remedies”. In my opinion, none of them were effective enough to justify the cost or labor involved.

I put flash tape over my pumpkin rows. The deer must have thought it indicated the “start-finish lines” because the tape soon became ribbons as the pumpkin plants disappeared.

I have had excellent results keeping my sheep IN with hi-tensile electric fences; however, I have found it to be a much less effective tool for keeping deer OUT.

Finally, one day I wrote one of my typically brief, but pointed, letters to my Divisional DNR office describing my most intimate feelings about the on-going relationship between my vegetables and their deer. Shortly thereafter, I had a farm visit from two area DNR employees who stopped by to personally verify my deer damage and to outline the DNR’s program to assist farmers with wildlife problems.

A week or so later, I had the pleasure of meeting Mr. Nick Reindl, the DNR’s Ace Fence Builder. First, he measured off the area I planned on fencing. He then drew the plans for the fence, composed a materials list, ordered all the necessary materials, and arranged to have them all delivered to my farm.

After I had the corners built and the line posts in place, I called Nick to let him know I was ready to hang wire. Nick came back to my farm with two other DNR workers from my District office along with all of the highly specialized tools required for rolling out and stretching 300-pound rolls of woven wire. In one afternoon, with Nick’s tools and his gift for fence building, I had a deer proof area on my farm. My financial assistance from the DNR has long since been spent, but Nick is still assisting me with my on-going deer fence projects and allowing me the use of his specialized tools.

If you are experiencing deer damage, don’t wait – it will probably become worse. Contact your District DNR office for damage verification. The DNR’s program, along with Nick’s expertise, offers a permanent solution to what appears to have become a permanent problem in many areas. Or better yet, come to the Upper Midwest Regional Fruit & Vegetable Growers Conference in St. Cloud on February 2 & 3, 2006 and meet Nick at the Minnesota DNR booth. Tell him Foster sent you.



USDA-Farm Service Agency County Committee Election

St. Paul, MN -- Nationwide, there are more than 8,000 county committee members serving more than 2,400 USDA-Farm Service Agency (FSA) offices throughout rural America.

These committees oversee local FSA operations and make important decisions about the administration of commodity, disaster, conservation, and loan programs in their communities. This grassroots approach gives farmers and ranchers a much-needed say in how Federal actions affect their communities and their individual operations. County Committee remains a cornerstone of FSA's efforts to preserve and promote American agriculture. Given the critical role county committees play in local agriculture, FSA is calling for increased participation of all farmers and ranchers in the county committee election process that begins on June 15, 2005.

From June 15 through August 1 eligible farmers and ranchers can be nominated as a candidate for their local FSA county committee. Minnesota has about 270 County Committee Members and 1/3 of these COC positions are up for election.

Each County Committee (COC) is composed of three to five elected members, each serving a three-year term. Every COC member represents the producers in a predetermined portion of the county known as a Local Administrative Area (LAA).

Eligible producers in a voting LAA are mailed a ballot in the fall with clear instructions for filling out and returning the ballot timely. Before ballots can be distributed, a slate of eligible candidates must be established.

Creating a list of candidates for each ballot depends on an important nomination process that begins June 15. Farmers and ranchers are encouraged to reach out to underserved segments within their communities and develop diverse groups of nominees to run for FSA county committee member.

Names for candidacy are submitted using the FSA 669-A form which is available at any FSA office or on-line at www.fsa.usda.gov/pas/publications/elections/. Nomination forms must be signed by the nominee and returned to the FSA office or postmarked before August 1.

If socially disadvantaged producers are not adequately represented on the elected committee, the state committee may appoint minority advisors who can represent additional views for the underserved farmers and ranchers in the county.

FSA urges producers to create a diverse list of candidates so their COC election can yield the best possible representation for their communities.

Prospective Voter Requirements

A person who meets the requirements in Numbers 1 or 2 below, *plus* Number 3 is eligible to vote.

1. Be of legal voting age and have an interest in a farm or ranch as either of the following:
 - An owner, operator, tenant, or sharecropper; or
 - A partner in a general partnership or member of a joint venture that has an interest in a farm as an owner, operator, tenant, or sharecropper.
2. Not of legal voting age, but supervises and conducts the farming operations on an entire farm.

3. Eligible to participate in any FSA program that is provided for by law, regardless of the status of funding.

For further information contact Dr. Nigatu Tadesse, USDA-Farm Service Agency, Tel: 651-602-7705 or E-Mail: nigatu.tadesse@mn.usda.gov.

Important Election Dates to Remember

June 15, 2005:

Nomination period begins. Request nomination forms from the local USDA Service Center.

August 1, 2005:

Last day to file nomination forms at the USDA Service Center.

November 4, 2005:

Ballots mailed to eligible voters.

December 5, 2005:

Last day to return voted ballots to the USDA Service Center.

January 1, 2006:

Elected committee members and alternates take office.

USDA is an equal opportunity provider and employer.

2005 Proceedings Books Available

The 2005 *Proceedings Book* contains information from many of the talks given at the Upper Midwest Regional Fruit & Vegetable Growers Conference and includes articles on berry production, business management, grapes, high tunnel production, irrigation, marketing, melon production, organic production, pumpkins & squash, sweet corn, tomato production, tree fruit and much more.

To receive a copy of the 2005 *Proceedings Book*, send your check for \$17.00 (payable to MFVGA) to the MFVGA office at 15125 W. Vermillion Cir. NE, Ham Lake, MN 55304.

State Fair Display Items Needed

Once again, it's hard to imagine that we need to think about the Minnesota State Fair already.

If you are willing to donate fresh produce or other products for the display, please call Marilyn Johnson at the MFVGA office – 763-434-0400. We are looking for a wide range of items that show the variety and quality of the fruits and vegetables that are available from Minnesota producers.

If you would like to volunteer for a four-hour shift at the booth, call Paul Huginin at 651-297-5510. There are three four-hour shifts each day during the Fair. The State Fair runs from August 25th through Labor Day.

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: March 1st for the April 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.

IPM as a Risk Management Tool?

Recent Thoughts about Taking Time to Plan

By Bill Hutchison, Department of Entomology, University of MN
(Re-printed from the May 16, 2005 issue of the
Minnesota Fruit & Vegetable IPM News)

This past spring, we have experienced one of the warmest weather systems in recent history. For southern Minnesota, you would have to go back to 1920's to find a warmer April. Now, however, we appear to be back to normal (wind chills at 32°F for southern MN). Regardless of the weather this year, it is never too late to plan, or think about planning for the upcoming season and what you will do to monitor and manage insect, disease and weed pests. As many of you know, I am a firm believer in the benefits of Integrated Pest Management (IPM), and also believe that IPM can be viewed as an excellent risk management tool. Specifically, IPM can help reduce much of your Production Risk, and consequently, should be a KEY part of your annual planning.

To help you accelerate your use of IPM tips and tricks (also known as tactics and strategies), I thought that a brief review of some key concepts, including the advantages of IPM Planning, might be helpful. As I am writing to a broad audience, with a variety of experience, I realize that some of the following is already obvious. However, I have elected to include some basic IPM and business concepts in one article in an attempt to provide cohesion and improved understanding of the need for IPM within the context of annual planning, review and risk management. One caveat for organic or organic-certified growers: although some specific tactics and time-frames will differ, many of the following principles should also be applicable.

IPM basics and planning review:

IPM is both a concept and a practice. For growers and crop consultants, transitioning from theoretical benefits of IPM to actual practice in the field can be a challenge, especially for high-value (high-risk) crops. Many definitions of IPM have been offered. Over the years, and most recently within USDA, the following definition reflects the key elements of the IPM concept: "IPM is the use of complementary control tactics (e.g., crop rotation, resistant varieties) to manage pests within a sustainable production system that minimizes economic, environmental and health risks." Insecticides or other chemical controls should only be used when necessary, based on pest monitoring information and potential economic impact. By definition, to use complementary, multiple pest control tactics requires planning ahead.

A few years ago at the Upper Midwest Fruit & Vegetable Conference, I put together a checklist of IPM activities that growers should keep in mind, and review throughout the year. As you will see, many of these activities can occur during the winter months, and by reviewing the previous year's activity. However, regardless of the time of year, you can benefit from keeping these principles in mind. Key activities related to IPM include:

Profit check:

This is not always initially mentioned in many IPM texts, but it is a good place to start, and typically helps get your adrenalin flowing (positive or negative). Beginning with the question: what was my net revenue, after all costs are accounted for?...helps you focus on the need for planning, and provides a clear reason for spending the

time to review each of the following details. A good place to start is last year's tax return, followed by your detailed records of input costs and income, and new ideas about marketing your product.

Take time to write it down:

It is difficult to gain a better understanding of what is working well and what is not, if you are not taking notes, recording yields and quality, costs, and other outcomes of your IPM and farming programs. This tip, provided by Brian Flood, Del Monte Corp., always seems obvious. However, it is a key step. If you feel you are not currently taking good records, find a system (computer spreadsheet, note-pad, whatever works for you), and start using it. Keep in mind you need to "write it down" in a way that makes sense. Stashing a stack of field records in your truck's glovebox, will not automatically help you with the New-year plan. If notes are not dated, or too convoluted or cumbersome to read, it will be difficult to muster the necessary fortitude to plan. The older we get, the less reliance we can place on long (or short) term memory.

Procrastinator?:

Know yourself. Based on my personal experience (working with others of course), if you fall into this category, plan to do everything on this list sooner than you think it should be done. If you have time to get around to it, you might consider reading a good book on procrastination.

Take time to review:

If you keep profits in mind, and you have some written records to review, you will now be ready to review what you wrote down. It is critical to ask the following: What worked? What didn't work and why? Make use of your extension and industry contacts to help solve past pest problems. Get a 2nd opinion. Review crop performance (quality and yield), marketing connections, new ideas for marketing, and all aspects of your operation, especially as they impact pest management performance.

Whole-farm perspective:

Think about your farm from a whole-farm, or systems approach, and all the variables (agricultural or otherwise) that affect your current and projected profits. Marketing opportunities (or concerns) should be a #1 rationale for what and how much to plant. However, you must also keep in mind the need (and space) for ample crop rotations, for effective management of soil-borne plant pathogens, and to some extent weed and insect management. Other examples of questions to consider, from a whole-farm perspective, include: should I own or rent land, should I consider renting more land, and the economic implications of each scenario. As I was just reminded April 15th, this aspect of long-term planning should include your tax accountant.

Variety check:

Planning for each new season should begin with a review of your crop varieties. Despite what dealers may say, how well did they yield on your farm, under your soil types, etc.? As part of this process, and if you are not already doing so, consider conducting small variety tests on your farm.

Environmental check:

As most of you are in this business for the long-term, this planning reminder would not be complete without discussing the environment within and near your farm. I do not have the space



MINNESOTA GROWN

Fresh From Your Neighbor

Television Update

Efforts to promote Minnesota Grown products and the *Minnesota Grown Directory* on FOX 9 and UPN 29 are in full swing with television ads, web ads and other special features. Here are a few highlights from early spring:

- M.A. Roscoe, feature story reporter on FOX 9's morning news program, showed the *Directory* twice on-air
- Chef Andrew has featured the *Directory* and Minnesota Grown members Bauer Berry Farm and Shady Acres Herb Garden in separate features during his part of the morning news show
- The opening of the Minneapolis and St. Paul Farmers' Markets were highlighted on the FOX 9 Community Calendar and during the FOX Official Meteorologist program which includes mentions during the 9:00 p.m. news as well as the morning news
- Tile ads on FOX9.com and UPN29.com began in mid-April and will continue to highlight Minnesota Grown products throughout the year.

Paid advertising continues in July and August with ads promoting farmers' markets (sponsored by Minnesota Grown with assistance from the Minneapolis and St. Paul farmers' markets). There will also be ads in late July encouraging consumers to purchase Minnesota Grown produce in the local grocery stores. The television campaign will return in September to promote fall activities like visiting the apple orchard, pumpkin patch or winery.

Wanted: Your Special Events

If you have a special event for your business or industry coming up in 2005, please contact Paul Hugunin at paul.hugunin@state.mn.us or by phone at 651-297-5510. Farmers' market events, a milestone anniversary for your business (such as your 25th or 50th year in business), or the opening of a new location are just a few examples of the kinds of events we'd like to promote through the Community Calendar on KMSP-TV and UPN29.

Over 140,000 Directories Out the Door

The new *Minnesota Grown Directories* have been flying out the door and into the hands of interested consumers. Over 140,000 of the 170,000 copies printed have already been sent to fill individual requests as well as bulk orders placed by businesses such as Travel Information Centers, libraries, realtors, and clinics and other locations that distribute Directories. Contact Brian Erickson at brian.j.erickson@state.mn.us or 651-296-4939 if you would like

copies for distribution. Directories come in boxes of 75 and 150, although we gladly send out other quantities upon request. The 584 listings in the 2005 *Directory* make it the largest *Minnesota Grown Directory* ever published! Thank you for your participation!

GardenMinnesota.com Ad Campaign Launched

The Minnesota Nursery and Landscape Association (MNLA) worked with Minnesota Grown to air the first television ad campaign of the season. The ad aired on Ch. 9 and Ch. 29 throughout May, with most of the ads running during the first two weeks of the month. GardenMinnesota.com is the new on-line resource for gardeners and homeowners hosted by MNLA. The site provides links to the *Minnesota Grown Directory*, MNLA members such as garden centers, landscape designers, and lawn services, links to the U of M Yard and Garden Briefs, and numerous landscaping tips and resources. The ad campaign also includes tile ads promoting GardenMinnesota.com on FOX9.com and UPN29.com from April through October.

180 Attend Marketing Conference!

The annual Minnesota Grown Marketing Conference drew its largest audience yet with 180 paid attendees on hand to hear keynote speaker Joel Salatin and other talented presenters. Attendee evaluations were glowing in regards to the full day of presentations. On a scale of 1-5, with 5 being the best rating, the average rating given to speakers was a remarkable 4.4!

A great mixture of marketers were present, including garden centers, fruit and vegetable growers, Christmas tree growers, farmers' marketers, livestock producers and other specialty crop producers. The 2006 conference will be held in mid-March on the U of M's St. Paul Campus. Please contact any of us if you have a topic you'd like addressed or a speaker to recommend.

Living Green Expo Draws Record Crowds

Approximately 14,000 people attended the 2005 Living Green Expo on April 30 and May 1 at the State Fairgrounds. These consumers were interested in purchasing sustainable products and in helping the environment. The Minnesota Grown Program helped sponsor the event as a way to encourage attendees to buy locally. Over 2,400 copies of the 2005 *Minnesota Grown Directory* were gobbled up by attendees. Visit the Expo web site at www.livinggreenexpo.org for details about the expo or to get information about exhibiting next year.

Berry Cost Share

A limited amount of berry cost share funds are still available as this article is being written. Pick-your-own berry farms (including strawberries, blueberries, or raspberries) that are licensed to use the Minnesota Grown logo and are current MFVGA members are eligible to participate. The cost share

Minnesota Grown continued on page 5

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.

funds reimburse growers for up to \$250 of advertising that includes the Minnesota Grown logo. Contact Paul Hugunin at paul.hugunin@state.mn.us or 651-297-5510 for details.

New Minnesota Grown Clothing

The Minnesota Grown Promotion Group has added some new Minnesota Grown logo clothing available for purchase: visors (tan with 3-color logo), new short-sleeve T-shirts (denim blue with black trim at the sleeve and collar), and a ladies-cut t-shirt (periwinkle with white logo). Old favorites like 3-pocket aprons, hats, and golf shirts are also available. The order form can be found on-line at www.minnesotagrown.com.

Help us find the Best Eateries in Minnesota!

The Minnesota Grown Program is collaborating with Renewing the Countryside and a number of other organizations on a project to highlight local foods throughout Minnesota. One aspect of the project is to identify restaurants, cafes, bed & breakfasts, or other public eateries that serve up great, home-made food. We especially want to know about places that serve locally-grown food, whose menus may include meat from a local rancher, cream and butter from a nearby dairy, fruits and veggies grown by area farmers, jams and relishes those farmers put up, honey from the neighborhood apiary, delicious Minnesota wines, or anything else that makes a wonderfully short journey from "farm to table." Over the next couple of months we will be gathering suggestions and selecting a number of these establishments to be featured in a book and on a website to promote "eating locally."

Please send the name of the eatery, the town it's located in, any contact information you may have (phone, address, e-mail) and, if you know it, the name(s) of the owner(s) and/or chef(s). All information can be sent to Derric Pennington at info@rtcinfo.org. For more information, contact Renewing the Countryside at 1-866-378-0587.

New Manuals Now Available

Two new manuals prepared by the University of Minnesota Extension Service and funded through partnership agreements with the USDA – Risk Management Agency and the Risk Management Agency Community Outreach & Assistance Partnership Program are now available.

The **Minnesota High Tunnel Production Manual for Commercial Growers** addresses issues including site selection and construction, layout, irrigation and water management, soil and plant fertility, disease management, insect management, crop production, basic economics of high tunnel production, organic production with high tunnels and information on where to find other resources. Development of the manual was coordinated by Dr. David Wildung from the U of M North Central Research & Outreach Center and Terry Nennich, Regional Extension Educator based in Crookston, MN. Several other U of M Extension specialists also contributed to the manual.

The **Minnesota Fruit & Vegetable Growers Manual for the Beginning Grower** is an updated and expanded version of the beginning grower manual prepared by the U of M Extension Service in 1994. The manual is designed for people who want to start growing fruits and vegetables to sell to other people and it contains basic information that all growers should know BEFORE they start planting their crops.

The new manual includes sections on risk management, business planning and start-up, marketing, knowing your soil, production, irrigation and cultivation, farm safety, pest management, harvesting and storage. The manual also includes several farm profiles and a section on where to find more detailed information.

Both manuals are available from the MFVGA office for \$35.00 each. Please send your requests and payment to the MFVGA office at 15125 W. Vermillion Cir. NE, Ham Lake, MN 55304. Make the check payable to MFVGA.



IPM Risk Management Tool continued from page 3

here to fully discuss all aspects of maintaining the environmental integrity of your farm. Clearly, much has been written, and I know that from talking with many of you, that environmental goals are a key part of your operation. Check with your county extension office to review what Conservation Reserve programs might apply to your area. Again, IPM, when used properly, is also compatible with environmental as well as economic goals. I will discuss this more in the future as well.

I realize this is a very brief overview, but it is intended to encourage you to continue to refine your operation as it relates to IPM. During 2005, I will periodically provide some additional views on the value and risks of IPM within the context of high-value fruit and vegetable crop production.

(The Minnesota Fruit & Vegetable IPM News is published weekly from May through August, cooperatively, by the Minnesota Department of Agriculture and the University of Minnesota. Partial funding for this publication is provided through partnership agreements with the Minnesota Fruit and Vegetable Growers Association and the United States Department of Agriculture – Risk Management Agency (RMA). Current issues of the *Minnesota Fruit and Vegetable IPM News* can be found on the VegEdge website (html format) at www.vegedge.umn.edu/MNFruit&VegNews/mnindex.htm and on the MDA website (pdf format) at www.mda.state.mn.us/biocon/fruitreports.

Leaf Analysis as a Guide to Apple Orchard Fertilization

By Carl Rosen, University of Minnesota
– Department of Soil, Water and Climate
(Reprinted from the June 20, 2005 issue of the
Minnesota Fruit & Vegetable IPM News)

Principles of Leaf Analysis

When used properly, leaf analysis provides the most reliable method to determine fertilizer needs for established orchards. Soil tests should be used prior to planting to determine lime requirements and phosphorus, potassium and magnesium levels. In established orchards, however, soil tests are primarily used as a supplement to leaf analysis information.

Many factors affect the nutrient composition of leaves. Soil moisture, soil texture/structure, native soil fertility, and fertilizer practices have direct effects on nutrient uptake. Crop load, variety, rootstock, disease and insect incidence, weather conditions, and cultural practices such as weed control and pruning can also alter leaf nutrient composition. Whenever possible, consideration of these factors should be taken into account when interpreting leaf analysis results. Fertilizer application is often necessary to provide optimum levels and balance of nutrients for plant growth, but fertilizer cannot make up for poor insect and disease control or correct problems like severe damage due to winter injury.

The basis behind leaf analysis is that optimum ranges exist for the level of each nutrient in the leaf and maximum quality/yields occur when nutrients are maintained within these ranges. If the level of a nutrient falls outside of its optimum range, corrective measures should be taken. The table below provides nutrient concentration levels indicative of deficient, optimum, or excessive conditions for 11 essential elements in apple leaves of bearing trees.

Recommended Procedures for Sampling and Handling Apple Leaves

Obtaining a representative sample is important to avoid misleading results and erroneous interpretations. Even the best-equipped laboratory cannot make up for a poorly collected or improperly handled sample. Optimum nutrient ranges are based on leaves sampled at a specific maturity level and collected at a specific period during the growing season. The following instructions should be used as a guide for proper leaf sampling and handling procedures:

1. Leaf samples should be collected between July 15 and August 15.
2. At least 4-6 trees should be selected for sample collection. Trees not typical of the orchard should be avoided.
3. Trees should be of the same age, variety, and rootstock, growing on a relatively uniform soil of the same fertility. If these conditions are not met, the orchard should be divided into uniform blocks that are sampled separately.
4. Leaves from the middle of the current year's terminal shoot growth should be selected. Spur leaves should be avoided. Collect both the leaf blade and its attached petiole (leaf stalk).

5. Collect a total of 60-100 leaves (about 10-15 leaves per tree), 4-6 feet from the ground, from shoots spaced around the tree. Do not pick more than 2 leaves from any one shoot. Leaves showing insect, disease or mechanical damage should not be selected for sampling.
6. If you are trying to diagnose specific leaf symptoms, send in two samples – one from trees showing the symptom and one from trees not showing the symptoms.
7. If leaves are dusty or dirty, they can be rinsed in distilled or deionized water. Do not let leaves soak in water, because nutrients will leach out. Dried leaves should not be washed.
8. Place leaves in a clean paper bag and dry at room temperature or send immediately to a laboratory. Do not use plastic bags unless samples have been previously dried.

The University of Minnesota Research Analytical Laboratory (phone: 612-625-3101) offers tissue testing services for a fee. An information sheet along with current prices can be found at the following web site:

<http://ral.coafes.umn.edu/Forms/DIAGNOSTIC%20PLANT2003a.pdf>

A number of private laboratories also offer tissue testing services. Contact your Extension Office or fertilizer dealer for information about commercial laboratories in your area or look in the Yellow Pages under "laboratories".

Interpretations for Nutrient Levels in Bearing Apple Trees (sampled between July 15 and August 15)

Nutrient	Deficient (below)	Optimum (within)	Excessive (above)
Nitrogen (%)	1.80	1.90–2.30	2.40
Phosphorus (%)	0.08	0.09–0.40	--
Potassium (%)	1.00	1.20–1.80	1.90
Calcium (%)	0.70	0.80–1.60	--
Magnesium (%)	0.20	0.25–0.45	0.55
Sulfur (%)	--	0.20–0.40	--
Manganese (ppm)	20	25–135	200
Boron (ppm)	25	30–50	70
Copper (ppm)	4	6–12	50
Zinc (ppm)	15	20–50	100
Iron (ppm)	45	50–200	300

Note: If pesticides containing copper, zinc or manganese were sprayed on the trees, then concentrations of these elements may be much higher in the leaf tissue. This is usually not a cause for concern, because most of the sprayed elements are on the leaf surface.



2005 Summer Field Day

The 2005 Summer Field Day was held at Berry Ridge Farm in Alexandria, MN on Friday, June 3, 2005. About 65 people participated in the tour hosted by Ron and Ann Branch. Ron gave an overview of the farm's operation as he led us on a tour of the fields. Steve Poppe from the University of Minnesota West Central Research & Outreach Center in Morris, MN talked about the "Annual Bed Strawberry Production Study" which is in its second year and showing promising results. Steve will be sharing more information on the study at the 2006 Upper Midwest Regional Fruit & Vegetable Growers Conference in February.

After our unusual spring – unseasonably warm followed by unseasonably cool, the benefits of high tunnel production were obvious in Ron's two tunnels where his beans and tomatoes were getting a good start. As for the strawberries in the tunnel – they were starting to ripen. It's hard to tell in a black and white picture, but if you look closely, you will see red berries. And no, we were not allowed to pick.

Berry Ridge Farm produces strawberries, raspberries, blueberries, pumpkins, squash, tomatoes, cucumbers, green beans and an assortment of other vegetables that are marketed on site and at the Alexandria Farmers' Market.

Thank you Ron and Ann for an interesting and informative day. Good luck throughout the season.





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

I regret to write that Dr. Janna Beckerman, Extension Plant Pathologist, has decided to leave the University of Minnesota for a position at Purdue University. Although we all congratulate Janna and wish her success in her new position, this means that the horticulture industries (nursery, turf, fruits and vegetables) in Minnesota will not have Extension help in plant pathology. As far as I know, the Department of Plant Pathology does not plan to hire a new person to replace Janna. It will be more difficult now to get help identifying diseases and finding someone to speak at conferences on diseases of horticultural crops.

As you may guess, this is another result of continuing budget cuts. Funding for the University is now a little less than 4% of the state's budget. In 1971, this percentage was a little over 8%. The change in support means that the University, more than ever, has to find non-state dollars to support its infrastructure (lights, heating, air conditioning, electricity, libraries, computer support, greenhouses, field plots, custodial care, parking spaces, etc.), not to mention graduate students, and technical and clerical staff. Those of you who are K-12 teachers, or downsized employees of private businesses, are already all too familiar with these types of budget cuts, and are working extra jobs to feed your families or pay the mortgage.

The University's problems don't begin to compare to those personal problems, or those of University employees who are being downsized (and I'm sorry to write that there are several in my department). As downsized employees at private institutions have had to do, we at public institutions may have to "re-invent" ourselves. As part of the University's new "strategic repositioning", the College of Natural Resources will disappear and its faculty merged with departments in the College of Agriculture, Food, and Environmental Sciences. In the future, departments may merge with one another. Discussions are taking place on the loss of horticulture departments across North America, whether there still is a need for horticulture departments (fewer and fewer undergraduates want to major in horticulture), and as always, what kinds of classes we should be offering undergraduates. Some faculty members in my department have suggested that we no longer should feel tied to commodities, so that we can pursue research in areas in which it may be easier to get Federal grant money, but many of us still feel a commitment to the land grant mission and to commodities of importance to Minnesota agriculture.

Ironically, I just finished reading "Hard Tomatoes, Hard Times", a report published by a nonprofit think tank in 1973, criticizing land grant colleges for not working enough on solving problems of the rural poor, working too closely with agribusinesses, and ignoring minorities. While I don't agree with everything the report criticizes (developing new fruit and vegetable varieties CAN help independent

family farms, and helping agribusiness can benefit consumers), and think that many of the recommended solutions ("public inquiry into the land grant complex", "conduct public negotiations with outside constituencies", "end racial discrimination", and "full public disclosure from the land grant complex") don't really help independent family farms (and creates more paperwork), I find it interesting that except for an increase in reporting requirements, things have not changed much in 30 years. I think that in general, University personnel WANT to help independent family farmers, farm workers, small town businesses, or non-farm rural people, but what funding there is for such projects often isn't enough to pay people to do the work plus pay overhead (that is used to pay for University libraries, computer lines, telephones, etc.). In chasing funding, University departments are either trying to find ways to teach classes with large student numbers, focusing research efforts in areas where Federal grants may be available, or working with agribusinesses or commodity groups that leverage some funding for a faculty position.

What can independent growers of minor crops do to get attention from the University? Growers can band together into associations like the MN Fruit and Vegetable Growers Association, write letters to Dean Muscoplat of the College (praise work you appreciate and show concern for trends you don't like), and lobby state legislators to pay for things, as the MN Grape Growers Association did years ago to pay for a new enology facility and enologist at the Horticulture Research Center. Of course, this happened 10 years ago, when there were state budget surpluses. Ultimately, the funding came from tax revenues and a bonding bill, which, in these times of belt tightening, may now mean a little less for something else (K-12 education, state troopers, road repairs, state parks, etc.). As science fiction writer Robert A. Heinlein popularized in his book, *The Moon is a Harsh Mistress*; "There ain't no such thing as a free lunch." Somebody has to pay, and for the public good, there may be a societal cost, whether economic, social, or political. However, if the public benefits, whether immediately or in the long term, maybe we all should be more willing to support the public good.

Another way to think about fiscal issues is that the "user pays". Sure, you already pay for educational programs when you pay to attend the annual conference and dues to the organization. The problem is paying for research that we can present at the annual conferences. MFVGA already partners with faculty members at the University in submitting grant proposals. These grants have helped pay for speakers from outside the University at the annual conference (and you like hearing somebody other than us regulars once in a while, right?), the VegEdge newsletter and web page, the high tunnel manual, and the updated manual for the beginning grower. However, due to funding constraints, there is a lot of work we could do that we don't, like test new production methods or continue developing new varieties of strawberries, blueberries, and apples for Minnesota. A grower asked me if there were any graduate students looking for projects to do, because he had an idea for such a project. The problem is not finding good projects, nor is it finding good graduate students. The problem is coming up with the money to pay for graduate student stipends and tuition. MFVGA members starting an endowment fund for a graduate student might help. It might not result in a graduate student next year, but maybe in five years, the funds might build up enough to leverage other funds, enabling us to hire a graduate student working on problems in fruits and vegetables. The student might be the only student left in the department working on fruits and vegetables, but one is probably better than none. Set us a good example, and maybe even some of us faculty members will contribute to such a fund!

MFVGA MEMBERSHIP APPLICATION

October 1, 2004 - September 30, 2005

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 \$ _____

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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.

Do you need posters from the Minnesota Department of Labor & Industry?

Minnesota law requires employers to display some state-mandated posters in a physical location where employees can easily see them. The posters provide safety, wage and age-discrimination information and are listed on the Minnesota Department of Labor & Industry (DLI) website along with brief explanations. There is no cost for the posters and they can be printed from the DLI website, ordered as a packet on-line from the DLI website, ordered via e-mail request or ordered by phone – 651-284-5042 or 1-800-342-5354 (outside the Twin Cities). A request can also be sent by mail to: IPC Poster Requests, Minnesota Department of Labor and Industry, 443 Lafayette Road N., St. Paul, MN 55155-4307.

You can access the MN Dept. of Labor & Industry workplace poster requirements at the DLI website at <http://www.doli.state.mn.us/posters.html>

Mandatory state posters include:

- Safety and Health Protection on the Job
(Safety and health regulation information – updated Sept. 2003)
Contact information: MNOSHA Compliance – 651-284-5050
- Minnesota Workers' Compensation Employee Rights and Responsibilities
(Explains what employees should do if they are injured at work – updated Aug. 2003)
Contact information: Workers' Compensation – 651-284-5005
- Minnesota Employees, You Are Entitled To...
(Details state and federal wage and overtime laws – updated 2001)
Contact information: Labor Standards – 651-284-5005
- Know Your Rights Under Minnesota and Federal Laws Prohibiting Age Discrimination
(Explains retirement and age discrimination – updated Jan. 2004)
Contact Information: Labor Standards – 651-284-5005
- Unemployed?
(Informs employees how and where to apply for unemployment insurance benefits should they happen to be separated from employment. – updated Dec. 2003)
Contact information: MN Dept. of Employment and Economic Development – 651-296-6141

In addition, some U.S. government agencies have mandatory poster requirements including the Equal Employment Opportunity Commission and the U.S. Department of Labor. These posters can also be printed from the websites listed below.

Equal Employment Opportunity Commission

Communications and Legislative Affairs
1801 L Street NW, Room 9405
Washington, DC 20507
Phone: 1-800-669-3362
www.eeoc.gov

- Equal Employment Opportunity is the Law

U.S. Department of Labor

Wage and Hour Division
220 S. Second Street, Room 106
Minneapolis, MN 55401
Phone: 1-866-487-9243
www.dol.gov/osbp/sbrefa/poster/main.htm

- Family Medical Leave Act
- Polygraph Protection Act
- Your Rights Under the Fair Labor Standards Act
- Details of Federal Minimum Wage, Overtime Pay and Child Labor Laws
- Notice to Employees Working on Federal or Federally Financed Construction Projects
- Notice to Employees Working on Government Contracts (Service Contracts or Public Contracts)

New Minimum Wage Law

As of August 1, 2005, the State of Minnesota will have new minimum wage rates.

- The “small-employers” rate will be \$5.25 an hour.
- The “large-employers” rate will be \$6.15 an hour.
- The large employer definition will change to “any enterprise whose annual gross volume of sales made or business done is not less than \$625,000.”
- The “training-wage” rate will be \$4.90 an hour.
- Free minimum-wage posters will be available from the Minnesota Department of Labor & Industry website at <http://www.doli.state.mn.us/>.

Additional information regarding minimum wage can also be found on this website.

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