

# VEGETABLE CROPS HOTLINE

A newsletter for commercial vegetable growers prepared by the Purdue University Cooperative Extension Service

Liz Maynard, Editor  
600 Vale Park Road  
Valparaiso, IN 46383  
(219) 548-3674  
emaynard@purdue.edu



[vegcropshotline.org](http://vegcropshotline.org)

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**END OF THE SEASON, TIME TO RENEW** - (Liz Maynard, [emaynard@purdue.edu](mailto:emaynard@purdue.edu), 219-548-3674) - This is the final issue of the Vegetable Crops Hotline for 2015. Now is the time for subscribers who receive a paper copy in the mail to renew. A renewal form is included with this issue. Email subscribers will remain on the subscription list as long as the email address works.

Your feedback about the newsletter: what was useful, what wasn't, whether the online version was easy to use, etc., is helpful to us. Don't hesitate to send me a note ([emaynard@purdue.edu](mailto:emaynard@purdue.edu) or 600 Vale Park Rd. Valparaiso, IN 46383), or visit <http://tinyurl.com/vch-feedback> to submit comments online. Thank you!



**ARE YOU INTERESTED IN TOMATO GRAFTING?** - (Wenjing Guan, [guan40@purdue.edu](mailto:guan40@purdue.edu), 812-886-0198) - You might have heard about tomato grafting, or you might even already have tried the new technique. Yes, it has multiple benefits: control of soilborne diseases, enhanced tolerance to abiotic stresses, and increased productivity. It works for some growers, but not all. Why? There are several reasons.

First, effects of grafting on controlling soilborne diseases depend on the presence of the disease that the rootstock is designed to control. For example, grafting might not be very helpful for white mold, because current commercial rootstocks do not have resistance to white mold. However, grafting might work if the primary problem is *Fusarium* crown and root rot, as

most commercial tomato rootstocks have resistance to this disease. With that said, it is very important to look at the disease resistance profile before deciding on the rootstocks.

Second, grafting effects on improving yield depend on factors such as scion and rootstock cultivars, cultural practices, and planting densities. Most growers use a very vigorous tomato rootstock such as 'Maxifort'. Most tomato varieties grafted onto 'Maxifort' have more leaves and stems: plants grow bigger. In this scenario, if we have a good pruning and trellising system (in case this is an indeterminate tomato cultivar), control foliar diseases well, and place plants wide enough for the extra growth, it is very likely that grafted tomato plants will have higher yield and a longer harvest period compared with non-grafted plants.

After growing tomatoes for many years, I am sure most of you have established a tomato production system that works best for your own farm. However, this system (pruning, trellising, densities, fertilizer and water, etc.) might need to be adjusted with the use of grafted plants. We do not have all the recommendations regarding the best cultural practices for growing grafted plants yet. Research projects are underway. We would like to also encourage you to do an experiment to find out whether grafted tomatoes work for your system.

In conclusion, I would like to announce that we are going to have a vegetable grafting workshop at the Indiana Horticultural Congress in January. If you are interested in tomato grafting, please come to our workshop, where you will learn everything about tomato grafting, and have the opportunity to graft tomatoes by yourselves. We are looking forward to seeing you at the conference.



Figure 1. A grafted tomato plant growing in a high tunnel. (Photo by Wenjing Guan)



**CERCOSPORA LEAF MOLD OF TOMATO** - (Dan Egel, [egel@purdue.edu](mailto:egel@purdue.edu), 812-886-0198) - This disease does not typically affect Indiana tomatoes, instead preferring tomatoes grown in tropical and sub-tropical areas. Since *Cercospora* leaf mold was observed in two different areas of Indiana in the 2015 season, it makes sense for growers to become aware of this disease in case it returns to Indiana in 2016.

The two locations where *Cercospora* leaf mold was observed in Indiana in 2015 were 1) a homeowner garden in southern Indiana and 2) a high tunnel in central Indiana. The fungus that causes *Cercospora* leaf mold, *Pseudocercospora fuligena*, normally does not overwinter outside of tropical and subtropical areas. It may be that a wind blew the fungus in from the south in 2015.

Symptoms of *Cercospora* leaf mold are similar to leaf mold caused by *Passalora fulva*. Both diseases cause chlorotic (yellow) lesions which are visible on the upper side of the leaf. The chlorotic area caused by *Cercospora* leaf mold is more of a mustard yellow than that caused by *P. fulva* leaf mold in which the lesions are more diffuse and a brighter yellow (see Figures 2 and 4). On the underside of the leaf, *P. fulva* leaf mold causes an olive-green fuzz that is from the causal fungus growing on the leaf. *Cercospora* leaf mold can be differentiated from *P. fulva* leaf mold because the former is caused by a black fungus that grows primarily on the underside of the leaf (see Figures 3 and 5). Neither disease causes lesions on stems or fruit.

The causal pathogen of leaf mold, *P. fulva*, will overwinter as crop debris in the soil. This disease is often observed in high tunnels where high humidity and crops of tomato after tomato favors the disease. *Cercospora* leaf mold will hopefully die out this winter in our cold climate. Both diseases may be managed by sanitation. Clean out high tunnel tomatoes between crops. A floor covering that prevents infected leaves from entering the soil will help lessen disease severity. In the field, practice crop rotation and till under the crop as soon as the last fruit is picked.

Fungicides which control *P. fulva* leaf mold should help to lessen disease severity in *Cercospora* leaf mold. *The Midwest Vegetable Production Guide for Commercial Growers 2016* (coming January 2016) will help growers to choose a fungicide for *P. fulva* leaf mold. Always be sure to choose a fungicide labeled for greenhouse use if necessary. And always read the label.



Figure 2. *Cercospora* leaf mold symptoms on the upper leaf surface. Note distinct chlorotic lesions. (Photo by Dan Egel)



Figure 3. Underside of tomato leaf with *Cercospora* leaf mold. Note dark fungal growth. (Photo by Dan Egel)



Figure 4. Lesions of leaf mold caused by *P. fulva* on tomato. Note indistinct chlorosis. (Photo by Dan Egel)



Figure 5. Underside of leaf with symptoms of leaf mold caused by *P. fulva*. Note olive-green fuzz of fungal growth. (Photo by Dan Egel)





**SYMPTOMS OF ANTHRACNOSE OF WATERMELON ON FRUIT** - (Dan Egel, [egel@purdue.edu](mailto:egel@purdue.edu), 812-886-0198) - Late in the 2015 season, I observed some unusual symptoms of anthracnose on watermelon fruit. I wanted to discuss these symptoms, but first a little background of cucurbits. An extension bulletin on this subject may be found at <https://www.extension.purdue.edu/extmedia/bp/bp-180-w.pdf>.

Anthrachnose of cucurbits, caused by *Colletotrichum orbiculare*, is responsible for lesions on leaves, stems and fruit. Crops affected include cucumbers and cantaloupe, however, watermelon is the host most often affected in Indiana. Although lesions on leaves and stems can cause significant loss, it is the lesions on fruit that cause direct yield losses.

Lesions on watermelon fruit tend to be close to the ground where the fruit tends to stay wet. These lesions are typically round, sunken and orange to salmon colored (see Figure 6).

However, the lesions I observed toward the end of the 2015 season differed from the typical. Instead of regular round lesions, the symptoms I observed on the bottom of affected watermelon were cracked areas that at first glance appeared to be a wounds (see Figure 7). Closer inspection, however, revealed the fungus *C. orbiculare* and lab isolations yielded the same fungus. In addition, I was able to find foliar symptoms of anthracnose when I went to the affected field. While it is possible that secondary fungi infected and enlarged the anthracnose lesions, *C. orbiculare* caused the original infections.

Inspect fruit for lesions and, if necessary, have the lesions officially diagnosed. Only when the cause of the symptoms are understood will it be possible to manage the problem properly.



Figure 6. Anthracnose on watermelon fruit, caused by *Colletotrichum orbiculare*, is typically round and sunken. (Photo by Dan Egel)



Figure 7. The long, cracked lesions on the watermelon shown above are anthracnose, although they are atypical of this disease. (Photo by Dan Egel)



### **MANAGING MANURE – HOW LONG IS LONG**

**ENOUGH?** - (Scott Monroe, [jmonroe@purdue.edu](mailto:jmonroe@purdue.edu), 812-886-0198) - There are certain questions within our culture for which there are simply no good answers. For example, how many times have we heard the classic question, “If a tree falls in a woods and there’s no one to hear it, does it still make a sound?” One question I’ve been asked recently, for which the answer is equally elusive, is “How long must I wait to grow vegetables after applying manure to the field?” With the 2015 season quickly winding down, it will soon be time to start making plans for next year’s crops. Part of those plans will undoubtedly include the question of manure use.

While manure is a good source of plant nutrients and organic matter, it may also contain human pathogens that can be transferred onto fresh fruits and vegetables. After manure is applied to a field, the bacterial community in the manure changes as it adapts to conditions in the soil. Given all the variables involved, exactly what happens to the bacteria is anyone’s guess. Soil type, manure type, soil moisture levels, and temperature all play a role in how quickly manure degrades and the bacterial community changes. While research is starting to shed some light on the issue, the fate of human pathogens in manure applied to the soil is still poorly understood. This was noted by FDA in their latest draft of the Proposed Rule for Produce Safety. Publications supplemental to the proposed rule stated that:

“The agency is deferring its decision on an appropriate time interval [between manure application and crop harvest] until it pursues certain actions. These include conducting a risk assessment and extensive research to strengthen scientific support for any future proposal, working with the U.S. Department of Agricul-

ture and other stakeholders.” (FSMA Proposed Rule for Produce Safety: <http://www.fda.gov/Food/Guidance-Regulation/FSMA/ucm334114.htm>)

The National Organic Program specifies an interval of 120 days between the application of raw manure and harvest for crops that come in contact with the soil and an interval of 90 days for crops that do not come in contact with the soil. These serve as good general guidelines, but the intervals were not developed to assure food safety.

Remember, in addition to any general guidelines, always follow the guidance given by your particular audit protocol or food safety plan.

Those using properly composted manure may apply it at any time, taking care to avoid application to the edible parts of the plants. Those producing crops with edible parts underground may also want to avoid applying composted manure while crops are in the field. Proper composting in this context involves a high-temperature process that kills most human pathogens. The high temperatures must be documented, along with other details of the composting process. A summary of what is involved in producing compost may be found at: <http://content.ces.ncsu.edu/compost-production-and-use-in-sustainable-farming-systems.pdf>.

Unless you have documentation that manure was composted properly, it should be treated as nothing more than aged raw manure, and there should be an interval of several months between application and harvest of a fruit or vegetable crop.

In addition to composting, other heat and chemical treatments can reduce pathogens in manure. Often manure treated with these methods is sold commercially as a bagged or bulk product. Growers using such products should get information about the manure treatment from the supplier, and ask specifically whether the treatment is documented to kill human pathogens.

One of the best ways to utilize manure is to apply it in the fall. A fall application, followed by incorporation and a cover crop, is a good way to insure a lengthy application-to-harvest window. One additional advantage is that fall-applying manure cuts one more job from what is, for most people, an increasingly hectic spring season. For those wishing to use a fall manure application, Purdue’s Midwest Cover Crops Field Guide (ID-433, [https://mdc.itap.purdue.edu/item.asp?Item\\_Number=ID-433#.VjDE202FO70](https://mdc.itap.purdue.edu/item.asp?Item_Number=ID-433#.VjDE202FO70)) can provide valuable cover crop information. Purdue’s Manure Management Planner, although designed for field crops, can help with estimating nutrient content from various manures (<http://www.purdue.edu/agsoftware/mmp/>).

An additional option may be to simply use manure only on agronomic crops. As a whole, the Midwest is a very strong agronomic region. Corn and soybeans are still the main crops. Where possible, growers can use this to their advantage by applying manure to agronomic crops in the year before fields are rotated into vegetables. This gives an interval of a year or more and

growers can still reap some benefits (increased organic matter, plant nutrients, etc.) from the manure application, with reduced risk to their vegetable crops.

If you must apply manure in the spring, avoid planting short-season crops in fields that have received an application. Long season vegetables, such as staked tomatoes, whose edible parts do not contact the ground, carry the least risk of being contaminated with a food-borne pathogen. Other options would be to grow late-season crops that normally are not consumed, such as pumpkins or gourds. Yet another option would be crops that are cooked prior to eating, such as sweet corn.

Across the state, growers have worked hard to incorporate food safety into the culture of their farms. Paying attention to how and when manure is applied is a good way to reduce the risk of a future outbreak.



**USDA ANNOUNCES THE ADDITION OF “GROUP-GAP” TO ITS AUDIT SERVICES** - (Scott Monroe, [jmonroe@purdue.edu](mailto:jmonroe@purdue.edu), 812-886-0198) - Recently the USDA announced the addition of a new third-party auditing service that will be available through the Ag Marketing Service (AMS). The service, called “GroupGAP”, will be available in the spring of 2016. The expansion of the service follows multi-year piloting and testing of the program.

Under the GroupGAP program, independent farms may organize under a central entity, such as a food hub or grower cooperative, to create a food safety system. Participating farms are responsible for collectively developing food safety practices and collecting required documentation. Entities will also be responsible for providing their own internal auditing services. They will also participate in an external audit by USDA-AMS Specialty Crops Inspection Service.

Growers marketing through food hubs, cooperatives, produce auctions, or other collective entities may benefit from this program. The full press release and details from USDA may be found at <http://blogs.usda.gov/2015/10/22/groupgap-program-brings-new-market-opportunities-for-farmers/>.



**FOODLINK - A NEW TOOL TO INCREASE FARM SALES AND IMPROVE SHOPPER KNOWLEDGE ABOUT SPECIALTY CROPS** - (Roy Ballard, [rballard@purdue.edu](mailto:rballard@purdue.edu), 317-462-1113 X225) - Consumers have many choices in today’s marketplace.

Whether they are shopping in the your farm market, roadside stand, community farmers’ market or the local grocery store it makes no difference...busy shoppers can choose to buy fresh fruits and vegetables or any number of frozen or otherwise preprocessed (value added) foods.

FoodLink, a **FREE** tool developed by a team within



Purdue Extension with funding from a USDA Specialty Crop Block Grant, will provide today's shopper with immediate and free access to unbiased information that may influence the food choices they are making while still at the point of purchase. Our goal is to help them choose **YOUR** high quality fresh Indiana products over lesser choices that take their dollars away from the farm and perhaps out of state and may have less nutritional quality than your fresh farm products.

FoodLink provides vendors access to sales materials that include Quick Response (QR) codes that are unique to each of over 40 Indiana specialty crops from Asparagus to Zucchini.

Depending on which crops you are marketing at any given time one simply makes the appropriate QR code available to the shopper to scan from their smart phone and allow them to use the information then at their fingertips to make the decision that is right for them and their families.

Statistically 87% of women shoppers have a smart phone and they use them to access information that impacts their purchasing!

This code driven tool will provide immediate access to the user about proper food selection, use, preparation, pairings, storage and a variety of other quickly accessed information including quick and easy recipes that will encourage the incorporation of fresh fruits and vegetables into the diets of Hoosier families. The tool will address the needs of not only home shoppers but also those of institutional buyers with recipes suitable for not only a family of four but groups of 400.

Codes can be reproduced and placed on signage—large or small, physically on larger produce (melons and pumpkins, etc.), on clothing (aprons, shirts, hats, etc.), on boxes used for wholesale shipments and many creative ways that we have yet to identify.

For more information about how to access and use FoodLink resources in your farm marketing activities, please contact Roy Ballard, Purdue Extension educator, ANR, Hancock county by calling 317-462-1113 or by e-mail at [rballard@purdue.edu](mailto:rballard@purdue.edu).

We hope to see you at the 2016 Indiana Horticulture Congress in Indianapolis during the new preconference Marketing track on January 19<sup>th</sup> and the 2016 Illiana Vegetable School January 5<sup>th</sup> in Schererville. In the meantime... take a look at the FoodLink website at [www.purdue.edu/Foodlink](http://www.purdue.edu/Foodlink).



## MIDWEST VEGETABLE PRODUCTION GUIDE FOR COMMERCIAL GROWERS 2016 - (Dan Egel, [egel@purdue.edu](mailto:egel@purdue.edu), 812-886-0198) - The 2016 version of the

Production Guide (ID-56) is on track to be completed by the first week in January 2016. The ID-56 is an annually updated Guide with recommendations on varieties, production practices, pesticides and more. To get your copy of the ID-56, either visit [mwveguide.org](http://mwveguide.org) or get a hard copy through the Purdue Education Store. Contact the education store at (888) EXT-INFO. In addition, the ID-56 will be sold at many locations where winter meetings are taking place, such as the Indiana Horticultural Congress. Hard copies are \$10 and the on-line version is free. Members of the Indiana Vegetable Growers Association receive a hard copy of the ID-56 as part of their membership benefits. The 2016 version will again feature wire binding. Some of the many changes to the ID-56 for 2016 are listed below.

### *New and Revised Sections*

- We updated the look of our website, [mwveguide.org](http://mwveguide.org), to make it easier to find the most current information. If you have bookmarked specific pages of this guide in the past, you may need to update them. Please visit [mwveguide.org](http://mwveguide.org).

The Soils and Fertility section contains examples of how to sequence cover crops with vegetable crops. Table 13: Postharvest Handling and Storage Life of Fresh Vegetables has been revised.

### *Disease Management*

- Aprovia Top<sup>®</sup> has been added to the Cucurbit Crops and Fruiting Vegetables chapters.
- Nimitz<sup>®</sup>, a nonfumigant, has been added to the Cucurbit Crops chapter and Table 21: Nematicide Soil Treatments.

Product rating tables have been updated in the Cucurbit Crops and Fruiting Vegetables chapters.

Orondis Ultra<sup>®</sup> has been added to the Cucurbit Crops and Fruiting Vegetables chapters.

Zing<sup>®</sup> has been added to the Cucurbit Crops, Fruiting Vegetables, and Potato chapters.

### *Weed Management*

- League<sup>®</sup> was removed from the Fruiting Vegetables chapter.
- A column for potatoes was added to Table 25: Label Restrictions (in Months) on Rotating to Vegetable Crops.

### *Insect Management*

- Assail<sup>®</sup> was added to the Asparagus chapter.
- Endosulfan<sup>®</sup> was removed from all chapters, because it is no longer labeled for use on vegetable crops.

Closer<sup>®</sup>/Transform<sup>®</sup> was removed from our recommendations due to a court ruling about their registration. Verimark<sup>®</sup>, Sivanto<sup>®</sup>, and Nealta<sup>®</sup> are new insecticides that were added for various crops.

Slug control recommendations were added to the Cole Crops and Leafy Vegetables chapters.

Formulation information was added for many products throughout the guide.



### SARE FARMER RANCHER GRANT DEADLINE COM-

**ING UP** - (Liz Maynard, [emaynard@purdue.edu](mailto:emaynard@purdue.edu), 219-548-3674) - There is still time to submit a proposal to this grant program. The 2016 Farmer Rancher Grant Program of NCR SARE offers grants for farmer-initiated projects of up to \$7,500 for individuals, \$15,000 for partners, and \$22,500 for groups. Grant applications are due in the NCR SARE office on Thursday, December 3, 2015. To learn more about the grants and download a grant application, visit <http://www.northcentralsare.org/Grants/Apply-for-a-Grant>. To receive a hard copy of the application, call NCR-SARE at 612-626-3113.

Not sure how to get started? Purdue Extension's October 7 webinar about how to write a grant was recorded and is available at [https://mediaspace.itap.purdue.edu/media/Roy+W+Ballard's+Personal+Room-20151007+1401-1\\_42105557/0\\_3nhrcqvc](https://mediaspace.itap.purdue.edu/media/Roy+W+Ballard's+Personal+Room-20151007+1401-1_42105557/0_3nhrcqvc).

If you have additional questions about this grant program, please contact Roy Ballard, Purdue Extension Educator for Hancock County and Indiana SARE State Coordinator at 317-462-1113 or by e-mail at [rballard@purdue.edu](mailto:rballard@purdue.edu).



### SW INDIANA MELON AND VEGETABLE GROWERS

**MEETING** - The Southwest Indiana Melon and Vegetable Growers Association will hold their technical meeting and variety trial showcase on Thursday, December 3<sup>rd</sup> at the Southwest Purdue Ag Center, 4369 N. Purdue Road, Vincennes, IN. The meeting will start at 6:00 P.M., dinner will be served. At approximately 7:00 P.M., the variety trial discussion will begin. Any grower interested in becoming a member is invited to attend. Membership dues are \$15 per year and can be paid at the meeting. If you have questions or want to RSVP, please contact Barb Joyner or Dan Egel at 812-886-0198 or email [joynerb@purdue.edu](mailto:joynerb@purdue.edu). RSVP are due by November 20<sup>th</sup>.



### UPCOMING EVENTS

**Beginning Farmer Tour.** Saturday, November 7, 2015. 9:00 A.M. – Noon CST. Perkins Good Earth Farm, DeMotte, IN. Breakfast, networking session, lunch, tour. Soil health, cover crops, vegetable and high tunnel production. Sponsored by Purdue Extension and Local Growers Guild. For more information and to register contact the Purdue Extension Education Store at <https://www.edustore.purdue.edu/> or 888-EXT-INFO.

**Southwest Indiana Melon and Vegetable Growers Association Technical Meeting and Variety Trial Showcase.** Thursday, Dec. 3, 2015. 6:00 P.M. dinner, 7:00 P.M. Variety Trial Showcase. SWPAC, 4369 N. Purdue Rd., Vincennes, IN. RSVP by November 20 by phone 812-886-0198 or email [joynerb@purdue.edu](mailto:joynerb@purdue.edu).

**Illiana Vegetable Growers Symposium.** Tuesday, January 5, 2016. 8:00 A.M. - 4:00 P.M. CST. Teibel's Restaurant, Schererville, IN. Registration and program available in early December. Contact Liz Maynard, 219-548-3674 or [vegrops@purdue.edu](mailto:vegrops@purdue.edu).

**Indiana Horticultural Congress.** January 19-21, 2016. Wyndham Indianapolis West, Indianapolis, IN. [www.inhortcongress.org](http://www.inhortcongress.org). Contact Lori Jolly-Brown, 765-494-1296 or [ljollybr@purdue.edu](mailto:ljollybr@purdue.edu).

**Midwest Women in Ag Conference.** February 17-18, 2016 Columbus, IN. <https://ag.purdue.edu/extension/wia/Pages/default.aspx>

**Indiana Small Farm Conference.** March 3-5, 2016. Hendricks County Fairgrounds, Danville, IN. For more information visit Purdue Small Farms at <https://ag.purdue.edu/extension/smallfarms/Pages/default.aspx>

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# 2016 Vegetable Crops Hotline Subscription Form

The *Vegetable Crops Hotline* newsletter provides the commercial vegetable grower with timely information about disease, insect and weed pests, fertility practices, post-harvest problems, pesticide label changes, meetings and much more. Each year, the Hotline is published 12 times during the growing season (April - September) with off-season issues in February, March and November.

Again this year, in addition to receiving the regularly scheduled *Hotline* issues, subscribers may also receive the ***Vegetable Crops Hotline - Bulletin*** either by email or FAX. This will require that subscribers to the 2016 *Hotline* indicate how they want to receive the bulletins. The *Bulletin* articles will also appear in the next regularly scheduled *Hotline* issue along with other pertinent articles written by the Purdue staff.

To subscribe, please fill in your name and address below, and send this form and a check for \$15.00 made payable to **Purdue University** to:

Vegetable Crops Hotline Subscription  
Southwest Purdue Agricultural Program  
4369 N. Purdue Rd.  
Vincennes, IN 47591

**Indiana Vegetable Growers Association members are automatically signed up for the *Vegetable Crops Hotline* at no additional charge.**

\_\_\_\_ Yes, I would like to subscribe to the 2016 *Vegetable Crops Hotline*. Enclosed is a \$15 check made payable to **Purdue University**.

**Mail to:** Vegetable Crops Hotline Subscription  
Southwest Purdue Ag Program  
4369 North Purdue Road  
Vincennes, IN 47591

\*\*\*\*\***(Please complete the following)**\*\*\*\*\*

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_ (home) and/or \_\_\_\_\_ (work)

If you would like to receive email notification when ***Vegetable Crops Hotline Issues and Bulletins*** are published, please give us your email address or visit [lists.purdue.edu/mailman/listinfo/vch](http://lists.purdue.edu/mailman/listinfo/vch) to sign up:  
email address: \_\_\_\_\_

If you want the occasional ***Hotline Bulletins*** by fax, please include your FAX number (with area code): \_\_\_\_\_

## Indiana Vegetable Growers Association

### Membership Renewal/Application

**Benefits of IVGA Membership:**

- Midwest Vegetable Production Guide for Commercial Growers, (ID-56) (new edition usually available in Jan.)
- Vegetable Crops Hotline subscription
- Listing in IVGA Directory of Wholesale Vegetable Producers (optional)
- Your web site linked on www.ivga.org
- Corporate members: logo included on corporate members page at www.ivga.org
- Network with other vegetable growers
- Support education and research to improve vegetable production and marketing in Indiana

To renew or join, correct or fill out the form below and send in with your check payable to IVGA. Memberships run January - December. If you have already renewed for the current year, but haven't provided the information requested below, please check here , and complete and return this form so we have your current information.

<p><b>Your contact information</b> below will be printed in the membership directory that is sent to members only. It will also be used to mail you the Vegetable Crops Hotline, to fax or e-mail the Hotline Bulletin, and for IVGA correspondence.</p> <p>Name: _____</p> <p>Company: _____</p> <p>Address: _____</p> <p>City, State, Zip: _____</p> <p>Tel: _____ Fax: _____</p> <p>Email: _____</p> <p>Web: _____</p> <hr/> <p><b>ID-56 Delivery:</b> Where will you pick up your copy of the ID-56 or should we mail it to you?</p> <p><input type="checkbox"/> IHC (Indiana Hort Congress),</p> <p><input type="checkbox"/> IVGS (Illiana Veg Growers Symposium)</p> <p><input type="checkbox"/> SW Ind. Melon and Veg. Meeting</p> <p><input type="checkbox"/> Starlight Veg Meeting</p> <p><input type="checkbox"/> Please send by mail</p> <p><input type="checkbox"/> I do not want a copy of the ID-56</p> <hr/> <p>Would you like to receive <b>free subscriptions</b> to trade magazines that may be offered to IVGA members?</p> <p style="text-align: center;"><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <hr/> <p>Check here if you want to receive the <b>Vegetable Crops Hotline by Email ONLY</b> (no hard copy) <input type="checkbox"/></p> <hr/> <p><b>Membership Type:</b></p> <p><input type="checkbox"/> Regular, \$40.00/year</p> <p><input type="checkbox"/> Industry/Corporate, \$80.00/year</p> <hr/> <p><b>Make check payable to:</b>          Indiana Vegetable Growers Association (IVGA).          Return to:          Indiana Vegetable Growers Association c/o Maynard          PO Box 1321          Valparaiso, IN 46384-1321</p>	<p>The IVGA Directory of Wholesale Vegetable Producers will be updated periodically.</p> <p><input type="checkbox"/> Check here to be included in the directory.</p> <p><input type="checkbox"/> Check here if information has not changed since previous year OR provide information below.</p> <p>Contact information for Wholesale Directory, if different from elsewhere on this form:</p> <p>Name: _____</p> <p>Company: _____</p> <p>Address: _____</p> <p>City, State, Zip: _____</p> <p>Tel: _____ Fax: _____</p> <p>Email: _____</p> <hr/> <p>The wholesale directory is available to anyone who requests it and will be posted on the web. Indicate quantity of each item: S=small quantities; X=wholesale quantities; T=semi truckload quantities.</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> apples</td> <td><input type="checkbox"/> onions, bulb</td> </tr> <tr> <td><input type="checkbox"/> asparagus</td> <td><input type="checkbox"/> onions, green</td> </tr> <tr> <td><input type="checkbox"/> beet</td> <td><input type="checkbox"/> peaches</td> </tr> <tr> <td><input type="checkbox"/> black- or raspberries</td> <td><input type="checkbox"/> peppers, bell</td> </tr> <tr> <td><input type="checkbox"/> broccoli</td> <td><input type="checkbox"/> peppers, hot</td> </tr> <tr> <td><input type="checkbox"/> cabbage</td> <td><input type="checkbox"/> potatoes</td> </tr> <tr> <td><input type="checkbox"/> cantaloupe</td> <td><input type="checkbox"/> pumpkin</td> </tr> <tr> <td><input type="checkbox"/> carrot</td> <td><input type="checkbox"/> pumpkin, mini</td> </tr> <tr> <td><input type="checkbox"/> cauliflower</td> <td><input type="checkbox"/> radishes</td> </tr> <tr> <td><input type="checkbox"/> chrysanthemums</td> <td><input type="checkbox"/> snap_bean</td> </tr> <tr> <td><input type="checkbox"/> daylilies</td> <td><input type="checkbox"/> spinach or chard</td> </tr> <tr> <td><input type="checkbox"/> greens (collards, mustard, turnip)</td> <td><input type="checkbox"/> squash, summer</td> </tr> <tr> <td><input type="checkbox"/> corn, stalks</td> <td><input type="checkbox"/> squash, winter</td> </tr> <tr> <td><input type="checkbox"/> corn, ornamental</td> <td><input type="checkbox"/> strawberries</td> </tr> <tr> <td><input type="checkbox"/> cucumber</td> <td><input type="checkbox"/> sweet corn, bicolor</td> </tr> <tr> <td><input type="checkbox"/> eggplant</td> <td><input type="checkbox"/> sweet corn, white</td> </tr> <tr> <td><input type="checkbox"/> gourds, ornamental</td> <td><input type="checkbox"/> sweet corn, yellow</td> </tr> <tr> <td><input type="checkbox"/> herbs</td> <td><input type="checkbox"/> tomatillo</td> </tr> <tr> <td><input type="checkbox"/> kale</td> <td><input type="checkbox"/> tomato</td> </tr> <tr> <td><input type="checkbox"/> lettuce</td> <td><input type="checkbox"/> turnips</td> </tr> <tr> <td></td> <td><input type="checkbox"/> watermelon</td> </tr> </table>	<input type="checkbox"/> apples	<input type="checkbox"/> onions, bulb	<input type="checkbox"/> asparagus	<input type="checkbox"/> onions, green	<input type="checkbox"/> beet	<input type="checkbox"/> peaches	<input type="checkbox"/> black- or raspberries	<input type="checkbox"/> peppers, bell	<input type="checkbox"/> broccoli	<input type="checkbox"/> peppers, hot	<input type="checkbox"/> cabbage	<input type="checkbox"/> potatoes	<input type="checkbox"/> cantaloupe	<input type="checkbox"/> pumpkin	<input type="checkbox"/> carrot	<input type="checkbox"/> pumpkin, mini	<input type="checkbox"/> cauliflower	<input type="checkbox"/> radishes	<input type="checkbox"/> chrysanthemums	<input type="checkbox"/> snap_bean	<input type="checkbox"/> daylilies	<input type="checkbox"/> spinach or chard	<input type="checkbox"/> greens (collards, mustard, turnip)	<input type="checkbox"/> squash, summer	<input type="checkbox"/> corn, stalks	<input type="checkbox"/> squash, winter	<input type="checkbox"/> corn, ornamental	<input type="checkbox"/> strawberries	<input type="checkbox"/> cucumber	<input type="checkbox"/> sweet corn, bicolor	<input type="checkbox"/> eggplant	<input type="checkbox"/> sweet corn, white	<input type="checkbox"/> gourds, ornamental	<input type="checkbox"/> sweet corn, yellow	<input type="checkbox"/> herbs	<input type="checkbox"/> tomatillo	<input type="checkbox"/> kale	<input type="checkbox"/> tomato	<input type="checkbox"/> lettuce	<input type="checkbox"/> turnips		<input type="checkbox"/> watermelon
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