

# MINNESOTA FRUIT & VEGETABLE GROWERS

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**July 2002 Volume 16, No. 3**



## Berry Field Day

**Date: Thursday, July 25, 2002**

**Time: 1:00 – 3:00 p.m.**

**Place: University of Minnesota - West Central Research and Outreach Center (U of M – WCROC) in Morris, MN. The WCROC is located on State Hwy 329, 1 mile east of the U of M – Morris campus.**

The Field Day will begin at the U of M - WCROC at 1:00 p.m. with a discussion of the current wool mulch research being done at WCROC for weed control in establishing strawberries. Bob Padula, formerly of Chippewa County Extension, will also be at the field day to talk about commercial availability of the wool mulch.

Two other trials may be of interest to fruit and vegetable growers. A wool and plastic mulch trial is being done with tomatoes. Some of the strawberry variety trials are also done in Morris. Both will be discussed during the field day, time permitting.

The Field Day will continue with a tour of Steve's Strawberries hosted by Steve Poppe. Refreshments will be served following the tour.

You are also invited to stay for the WCROC Horticulture Night on Thursday evening, July 25th from 5:00 to 9:00 p.m. More information on the Horticulture Night activities can be found below.

There is no charge for the field day or the Horticulture Night events. An evening meal can be purchased in connection with the WCROC Horticulture Night for approximately \$5.00 per person.

### **Directions to WCROC from Minneapolis/St. Paul, MN:**

I-94 west to Sauk Center, Hwy 71 south to Hwy 28. Hwy 28 west to Glenwood and on to Morris. Before entering Morris, take Hwy 59 south (3/4 miles) to Hwy 329 east. The Administration Building is the 2nd approach on the left. The Gardens and Farm site are the 2nd approach on the right.

# Enjoy an Evening in the Garden!

## West Central Research and Outreach Center Horticulture Night

July 25, 2002

5:00 – 9:00 p.m.

Planned events include walking tours, demonstrations and much more!

Walking Tours of all the Gardens (including discussion):

Annual Flowers – Russel Emerson

Roses – Kathy Zuzek

Ornamental Grasses – Mary Meyer

Shrubs – Neal Holland

Daylilies – Nancy Snyder

Weed Control – Larry Zilliox

Wool Mulch – Emily Hoover

Lawn Care – Marilyn Mathias

Demonstrations:

Bird Garden – Al Glaeseman

Blueberries – Ron Branch

Propagate Woody Plants – Ron Wienhold

Water Garden in a Tub – Mary Kosak

Topiary – Randee Hokanson

### **Other activities and opportunities:**

Children's activities for the New U of M Children's Garden

Trade Show featuring area nurseries, businesses and CSAs

Food booth featuring a "Flower Pot Dinner"

Music featuring the Tri-State Band

Glacial Ridge Artists Program – Learn to Paint with the Artists

And much more!

There is no charge for attending the Horticulture Night, but donations are welcome. Reservations are not required.

For more information contact Jean or Theresa at 320-589-1711 or visit the West Central Research and Outreach Center website at <http://wcroc.coafes.umn.edu>

The West Central Research and Outreach Center is located on State Hwy 329, 1 mile east of the University of Minnesota – Morris campus. Look for signs along Hwy 59 directing you to the gardens.

### **Directions to WCROC from Minneapolis/St. Paul, MN:**

I-94 west to Sauk Center, Hwy 71 south to Hwy 28. Hwy 28 west to Glenwood and on to Morris. Before entering Morris, take Hwy 59 south (3/4 miles) to Hwy 329 east. The Administration Building is the 2nd approach on the left. The Gardens and Farm site are the 2nd approach on the right.

## **Note from the Board**

By Bill Jacobson  
Pine Tree Orchard, White Bear Lake, MN

Hello.

I am very happy to be back on the MFVGA Board of Directors. I served two terms back in the early 90's and had the privilege to serve as president for two of those years. I regard the MFVGA as one of my most valuable resources and rely on it often.

My family and I operate Pine Tree Apple Orchard in White Bear Lake, MN, about 20 miles north east of St. Paul. Our farm is truly a family affair. My mother and father plus six children (Barb, Mary, John, Bill, Nancy and Jeanne) all work full time on the farm throughout the year. Each person has their own area of responsibility and also knows that they may wear many different hats during the course of the year. Our parents, Art and Dickey, got their start in farming in 1950 when Art took a job as foreman at a small orchard where the owner was getting ready to retire. The orchard was 25 acres in size when my family took over in 1957. At this time, we have about 150 acres devoted to apple production in two Minnesota locations. Preston, MN is home to Pine Tree Orchard #2 where we have about half of our apple production. White Bear Lake is our home base and here we have about 75 acres of apples, 20 acres of strawberries and 12 acres of pumpkins. Nearly 100% of our crops are sold at our farm market.

We started pressing apple cider in the 60's and in 1977 the first apple pies came out of what is now our 3,000 square foot "from scratch" bakery. Processing and value-added products have been key in keeping our operation successful. Our market is open from Strawberry time through February.

Other key ingredients to our operation are our involvement with our community and our industry groups. Again, thank you for another term on your Board. I look forward to a great harvest for all and hope to see you at future MFVGA events.

## **President Bush Signs New Farm Bill**

President Bush signed the new Farm Bill into law on May 13, 2002. For complete information about the new Farm Bill visit the Minnesota Extension web site at <http://www.extension.umn.edu/farmbill/> or the USDA site at [www.usda.gov/farmbill](http://www.usda.gov/farmbill)

## **Specialty Crops Grant Update**

### **Research Update:**

By the time you read this, research projects for this growing season should be well under way (weather permitting). Research projects supported by the Specialty Crops Grant funding include high tunnel production, organic blueberry production, weed control in strawberries, strawberry bacterial angular leaf spot and blueberry pruning systems.

Specialty Crops funding continues work on the small fruit variety trials and aids in the evaluation of winter hardiness of apples in Zone 3.

Watch for updates on these projects in future issues of the MFVGA Newsletter. Research results will also be shared at the Upper Midwest Regional Fruit and Vegetable Growers Conference to be held at the St. Cloud Civic Center in St. Cloud, MN on February 6-8, 2003.

## Marketing Update:

Applications are starting to come in from Farmers' Markets for the cost-share advertising dollars. The cost-share dollars are limited and applications are considered on a first-come, first-serve basis. If you are a market manager and are considering sending in an application, we encourage you to send it in soon. If you are a market manager and did not receive an application for the cost-share program and would like one, please contact Marilyn Johnson at 763-434-0400.

We are in the process of developing a produce bag that will be made available to farmers' markets, individual vendors and direct marketers. The bag will be big enough to hold a dozen ears of corn and will carry the Minnesota Grown logo. We will keep you updated on our progress and the availability of the bag.

Other projects will involve partnering with the Midwest Food Alliance and the Minnesota Grown program to promote Minnesota fruits and vegetables. Don't forget the Minnesota Grown Passport Program. Encourage your customers to participate – they could win a family vacation for four to Sugar Lake Lodge! Details (including rules and eligibility) are include in the *2002 Minnesota Grown Directory*.

## Daily "ET" Available Over The Internet

Producers and crop consultants in Minnesota who need daily crop ET information for irrigation scheduling can access the internet to obtain daily ET potentials presented on color contoured statewide maps by linking to one of the following Web pages:

Minnesota & Wisconsin (reference ETs only):

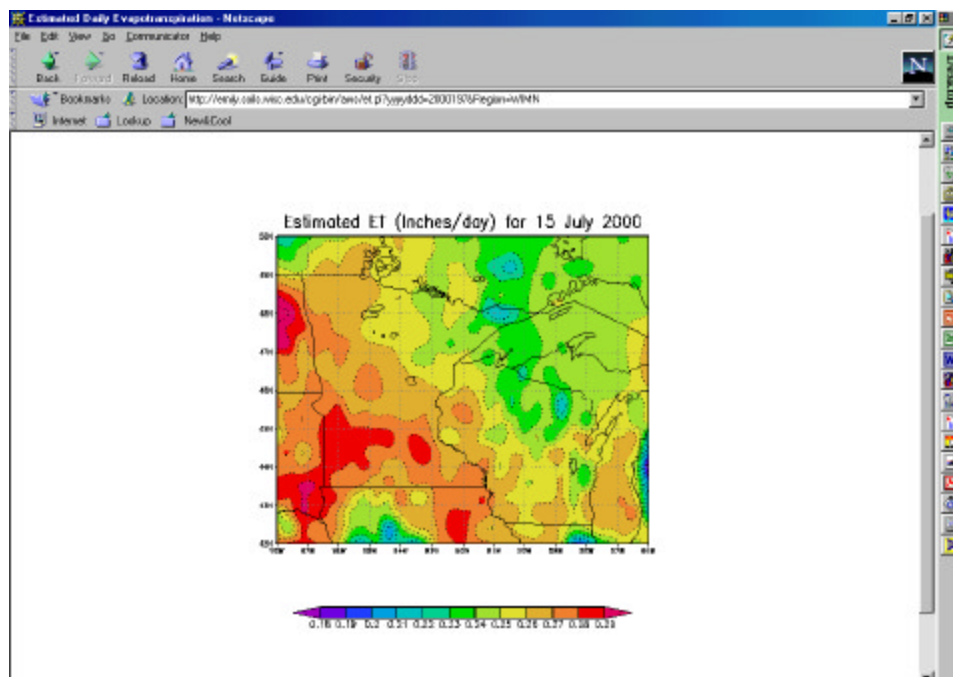
<http://www.soils.wisc.edu/wimnext/>

North Dakota & Red River Valley (ETs for several crops):

<http://www.ext.nodak.edu/weather/cropwater/>

The Minnesota and Wisconsin ET daily statewide maps are available between mid-April and the end of September. Each daily map gives a reasonable estimation of the potential (reference) ET value across the area based on the weather conditions of that day. Potential ET values are very similar to the daily crop ET from a full cover alfalfa crop at 10 inches in height.

6 to



**The daily values from the Wisconsin site can also be sent directly to a user by e-mail each day for a given field site within the map area if requested over the Web site.**

These reference ET daily contour maps are generated using data from local airport automatic temperature recording stations across the state and solar radiation estimations calculated from a GOES satellite that takes a picture about every 10 minutes to estimate the daily solar radiation for a given location. A comparison of the last two year's values with ET estimations from local weather stations at Staples and Morris has found them to be similar, but about 10 percent greater in value, than reported by local ET hotline services.

The daily WI-MN ET maps are created and managed by University of Wisconsin Extension Soils Scientist, Bill Bland. This daily ET value must be taken times a crop coefficient (Kco) constant that is dependent on the growth stage of the specific crop. Generally, once a plant's canopy has nearly closed the Kco is equal to one. For some crops, however, this Kco may become slightly larger to around 1.1 during a crops' critical growth, like with corn between late pollination and early dough stages.

Keeping track of the crop's daily ET use and regular in-field soil moisture checking can go a long way in helping an operator optimize the crop's growth while reducing the potential for leaching of some crop inputs, like nitrogen, into the groundwater.

These daily ET values best serve the user if recorded on a calendar log, like an irrigation checkbook worksheet or computer spreadsheet, for quick reference when making your irrigation decisions. **Consider assigning the updating task to one of the younger members of your family.**

For more information on how to use daily crop ET information contact Jerry Wright, Extension Engineer at the West Central Research and Outreach Center in Morris, MN, at 320-589-1711 or [jwright@umn.edu](mailto:jwright@umn.edu) or your local Extension or SWCD office.

## **Correction to Changes Announced by the National Agricultural Statistics Service (NASS)**

The April 2002 issue of the MFVGA Newsletter contained an article that outlined changes announced by the National Agricultural Statistics Service. The following is a correction to that article.

Production Statistics will be discontinued in Minnesota for the following commodities beginning in 2002: beets and fresh carrots.

Production Statistics in Minnesota will continue for onions (summer – storage), snap beans (processed), carrots (processed), sweet corn (processed) and green peas (processed).

Chemical use statistics will continue in Minnesota for green peas (processed) in 2002.

We apologize for any inconvenience or confusion.

## Farmers' Market Tidbits

Is summer here? It looks like it will be another challenging year for growers in various parts of the state. From the floods to the dry areas waiting for rain, it is a challenge to produce quality products for the farmers' markets.

This year, the Farmers' Market Nutrition Program (FMNP) funding level was unsure, until recently. We received \$464,000 for food compared to \$525,000 last year. Some areas were not funded this year; however, we did reauthorize all the farmers' markets to accept the FMNP checks in areas to ensure redemption throughout the state.

The Minnesota Farmers' Market Association (MFMA) successfully shepherded passage of a bill changing language for requirements to operate at farmers' markets. They are also looking into a new insurance program for farmers' markets. Please check the MFMA website ([www.mfma.org](http://www.mfma.org)) for updates. We have free recipe cards available that feature fresh produce available from farmers' markets. They need to be ordered soon, please let Ruth White ([ruth.white@state.mn.us](mailto:ruth.white@state.mn.us) or 651-297-5794) know by June 28th if you would like to receive free recipe cards.

What are you doing for National Farmers' Market week? (August 4-10). Need ideas? Contact Ruth ([ruth.white@state.mn.us](mailto:ruth.white@state.mn.us) or 651-297-5794) with events that you may be conducting. A joint news release announcing your event could be put together.

## State Fair Time Already

The growing season has gotten off to a late start in many parts of Minnesota and it's hard to believe that it's already time to think about the State Fair.

Help us showcase Minnesota Grown produce and products. Let's show the thousands of people who visit the Fairgrounds and stop by the booth the variety and the quality of produce that Minnesota growers have to offer. Donate some of your Minnesota Grown items for the display. Let's make this year's display the biggest and best ever! We are looking for as much variety as possible and we'll take the smallest pepper to the largest squash, pumpkin or watermelon. The more variety, the better. Value-added items are also welcome.

The refrigerated display case has allowed us to add some of the more perishable items that we haven't been able to include in the past. The display looked wonderful last year and, weather permitting, we hope to have a good variety of Minnesota Grown items available this year, too.

If you have produce or other items to donate, please call Marilyn at 763-434-0400 to make arrangements to get the items to the fairgrounds. This year's fair runs August 22nd through Labor Day.

We are also looking for volunteers to help man the booth. If you would like to volunteer for a four-hour shift (or two), please call Paul Hugunin at 651-297-5510.



## **State of the Berry Crops**

By Thaddeus McCamant, Specialty Crops Management Instructor  
Northland Community and Technical College

Our abnormally cool spring has slowed strawberry bloom and harvest throughout the state. As of June 12th, strawberry fields near the metropolitan area were finishing bloom, and growers were expecting to start picking around the 22nd. In central Minnesota, Glooscap and other midseason varieties were approaching full bloom, and most growers were expecting to open for U-pick customers between June 28th and July 3rd. In some parts of northern Minnesota, Glooscaps were just starting to bloom on June 13th, and northern growers may not open up for business until July 8th. Most people will start picking a week to ten days later than normal.

The cool weather has not slowed crop development in fields equally. Strawberry fields that were planted a year ago have bloomed up to a week earlier than neighboring fields that were planted two or three years ago. Fields with little straw are blooming a week earlier than fields with heavy straw.

A late crop does not mean a small crop. Few fields have been damaged by frost, and most strawberry growers will have an average yield. There is some winter injury in all parts of the state. The winter injury primarily occurred in sites where strong February winds blew straw off the plants. Winter injury will probably lower yields up to 20%, with many people harvesting a full crop.

Many growers are worried that a sudden hot spell at the end of June will make for a short season just like last year. My biggest concern is not the weather, but the customers. Several newspapers and television stations have already run stories about the start of the strawberry season, and thousands of potential customers have been disappointed. As you get closer to harvest, make sure you say in your advertisements and answering machines something like, "The strawberries are a little late this year, which means they have had more time to become the big, sweet berries you expect from us."

Raspberries and blueberries came through the winter in great shape. Most blueberries had a heavy bloom, and every blueberry field I visited was noisy with the sound of honeybees and bumblebees. The raspberries are starting to bloom now in southern and central Minnesota. Raspberries and blueberries will ripen during the middle of the strawberry harvest.

## **Exhibitors –**

It's not too early to send in your application for booth space at the 2003 Trade Show. The trade show will be held at the St. Cloud Civic Center in St. Cloud, MN on February 6 & 7, 2003. Plan now to attend. Growers will be looking for you. Sign up early to get your first choice in booth spaces.

## **Irrigation Scheduling "Software" Available**

A simple user-friendly spreadsheet-style software is now available to assist you in planning your next irrigation event and keeping a daily record of your precipitation and irrigation amounts along with a daily estimation daily soil water status throughout the growing season. The software can be used to monitor daily soil water status for alfalfa, corn, soybeans, potatoes, dry beans, wheat and sugar beets.



Attn: Jerry Wright, Extension Engineer  
PO Box 471  
Morris, MN 56267

For more information, contact Jerry Wright, Extension Engineer at the West Central Research and Outreach Center in Morris, MN, at 320-589-1711 or [jwright@umn.edu](mailto:jwright@umn.edu).

## **Risk Management “Toolbox” Available for Specialty Crop Growers**

A new pocket folder, with tab for easy filing, introduces specialty crop growers to an understanding of the USDA’s Noninsured Crop Disaster Program (NAP) as well as sound risk management principles. This folder includes fact sheets on how to keep reliable and verifiable records, understanding and determining Actual Production History (APH), how to file a notice of loss and more. Also included is the USDA’s 20-page Introduction to Risk Management and introduction to Risk Management Agency pilot programs. Real life examples make it easy to understand the concepts and processes.

This resource was written and developed by Rodney Elmstrand and Terry Nennich, Extension Educators with the University of Minnesota Extension Service; Glenn Schafer, program specialist with the Farm Service Agency and by Laurie Fredricks with the Risk Management Agency (RMA). An RMA grant has supported this cooperative effort.

The Risk Management Toolbox for Specialty Crop Growers pocket folder can be obtained through the University of Minnesota Extension Offices or by calling 1-800-876-8636 and ask for item #MI-07721. The cost is \$4 each.

## U of M Gleanings

By Cindy Tong, Dept. of Horticultural Science  
University of Minnesota

How does that Robert Burns poem go? – *"The best laid schemes o' mice an' men/ Gang aft agley/ An' lea'e us nought but grief an' pain/ For promis'd joy!"* We were planning to do experiments to look at how thinning affects soft scald in 'Honeycrisp' apples, but one of the orchards we were going to use suffered a major hailstorm, so there won't be any fruit there for us to examine. We'll probably still have other orchards we can use, and storms don't hurt researchers as much as they hurts growers, but if we have problems at the other orchards, we'll have to wait another year to do this experiment. Good thing it's not a graduate student's project.

If there's any compensation to the weather we've been having, it's that the National Oceanic and Atmospheric Administration is predicting that there's an equal chance that temperatures and precipitation will be above average or below average in Minnesota this summer. In other words, it should be an average summer for precipitation and temperature. I thought that effects from El Niño might show up, but this doesn't seem to be the case yet. You can visit the Web site at <http://www.pmel.noaa.gov/tao/elnino/forecasts.html#climate> and see for yourself, but it looks like El Niño won't affect us until this fall and winter, when we should get warmer than normal temperatures.

El Niño is a disruption of the ocean-atmosphere system in the tropical Pacific. Normally, in non-El Niño years, trade winds blow toward the west across the tropical Pacific, towards Indonesia. These winds cause warm water to pile up in the western Pacific. Because of this and because cold water rises from the deep parts of the Pacific Ocean near South America, the water surface is warmer in the western Pacific than in the eastern Pacific. Because rain falls where there is rising warm air; it'll rain more over Indonesia than over Ecuador.

During an El Niño year, the trade winds stop blowing, so warm water spreads from the western Pacific to the eastern Pacific. This puts a damper on the rise of cold water from the deep parts of the Pacific Ocean near South America. Overall, surface temperature of the Pacific Ocean will increase. Because rain falls over rising warm air, it'll rain more over Ecuador in an El Niño year than over Indonesia. In fact, Indonesia could suffer a drought. The change to warmest water in the eastern Pacific causes changes in the global atmospheric circulation (the redistribution of heat and water vapor from the equator towards the poles). This will cause changes in weather in regions far removed from the tropical Pacific, like Minnesota. The change in global atmospheric circulation is strongest in the winter months, which is why its effect on Minnesota weather will occur in the fall and winter. So, we might get a longer growing season this year. After the cold, wet spring we had, we might need it.

## **Thanks to MFVGA for Research Funds! Wool Mulch Work Continues**

Emily Hoover, Steve Poppe, and I are grateful to MFVGA for funding a continuation of our strawberry weed control work. With the grant we received from the association, we're going to do another small-scale experiment using wool mulch as a weed barrier in establishing strawberries.

The earlier wool mulch trials were very promising: the mulch made for healthy, vigorous plants, lots of daughters, increased yields, and very little weed competition. But the up-front cost of the mulch is something like \$1,000- \$2,000 per acre. It seemed to us that the increase in yield could still make the wool a profitable option, and we were hopeful that the price of the wool might come down. We thought of doing a larger-scale trial, but growers told me the cost of the mulch was simply too high.

This time around, we're going to track the time spent hand weeding in the wool mulched plots, and the plots treated with standard herbicide. I am quite confident that the wool mulch will "pay for itself" just in labor savings, and that the increased yields will be an additional bonus. We're lucky to have a corps of very good undergrad student workers at Morris to do the weeding and keep track of the minutes they spend on each plot.

### **Canola**

What about our research into using canola as a weed inhibiting cover crop? Well, we found that canola worked as well as Dacthal to keep germinating weed seeds from establishing themselves, but there are problems with using this cover crop. Planting date, soil fertility, and seeding rate can drastically affect the usefulness of this strategy. Our large-scale canola trials planted in the fall of 2000 died off because they were planted too late. Planting canola in the spring can mean delaying planting the strawberries for too long.

A small-scale trial of seven different dates for late-summer/fall planting demonstrated that seeding rate is as important as seeding date in establishing enough canola to inhibit weeds. Seeded too thickly, the canola plants competed with each other and none were big and strong enough to make it through the winter. Only the plants at the edges of the plots came through the winter.

This August, we're going to run that timing trial again, reducing the amount of seed. We're also going to use canola as a between-row cover crop in newly planted strawberries as one of the treatments in the wool mulch study.

### **Field Day**

As before, the wool mulch trial has been planted in our research plot at the West Central Research and Outreach Center in Morris. The MFVGA summer field day will be in Morris this year, in conjunction with the WCROC "Hort Night" open house event. We'll also tour Steve Poppe's strawberry farm. I hope you will all be able to come out to Morris and check out the experiment, as well as similar wool mulch work in tomatoes and herbs. If you have an interest in ornamental plants, you'll also enjoy seeing the excellent annual and perennial gardens at the Center.

Bob Padula, formerly of Chippewa County Extension, will be on hand at the field day to talk about commercial availability of the wool mulch. Bob worked with sheep ranchers to get the product developed. Now he's looking into getting it into the hands of growers. So for all of you who have come to me, Emily, and Steve with suggestions for how the wool could be produced and marketed, there will be someone qualified to talk with you about these topics.

I hope to see you all in Morris!

Jill MacKenzie

Assistant Extension Horticulturist—Fruit  
612-624-3478 : : macke020@umn.edu

## **Minnesota Grown Notes**

(Minnesota Grown information is supplied to MFVGA by Paul Hugunin (651-297-5510) from the Minnesota Department of Agriculture, Ag Marketing Services Division.)

### ***New Minnesota Grown Directory Available***

As this article was put together, over 125,000 copies of the 2002 *Minnesota Grown Directory* have already been distributed around the state. If you would like free *Minnesota Grown Directories* to distribute, please e-mail your mailing address and number requested to: [brian.j.erickson@state.mn.us](mailto:brian.j.erickson@state.mn.us), or call Brian at 651-296-4939. We appreciate requests that are in multiples of 50 or 200 (that's how they're boxed).

### ***Story Suggestions Invited***

If you've got news about your farm we'd love to help spread the word. News could be weather related (temperatures are causing a certain product to be earlier or later than usual), product related (you are growing a new variety of something), farm related (your farm has been in the apple business for 75 years), or event driven (you are part of a group of growers hosting a weekend raspberry festival in the county). Contact Brian Erickson with your press release suggestions at [brian.j.erickson@state.mn.us](mailto:brian.j.erickson@state.mn.us), or call Brian at 651-296-4939.

### ***Berry Cost-share Program Filled***

Over 20 berry growers that belong to the MFVGA and the Minnesota Grown Program have already signed up for the cost-share program at the time this article was written. The Minnesota Grown Program is paying half the cost of advertising up to \$275 of matching funds per grower. All ads include the Minnesota Grown logo and web site.

### ***Free Stickers, Posters and Price Cards Available***

Be sure to take advantage of the Minnesota Grown logo in your displays and advertising this season. The logo provides your customers with the assurance that they are buying a product that was grown on a farm right here in Minnesota. A myriad of stickers, posters, price cards, buttons and other items are available FREE to licensed marketers. The cost of the license is just \$5 per year. Over 675 marketers are already licensed to use the logo – more than ever before!

Plus, if a new or improved label, bag or box is in your future, don't forget to add the Minnesota Grown logo. The Minnesota Grown Promotion Group will reimburse you for up to \$100 of your design charges. Contact Paul Hugunin at 651-297-5510 to register.

### ***Minnesota Grown Promotion Group Board Has Vacancy***

The Minnesota Grown Promotion Group (MGPG) has an opening for an at-large member. The MGPG meets four times per year in St. Paul and members also serve on the MDA's Minnesota Grown Advisory Committee. The committee provides guidance and feedback for the MDA's Minnesota Grown Program. Interested persons should contact Paul Hugunin at 651-297-5510 by July 10.

### ***Download the Logo and Order Form off the Web***

The quickest way to get the point-of-sale material order form or the Minnesota Grown logo is to download from the 'licensed producer only' web page. This page is just for marketers that are licensed to use the Minnesota Grown logo and is not linked to the rest of the Minnesota Grown web pages. If you are licensed to use the logo and have misplaced the web address, just send an e-mail to Brian or Paul and we'll send the link to you. Along with the point-of-sale material order form you'll have access to the Minnesota Grown logo in several different formats.

### ***Summer Television Ads set for July and August***

The Minnesota Grown television ads will be running from July 16th through August 12th this summer. The schedule includes three weeks of farmers' market ads and two weeks of grocery store produce ads. Channel 5 has the biggest share of the ad campaign but ads will also appear on Channel 4 and Channel 11. As in the past, three separate tags will rotate through the farmers' market ad schedule: one for the Minneapolis market, one for St. Paul, and a third promoting the new *Minnesota Grown Directory*.

### ***State Fair Volunteers Needed***

Plans are underway for the Minnesota Grown booth at the Minnesota State Fair. We will be using the refrigerated display case that debuted last year. The case did a nice job of keeping the produce and other refrigerated items looking fresh. We look forward to another good year. It's never too early to sign up for a four-hour shift (or two) at the Minnesota Grown booth at the Fair. Call Paul Hugunin at 651-297-5510 to reserve your spot!

## **University of Minnesota Extension Service News:**

By Jerry Wright, University of Minnesota

### **Comprehensive Guide to "Sprinkler Irrigation Systems" Now Available**

Agricultural producers and consultants, engineers, equipment dealers, government agency employees, educators, students, and others interested in the technology of irrigation have a newly published resource to help them better understand all aspects of sprinkler irrigation systems. The book *Sprinkler Irrigation Systems*, MWPS-30 from MidWest Plan Service (MWPS) provides a systematic approach to the whys and hows of developing sprinkler irrigation systems.

Jerry Wright, Associate Professor and Extension Engineer with the University of Minnesota, says *Sprinkler Irrigation Systems* was developed to provide a planning tool, reference guide, and design manual for a broad audience. According to Jerry Wright, the authors wanted MWPS-30 to be a repository of the technical knowledge necessary to design and develop sprinkler irrigation systems. Another goal was to further an understanding of the methods used to manage irrigation systems efficiently.

In line with those aims, the book provides information that helps to determine water needs and to establish a minimum recommended system capacity. The publication also includes a discussion of the methods used to evaluate a water supply and to determine the type of sprinkler system that best fits a specific need.

One chapter is devoted to understanding and using water sources properly. This chapter includes sections on planning, drilling, developing, pumping, and maintaining irrigation wells. Separate chapters discuss sprinkler performance characteristics and sprinkler selection and frost control. Another chapter explains how to select pumps, piping, and power units.

The book does not neglect special uses for irrigation systems. One chapter discusses chemigation, which is the application of fertilizers and pesticides through irrigation systems.

The final chapter in the book contains examples covering the step-by-step planning and design process for different sprinkler irrigation systems. Included in the examples are designs for a center-pivot system with a well, a traveler irrigation system for irrigated pasture, and an irrigation system for a small acreage that is producing horticultural crops.

Extension Engineer, Jerry Wright, says the *Sprinkler Irrigation Systems* book contains more than 110 photographs and illustrations. Included in the illustrations are example layouts of irrigation systems and diagrams of pumping and piping systems. The book also has approximately 70 tables. Professor Wright says

the tables help to organize technical data, including estimated pressure losses for hard and soft hoses, peak application rates for various systems, maximum flow rates, friction losses, and efficiencies of typical drive units.

MWPS is a cooperative regional research and extension organization headquartered at Iowa State University and representing the 12 land-grant universities of the North Central Region of the United States and the USDA.

Authors of the publication are Thomas Scherer, Extension Engineer, North Dakota State University; William Kranz, and C. Dean Yonts, Irrigation Specialists, University of Nebraska; Donald Pfof, Extension Engineer, University of Missouri; Hal Werner, Extension Agricultural Engineer, South Dakota State University; and Jerry Wright, Associate Professor of Biosystems and Agricultural Engineering and Extension Engineer, University of Minnesota.

MWPS-30, *Sprinkler Irrigation Systems*, costs \$20.00 per single copy plus tax and shipping charges. To order a copy, contact the Biosystems and Agricultural Engineering Department in St. Paul at 612- 625-9733 or e-mail: [mwps@gaia.bae.umn.edu](mailto:mwps@gaia.bae.umn.edu)

For more information on the content of the handbook, visit website <http://www.bae.umn.edu/extens/mwps/swa.html> or contact Jerry Wright, Extension Engineer, at the West Central Research and Outreach Center in Morris, MN at [jwright@umn.edu](mailto:jwright@umn.edu) or 320-589-1711.

## **LSP to Celebrate 20 Years of ‘Keeping the Land & People Together’**

The Land Stewardship Project will observe 20 years of working to promote family-farmer based sustainable agriculture during a special celebration, Saturday, August 24th, between 3:00 and 9:00 p.m. at Good Counsel Hill in Mankato, Minnesota.

This celebration will feature sumptuous local foods produced by Midwest Food Alliance-approved farmers and catered by St. Peter Food Co-op. It will also feature storytelling, family-friendly activities, dance music by Pig’s Eye Landing, a recognition ceremony, a Stewardship Shop, and microbrewery beer samples from Summit Brewery and Schell’s Brewery. There will also be a drawing for a Mississippi River houseboat excursion that includes a gourmet dinner of locally grown food prepared by the Blue Heron Café.

Only 300 tickets will be sold for this event. Prices are \$25 for adults and \$10 for children ages 13-17 (12 and under are free). To purchase tickets, call 651-653-0618.

The Land Stewardship Project (LSP) was founded in 1982 by Ron Kroese and Victor Ray. They launched the organization to address significant land stewardship problems plaguing farm country throughout the Midwest. During the past two decades, this membership-based grassroots organization has used activism, education, on-farm research, journalism and policy development to promote a food and farm system that is economically, environmentally and socially sustainable. LSP has always relied on its unique membership base of farmers and non-farmers, and an “education to action” philosophy of community organizing.

For more information on LSP, call 651-653-0618 or e-mail [lspwbl@landstewardshipproject.org](mailto:lspwbl@landstewardshipproject.org).

## **2003 Conference**

Plans are well underway for the 2003 Upper Midwest Regional Fruit and Vegetable Growers Conference and Trade Show. The Conference will be held at the St. Cloud Civic Center in St. Cloud, MN on February 6 – 8,

2003. The Trade Show will be held on Thursday and Friday, February 6 & 7. Make a note and plan now to attend.

## **Funding Continues for MN Vegetable IPM Newsletter**

By Bill Hutchison, Dept. of Entomology, Univ. of Minnesota

Thanks to recent USDA funding for “Specialty Crops,” administered by the Minnesota Department of Agriculture, Marketing Group, and sponsored by the Minnesota Fruit and Vegetable Growers Association (MFVGA), funding is now available to continue production, printing and mailing of the MN Vegetable IPM Newsletter. Funding will continue to cover costs through the 2003 growing season. Although most readers access the newsletter via the web site, many also prefer to receive the hard copy via postal mail. We have scheduled about 8-9 issues/year to be sent via postal mail. Additional issues may be published on the web site, as needed, in response to new pest, pesticide or industry issues. The MDA IPM Program will continue to print and mail the hard copy version. We thank all who have supported continued publication of the newsletter!

The MN Vegetable IPM Newsletter is available at the VegEdge site, at: <http://www.vegedge.umn.edu/mnvegnew>

All previous issues of the Newsletter, and a searchable database of articles, are available at: <http://www.vegedge.umn.edu/mnvegnew/mnindex.htm>

## **Revised Vegetable Pesticide “Plant-back” Updates for 2002**

Provided by Wayne Wells, Chiquita Processed Foods, LLC, River Falls, Wisconsin  
(Reprinted from the *MN Vegetable IPM Newsletter*, Vol. 4, No. 2)

Pesticide “plant-back” restrictions for the major processing vegetable crops in the Upper Midwest, USA, are now available on the VegEdge Web Site. Information for each crop can be downloaded as WORD or PDF file formats.

VegEdge Editor’s Note: As in previous years, Wayne Wells has updated an exhaustive list of pesticide “plant-back” restrictions for the major processing vegetable crops in the Upper Midwest. Beginning this year, this information is available on the VegEdge site. If and when label changes are made during the growing season these can be updated. In addition, all restrictions will be critically reviewed over the winter months.

Disclaimer: Please note, ALL INFORMATION PROVIDED SHOULD BE VIEWED AS A GUIDE IN SELECTING THE APPROPRIATE PESTICIDE. BEFORE USING A GIVEN PESTICIDE, ALWAYS REFER TO THE LABEL. The including of specific pesticides does not imply endorsement or non-endorsement by either Chiquita Processing Foods, or the University of Minnesota. This information is provided for educational purposes.

To access data for each crop, go to: <http://www.vegedge.umn.edu/intro/PIBack/PIback.htm>

## **Tour Opportunities:**

## **Research and Demonstration Garden for New Immigrant Farmers at UMore Park**

Includes 1) Evaluation of compost rates on tomato yield and shelf life; 2) The effect of straw, woodchips, plastic mulch, and corn gluten for weed control; 3) Demonstration of diverse crops (vegetables, herbs, flowers) by new immigrant farmers; and 4) Discussion of marketing fresh produce and land-based issues on the urban fringe.

**Monday, July 29, 2002**

**6:00 – 8:00 p.m.**

**UMore Park, 1605 – 160th Street West, Rosemount, MN**

Directions: From St. Paul, go south on US Highway 52 for 15 miles. Exit on Dakota County Highway 42. Go two miles west and turn left on Akron (just beyond Dakota County Technical College.) Follow field day signs to the site.

Additional information: Light food and refreshments will be served. Dr. Thomas Halbach, Department of Soil, Water & Climate, University of Minnesota, will speak on the value of compost as a soil amendment and actively working compost will be demonstrated.

For more information, contact Nigatu Tadesse at 651-423-2413.

## **Blueberry & Tomato Field Night at Staples Central Lakes Ag Center – July 18th**

University of Minnesota horticulture specialists will lead discussions on tomato mulching, organic practices, blueberry startup and maintenance practices, and small scale marketing tips on Thursday evening, July 18th at the Central Lakes College – Ag Center in Staples. Discussion will be tailored around the interests of potential and existing commercial growers and Master Gardeners. Production practices included in the discussion will be soil pH, fertility, weed control, plastic mulching, trickle irrigation and grower experiences.

Registration is free and opens at 5:30 p.m. The field night will run from 6:00 p.m. to dusk and take place in the tomato and blueberry planting south of the bus garage. If raining, the hort meeting will be held indoors at the Ag Center.

The Field Night is co-sponsored by the University of Minnesota Extension Service, UM-Central Region Partnership, UM-College of Agricultural, Food and Environmental Sciences and the Central Lakes College – Ag Center.

For more information, contact the UM – Central Region Partnership at 1-877-977-7778 or Jerry Wright, Extension Engineer, at [jwright@umn.edu](mailto:jwright@umn.edu) or 320-589-1711 (UM-WCROC at Morris).

