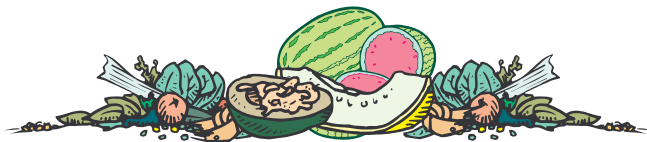


# VEGETABLE CROPS HOTLINE

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

Chris Gunter, Editor  
(812) 886-0198  
egel@purdue.edu



No. 403  
April 18, 2002

<http://www.entm.purdue.edu/entomology/ext/targets/newslett.htm>

## IN THIS ISSUE

- **NONINSURED CROP DISASTER ASSISTANCE PROGRAM APPLICATIONS DUE BY APRIL 18, 2002**
- **CUCURBIT DISEASES**
- **HOST FAMILIES NEEDED FOR INTERNATIONAL STUDENTS**
- **SANDEA RECEIVES SECTION 24C FOR USE IN INDIANA**
- **WEED WATCH: WINTER ANNUALS**

*(The following article was distributed via e-mail and fax as a Vegetable Crops Hotline – BULLETIN, April 5, 2002.)\**

**NONINSURED CROP DISASTER ASSISTANCE PROGRAM APPLICATIONS DUE BY APRIL 18 - WASHINGTON, APRIL 1, 2002 - (Brad Summers)**  
*(Although, by the time you receive this issue of the Vegetable Crops Hotline, the deadline date will be passed, it is our hope that this article may be of some benefit to you in the future.)*

Producers have until April 18, 2002, to apply for coverage for certain eligible crops under the U.S. Department of Agriculture's Noninsured Crop Disaster Assistance Program. This deadline applies to 2001 and 2002 crops for which the coverage period would normally have begun prior to March 19, 2002, or within 60 days after March 19, 2002. Along with submitting an application for coverage, producers must pay applicable service fees and provide a certification of prior crop year production for the crop by April 18, 2002.

The deadline for submitting an application for payment for 2001 crop losses is the 2002 acreage reporting date for the crop.

Producers seeking NAP coverage of eligible crops are encouraged to contact their local USDA Service Center prior to the deadline to identify applicable crops and file an application. Producers are reminded there are no late-file provisions for submitting applications for coverage after April 18, 2002.

NAP provides financial assistance to producers for eligible crop losses and prevented planting due to natural disasters. Eligible crops are those for which the catastrophic level of Federal crop insurance is not

available and include those produced for food, livestock feed, fiber, mushrooms, floriculture, honey, maple sap, aquaculture (including ornamental fish), Christmas tree crops, ginseng, ornamental nursery and turf grass sod.

For questions or comments, please contact:

Brad Summers, County Executive Director for Knox County Farm Service Agency  
E-mail:

Brad.Summers@in.usda.gov

Phone: (812) 882-8210

Fax: (812) 882-7697

*\*Editor's note: If you have access to e-mail service or a fax machine and would like to receive notification of any future Vegetable Crops Hotline – BULLETIN, please notify the Southwest Purdue Agricultural Program, 4369 N. Purdue Road, Vincennes, IN 47591 Phone: (812) 886-0198; Fax: (812) 886-6693 or you may e-mail Chris Gunter, Editor at <gunter@hort.purdue.edu>.*

\*\*\*\*\*

**CUCURBIT DECLINES - (Dan Egel) -** The cucurbit family includes cucumbers, muskmelon, watermelon, pumpkin, and winter and summer squashes. Several members of the cucurbit plant family are an important source of income to Indiana farmers. Unfortunately, the cucurbit family also has its share of diseases. A relatively new disease, cucurbit yellow vine disease (CYVD), has been described in Texas, Oklahoma, Arkansas and Massachusetts. This disease has not been observed in Indiana, and Purdue specialists, therefore, have not had an opportunity to confirm the research done by others on CYVD. This article describes observations from researchers in other states on CYVD so that growers will be familiar with this potential threat to cucurbit production. Since cucurbit yellow vine disease is relatively new, much of the information available is subject to change. However, this is what is known to date.

Although first observed on squash and pumpkins in 1988, CYVD also has been reported on

muskmelon and watermelon. The disease was originally observed in central Texas and Oklahoma. Symptoms of CYVD often show up as the fruit approaches maturity. From the time the first yellow leaf is observed to the time vines are completely yellow may only be 2 to 3 days. The terminal leaves on each vine are the last to die. There are no lesions on the stem or roots associated with CYVD. A diagnostic feature of CYVD is the honey-brown discoloration that can be observed in a ring just inside stems cut in cross section. This discoloration is most noticeable in the root and crown area.

Vines with CYVD occur in a random fashion across a field. This type of distribution is consistent with an insect vectored disease. Investigators in Oklahoma and Texas believe that CYVD is caused by a bacterium that is spread by the squash bug.

As always, Purdue University Extension Specialists are on the look out for any new threat to agricultural production in Indiana. We will be on the look out for the symptoms described above both in commercial fields and in research plots. Growers who find unusual symptoms on cucurbits this summer should contact their County Educator, an Extension Specialist or the Plant Pest Diagnostic Laboratory.

Symptoms of cucurbit diseases that occur in Indiana have been described in the following Extension Bulletins: Diseases and Pests of Muskmelon and Watermelon (BP-44), Identification and Management of Pumpkin Diseases (BP-17) and Mature Watermelon Vine Decline and Similar Vine Decline Diseases of Cucurbits (BP-65-W). These publications are available on-line <<http://www.btny.purdue.edu/Pubs/>> or from the Media Distribution Center (1-888-EXT-INFO).

\*\*\*\*\*

**HOST FAMILIES NEEDED FOR INTERNATIONAL STUDENTS - (Prudie Miller) -** I have a GREAT OPPORTUNITY for your entire family. I am looking for farm families (from all types and sizes of farms) to host undergraduate students from our exchange universities in Japan. The students will only be here for about 4 weeks (approx. Aug 6th-Sept 5th). They all have English skills and are anxious to learn about what you do everyday. They are coming to



learn and would be expected to help around the farm just as any other family member. By hosting, you also allow us to continue sending our Purdue Agricultural students to Japan on the exchange. While in Japan they stay with host families and conduct their internships.

Please feel free to contact me for further information. Prudie Miller, International Students/Visitors Coordinator, Purdue University International Programs In Agriculture, Phone: (765) 494-8458, Fax: (765) 494-963, Email: <prudie@purdue.edu>.

\*\*\*\*\*

**SANDEA RECEIVES SECTION 24C FOR USE IN INDIANA - (Chris Gunter)** - A Section 24C has been issued by the Office of the State Chemist for Sandea Herbicide (EPA Reg. #10163-254, SLN IN-020002) for the control of various weeds in cucumbers, pumpkins, winter squash, cantaloupes, honeydew melons and crenshaw melons. Sandea suppresses or kills many broadleaf weeds and yellow nutsedge. The label allows for either pre- or post-emergence applications. Sandea should be a very effective herbicide and will be a great tool for vegetable growers. However, its effectiveness is only possible through careful management by growers and following the label precautions to avoid crop injury or loss. For information on using the product and weed management in these type crops, contact Steve Weller in Horticulture at 765-494-1333.

\*\*\*\*\*

**WEED WATCH: WINTER ANNUALS - (Liz Maynard)** - Spring arrived this past week across Indiana and with it have come many winter annual weeds. Winter annuals germinate in late summer, fall, or early spring. Many are killed by primary tillage operations, or they bloom, set seed and die before vegetable crops are planted. Because of this, targeted control measures are often not required. An important exception is in no-till or reduced tillage situations where weeds won't be killed by tillage and might need to be burned down.

While the weeds are still alive before crop planting they are both helpful and harmful for vegetable production. Like a cover crop, they can protect the soil from erosion and scavenge nutrients that otherwise might leach below the rooting zone. On the negative side, they can provide an attractive habitat for cutworm larvae and can harbor diseases that might be transmitted to crops. Killing the weeds two weeks before planting is one way to minimize these negative effects.

If winter annual weeds are an increasing problem preventive practices can help. Prevent seed additions to the soil this spring by controlling weeds before they set seed. In the fall consider planting a cover crop to suppress establishment of the weeds at that time. Described below are some of the common winter annuals.

Common chickweed is a low-growing delicate plant with opposite leaves. Leaves are about 1/2 to 1 inch long and are pointed at the tip. High populations form mats covering the soil. The flowers, blooming now, have 5 petals that are deeply split and are about 1/4 inch across. The seed capsule is like a little vase, open at the top, and seeds fall out as they mature and the plant dies.

Marestail (Horseweed) spends its juvenile phase as a rosette. Leaves of the rosette are long and narrow with toothed margins and are covered with hairs. When plants mature in mid to late summer the stem lengthens up to 6 ft. in height and many small flower heads form in a spreading panicle at the top of the shoot. Each flower head is like a miniature daisy 1/5 inch across; except the white 'petals' are so short they can barely be seen. Seeds have whitish bristles at one end and are dispersed by wind.

Winter annuals in the Mustard Family include shepherd's-purse, field pennycress, and yellow rocket. These plants grow as rosettes from germination until ready to bloom in spring or early summer. At that time the stem lengthens to 4 to 20 inches tall and small white or yellow flowers with 4 petals bloom along the stalk.

Field pennycress has smooth leaves in the rosette stage and older rosettes have wavy and slightly toothed leaf margins. The flowering stalk sometimes has many branches and flowers are white. Seedpods are round, about 1/2 inch across, with a flat wing around the edge and a notch at the tip. Dried flower stalks with seed capsules can be used in dried flower arrangements.

Yellow rocket may grow as a winter annual, a biennial, or a short-lived perennial. It starts out as a rosette with round, lobed, glossy green leaves. The leaves are edible and in historic times were used as an early spring green. The year following germination a flower stalk develops and produces bright yellow flowers in early spring. Seeds are produced in a narrow fruit about 1-inch long with a pointy tip. When mature the fruit splits open to disperse seeds. Yellow rocket is susceptible to the diseases white rust, black rot and club root, and so may provide a source of inoculum for vegetables susceptible to those diseases. Cucumber mosaic virus can overwinter in yellow rocket roots. Vegetable insect pests that feed on yellow rocket include black cutworm, cabbage maggot, flea beetles, imported cabbageworm and aphids.

Non-selective herbicides or flaming can be used to control these weeds prior to planting if they pose a problem and no tillage is planned. Glyphosate should control common chickweed, marestail, field pennycress, and yellow rocket. Paraquat should control of all those weeds EXCEPT marestail. Scythe is another non-selective herbicide that should control all of these weeds. Be sure to read the herbicide label prior to use and follow all directions.

It is the policy of the Purdue University Cooperative Extension Service, David C. Petritz, Director, that all persons shall have equal opportunity and access to the programs and facilities without regard to race, color, sex, religion, national origin, age, marital status, parental status, sexual orientation, or disability. Purdue University is an Affirmative Action employer. 1-888-EXT-INFO <http://www.agcom.purdue.edu/AgCom/Pubs/index.htm> Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

Vegetable Crops Hotline  
c/o Chris Gunter  
Southwest Purdue Agricultural Program  
4369 N Purdue Rd  
Vincennes, IN 47591