"We are what we repeatedly do. Excellence, then, is not an act, but a habit." Aristotle

Address any questions or comments regarding this newsletter to the individual authors listed after each article or to its editor, Rick Weinzierl, 217-333-6651, weinzier@uiuc.edu. The Illinois Fruit and Vegetable News is available on the web at: http://www.ipm.uiuc.edu/ifvn/index.html. To receive email notification of new postings of this newsletter, call or write Rick Weinzierl at the number or address above.

In this issue ...

Crop and Regional Reports (from Elizabeth Wahle and Maurice Ogutu)
Upcoming Meetings (Illinois Specialty Crops Conference January 20-22, and a listing of additional winter educational programs in Illinois and nearby)
Updates on Pesticide Recommendations for 2005 (Manufacturer’s announcements at the Great Lakes Expo; notes on fruit insecticide registrations)
Fruit Production and Pest Management (Vole control in orchards)
Vegetable Production and Pest Management (Anthracnose in cucurbits)
University of Illinois Extension Specialists in Fruit & Vegetable Production & Pest Management

Crop and Regional Reports

In the south and southwest, late fall continues to be wet. Since the last issue on November 11th, my records for the St. Louis area show 13 rain events and a total of 7.6 inches of rainfall. Some strawberry growers struggled to get mulch down around continuous rain, and horseradish digging was slowed at times as well. Temperatures remained mild until just recently, and since most growers were unable to work fields due to wetness, they were able to enjoy fairly good weather on all days of the deer season this year. Temperatures have recently starting dipping into the low 20’s and upper teens throughout most of the region, giving the landscape that definite winter appearance. Pruning of apples continues throughout the region.

Elizabeth Wahle (618-692-9434; wahle@uiuc.edu)

In northern Illinois, temperatures that topped out in the upper 30s to upper 50s and dropped to night-time lows in teens to the 40s have given way to winter by dropping about 10 to 15 degrees in highs and lows. Rainfall recorded in the area during the last half of November was about 2 inches, and about 1½ inches fell from December 1 through 15. All who tried to travel around the Thanksgiving holiday know that the area received 3-8 inches of snow during the last week of November as well. So ... it’s winter in northern Illinois, and all pick-your-own, outdoor entertainment retailers are closed except those that sell Christmas trees. The next couple of months provide a good time to attend the season’s educational programs.

Maurice Ogutu (708-352-0109; ogutu@uiuc.edu)
The Illinois Specialty Crops Conference will be held January 20-22, 2005, at the Crowne Plaza Hotel in Springfield, IL. A one-day workshop on pumpkins will be held on Thursday, January 20, and will cover production, pest management, and marketing issues. The two-day conference will follow on Friday and Saturday, January 21-22, 2005.

This year’s program begins on Thursday, January 20, at 10:00 a.m., with a pumpkin production workshop. The pumpkin program will run all day Thursday, providing an overview of pumpkin production in Illinois, presentations on disease, insect, and weed management, soil fertility and plant nutrition recommendations, a look at pumpkin production and marketing at Tanner’s Orchard, and a grower panel discussion of pumpkin production and marketing issues. The pumpkin production workshop will adjourn at 5:00 p.m. on the 20th. The registration fee for the pumpkin workshop is $35.00 and includes lunch as well as a copy of University of Illinois Extension’s new publication, Identifying and Managing Cucurbit Pests.

On Friday and Saturday, the Illinois Specialty Crops Conference will feature its traditional concurrent sessions on fruits, vegetables, and herbs, along with additional workshops on irrigation, risk management, and labor issues. Dr. Lowell Catlett, ag futurist from New Mexico State University, will keynote the Friday morning opening session at 9:00 a.m. His topic will be: “Hot Issues in the Future of Horticulture.” Following the keynote address in the second portion of the opening session, Ron Walberg and Steve Wentworth of Midwest Greenhouse will highlight their central Illinois business that concentrates on the hydroponic production of peppers. Friday evening will feature a banquet followed by comments from Jerry Mills, southern Illinois apple grower and author of the column “Notes from the Farm” in The Fruit Growers News, and the announcement of the cider contest winners. Saturday will feature Dr. Wesley Jarrell, head of the University of Illinois Department of Natural Resources and Environmental Sciences, who will provide updates on University of Illinois research and extension programs in fruits, vegetables and herb crops.

University of Illinois researchers and extension specialists will present updates and recommendations on a wide variety of production and pest management issues, and invited speakers will be on hand to provide some new ideas as well. Father Dominic, of St. Bede's Monastery in Peru, Illinois, will highlight the herb sessions. Father Dom is well known to PBS cooking show fans from his bread-baking series that aired on educational TV channels across the country. He will entertain and enlighten conference attendees with insights into how to incorporate cooking skills as marketing tools in herb businesses. Apple production will take center stage of the fruit breakout sessions, but talks on grape varieties and small fruits will also be featured. Dr. James Luby, University of Minnesota, will talk about their apple breeding program – the source of Honeycrisp and Zelstar – and the development of strawberry cultivars for Midwest production. Topics in the vegetable sessions will run the gamut of food safety to production problems to marketing. Dr. Elizabeth Maynard, Purdue University, will speak about new developments in sweet corn breeding. A special workshop will be held on Friday featuring Sharon Hughes, National Council of Ag Employers, who will discuss labor law compliance issues. Risk management topics will also be addressed on crop insurance for specialty growers, liability insurance for farm entertainment enterprises, and legal issues facing the direct farm marketer.

Trade show plans have spaces for over 50 exhibitors, with lunch being served in the trade show area. Plenty of time is allowed between sessions to visit with exhibitors. Some space is still available for those wishing to exhibit their specialty crop products or services.

The 16th Annual Cider Contest and the 3rd Annual Hard Cider Contest will again be held in conjunction with the conference. For more information contact Dr. Elizabeth Wahle, University of Illinois Extension, PH: 618/692-9434; FAX: 618/692-9808; E-mail: wahle@uiuc.edu.

The conference agenda can be reviewed at www.specialtygrowers.org and a registration form is available at that site. The registration for Friday-Saturday is $40 for ISGA members and $50 for nonmembers (with reduced fees for additional attendees from the same family or enterprise); Friday night’s banquet tickets sell for $20 per member and $25 per nonmember. To be placed on the mailing list to receive registration materials or to get exhibitor information, please contact Diane Handley, PH: 309/557-2107 or E-mail: handle@ilfb.org.

The Crowne Plaza Hotel, is at Exit 94 off Interstate 55 at Springfield. The hotel is reserving a block of their luxury guest rooms for conference attendees at $67 plus tax per room. If you need reservations, please make them immediately. Please call the hotel directly at 217/529-7777 to make your reservations and ask for the Specialty Crops Conference rate.

This conference is jointly sponsored by the Illinois Specialty Growers Association, University of Illinois Extension, Illinois Department of Agriculture, and USDA Risk Management Agency.
Illiana Vegetable Grower School, January 6, 2005
... at Teibel’s Restaurant in Schererville, Indiana. For more information, contact Maurice Ogutu at the University of Illinois Extension Center in Countryside (708-352-0109; ogutu@uiuc.edu).

Illinois Organic Production Workshop, January 12-13, 2005
... providing farmers with practical, science-based information on organic production and certification. January 12 - 13, 2005, at the Holiday Inn, Normal, Illinois. The January 12 program runs from 9:00 a.m. to 6:00 p.m; January 13 runs from 7:00 a.m. to 12:45 p.m. Registration is $75 in advance or $100 at the door. For details, contact Dan Anderson, 217-333-1588, aslan@uiuc.edu.

Southern Illinois Tree Fruit School, February 1, 2005
... at the Holiday Inn, Mt. Vernon, Illinois. Registration will include the 2005 Commercial Tree Fruit Spray Guide. Contact Elizabeth Wahle (618-692-9434; wahle@uiuc.edu).

Southwestern Illinois Tree Fruit School, February 2, 2005
... at the First Presbyterian Church, Hardin, Illinois. Registration will include the 2005 Commercial Tree Fruit Spray Guide. Contact Elizabeth Wahle (618-692-9434; wahle@uiuc.edu).

Southern Illinois Vegetable School, February 9, 2005
... at the Holiday Inn, Mt. Vernon, Illinois. Registration will include the 2005 Midwest Vegetable Production Guide for Commercial Growers. Contact Elizabeth Wahle (618-692-9434; wahle@uiuc.edu).

Illinois/Wisconsin (Stateline) Fruit and Vegetable Conference on Thursday February 17, 2005
... at Lake Lawn Resort in Delavan, Wisconsin. Contact Maurice Ogutu (708-352-0109; ogutu@uiuc.edu).

Missouri Small Fruit and Vegetable Conference, February 21-23, 2005
... program under development. Contact Pamela Mayer (417-926-4105; pam621t@smsu.edu).

Kankakee County Vegetable Grower School on Thursday February 24, 2005
... at the Kankakee County Extension Office Bourbonnais, IL. Contact Maurice Ogutu (708-352-0109; ogutu@uiuc.edu).

Illinois Small Fruit and Strawberry Schools, March 1 - 2, 2005
... at the Holiday Inn, Mt. Vernon, Illinois. Registration will include the 2005 Midwest Commercial Small Fruit and Grape Spray Guide, the Midwest Small Fruit Pest Management Handbook, and the school Proceedings. (Contact Bronwyn Aly (618-695-2444; baly@uiuc.edu) or Elizabeth Wahle (618-692-9434; wahle@uiuc.edu).

Updates on Pesticide Registrations and Recommendations for 2005

Manufacturer’s News from the Great Lakes Expo

The Great Lakes Expo was recently held in Grand Rapids, Michigan, and I came away with several updates that are of interest to Illinois growers. With the arrival of soybean rust in the US, fungicide supplies may become an issue. Not only are soybeans at risk, but soybean rust has a broad host range and can infect many different species of legumes including: dry beans, green, lima and butter beans, vetch, lupines, and medic. Because there are leguminous vegetable crops at risk, there will be a high demand for fungicides like Bravo, Quadris, Amistar, Nova, Endura, and Cabrio. Even if you don’t produce leguminous crops, there is a good chance you will need these products for other crops that you are producing. Since soybean rust moves in a northern direction, it can be expected that southern tier states will have first priority for supply of fungicides for the upcoming growing season. For this reason, I strongly advise growers to secure a quantity of fungicides now to cover the 2005 growing season.

Valent has expanded the Retain (aviglycine HCL) label to include stone fruit. Application is recommended 7-14 days prior to anticipated harvest and results in fruit maturing slower than untreated fruit – allowing fruit a chance to gain additional size without dropping or getting soft. Valent has also released a new herbicide under the trade name Chateau (same active ingredient as Valor, flumioxazin). It currently is labeled for broadleaf and annual grass control in grape, non-bearing fruit and nut trees, and several non-crop areas, and the label is expected to expand to bearing fruit trees in the future. Chateau must not directly or indirectly contact foliage or green bark. Valent’s miticide Zeal (new in 2004) is labeled for use in apples, pears, and strawberries.
Bayer CropScience has released two new fungicides. Reason (fenimidone) fungicide is labeled for several vegetable crops, with targets including downy mildew and Alternaria in cucurbit crops and early and late blight in tomatoes. Scala (pyrimethanil) fungicide is labeled for several vegetables, grapes, several stone fruits, pome fruits, and strawberries. Diseases controlled are grey mold in grapes, strawberries, tomato, and stone fruits, brown rot in stone fruits, scab in pome fruits, and Alternaria (early blight) in several vegetables. The label for Flint (trifloxystrobin) fungicide has been expanded to include scab, powdery mildew, and cherry leaf spot in stone fruit. Bayer CropScience expects a future release of Envidor (spirodiclofen) miticide, and its label is to include uses on grapes, pome fruits, stone fruit, and nut trees.

FMC is expecting a short supply of Spartan (sulfentrazone) for 2005 while they are transferring from one production facility to another. FMC has also moved labeled vegetables from the 75DF to the 4F formulation, including processing cabbage, dry beans, and horseradish. They expect product to be readily available for the 2006 season. For later in 2005, FMC expects an expanded label for Mustang Max to include pasture, tree fruits, sunflower, and cucurbits. The company expects a label for Beleaf (flonicamid), a nicitinoid insecticide for aphid control in leafy greens, pome and stone fruit, and potatoes, some time in 2005. FMC also hopes to release in 2005 a new fungicide under the trade name of Hero (cyazofamid). The Hero label is expected to include uses to control late blight in tomatoes and potatoes and downy mildew in cucurbits. Their Aim (carfentrazon-ethyl) herbicide label will be expanded to include a directed spray (hooded) for all fruit sometime in 2005.

Elizabeth Wahle (618-692-9434; wahle@uiuc.edu)

Notes on Fruit Insecticides

In mid-October the Midwest Fruit Workers got together to go over 2004 projects and to revise the tree fruit and small fruit spray guides used throughout the region. Among the observations from 2004 and the changes to note for insecticide recommendations for 2005 are:

- Assail and Calypso worked well throughout the region as alternatives to Guthion for codling moth control, whether in orchards where Guthion resistance was a problem or where it was not. My observations from a small-plot trial and from a few orchard-scale spray programs indicate that Assail and Calypso are the best choices for codling moth control where Guthion and other products have failed. Danitol worked well against codling moth in much of the region (as it has in trials at Urbana in the U of I orchard), but it was not effective for codling moth control at a southern Illinois site where Guthion resistance had been a problem. It seems clear that Danitol’s effectiveness against codling moth at any location will require application at the upper end of the label rate (21.3 fl oz per acre).

- The miticide Pyramite is no longer being manufactured, but the same active ingredient, pyridaben, is now being formulated as Nexter 25WP. Along with existing miticides such as Acramite, Agri-Mek, Apollo, Savey, and Zeal and the newly registered Fujimite 5EC, the suite of miticides available for apples is now extensive. Acramite, Apollo, Nexter, and Savey also are registered on peaches. Remember, however, that these products are not inexpensive ... keep up the inexpensive pre-bloom oil applications to control overwintering red mite eggs and perhaps alleviate the need for these summer miticides.

- The list of pyrethroids now labeled for use on apples and peaches now includes Proaxis, a product that is very similar to Warrior. Without a lot of data to examine yet, it appears that Warrior and Proaxis will be effective against codling moth, plum curculio, apple maggot, and leafrollers, but extension entomologists around the region are reluctant to recommend their use (or that of other pyrethroids) in most instances because they are likely to trigger flare-ups in red mite infestations.

Rick Weinzierl (217-333-6651; weinzier@uiuc.edu)
Fruit Production and Pest Management

Vole (Mice) Control in Commercial Apple Orchards

Left: Tracks of prairie/meadow vole. Right: An 8-yr-old apple tree girdled by prairie/meadow vole.

Vole damage to apple trees in Illinois and many mid-western states can be devastating unless preventative measures are taken to reduce their population. In Illinois, the vole population is very high, especially from spring to early fall, when there is plenty of grain and vegetation for these animals to feed on. Tree damage from vole occurs during late fall to early spring, particularly if the ground is covered with snow. During this period, there is very little vegetation for these animals to feed on, because corn and beans have been harvested and the ground cover is frozen or dormant. As a result, the animals will likely feed on less desirable woody plants such as apple and occasionally peach trees.

Vole Species

There are three species of vole in Illinois and most of the midwestern states. These species are:

- Pine vole (Pitymys pinetorum). This species has a relatively small body, short tail (about the length of the hind-leg), a pointy nose, sunken eyes, and a brownish fur. Pine voles are usually very shy of venturing into the open, so they tend to feed mostly underground on young root and root bark. Pine voles are very damaging to apple trees, because it is very hard to detect injury to the root system until it is too late to save the tree. It is also difficult to correct the problem by bride grafting.

- Meadow vole (Microtus pennsylvanicus). This species has a larger body than pine vole, it has a longer tail (about two times the length of the hind-leg), prominent eyes, and dark grayish fur. Meadow voles are less shy than pine voles and so they tend to feed in the open, especially if there is enough groundcover to hide under. They will also feed immediately under the soil surface. Most of the injury to apple trees from this species occurs at the soil surface. They use their sharp teeth to peel off the bark, especially of young trees. However, the damage is not restricted to young trees, I have seen 20-yr-old trees girdled by meadow voles.

- Prairie vole (Microutus ochrogaster). This species is very similar to meadow vole in appearance and eating habits.

Identification of Vole Species and Population Monitoring

Growers need to determine the potential for tree damage before they apply any treatment. Vole species and population size are two very important factors for predicting the extent of the damage and for deciding on what control measure are needed to reduce the population. To identify vole species in an orchard, place approximately 20 traps per orchard close to active runs and in heavy cover areas. Measure the length of the tail relative to the hind leg. If the tail is very short relative to the hind leg and the fur is brownish, then it is likely that it is a pine vole. However, if the tail is about the length of the hind leg and the fur is grayish, then chances are it is a meadow vole. Estimate percentage of the population is pine versus meadow vole. As I will discuss in the chemical control section, it is important to know what percent of the population is pine versus meadow vole.
The most effective way of determining vole population size is to place a half apple close to a tree trunk or at the site of an active run. Depending on the size of the orchard, place an apple slice every 4 to 5 trees in an orchard of 2 to 3 acres. In larger orchards, place an apple slice every 20 to 30 trees in each block. Distribute the apples so they are not close to one another. If there are shrubs adjacent to the orchard, place an apple slice every 10 to 20 feet in that area as well. Approximately, twenty-four hours after placing the apple slices in the orchard, check them for gnawing marks (teeth marks). The percentage of apples with teeth marks will give an approximate percentage of trees that will be damaged if the vole population is not controlled.

**Orchard Vole Control Program**

- Non-chemical. Mowing on a regular basis, especially during early fall, is the most effective treatment for vole control. When mowing an orchard, it is as important to mow between the trees as it is to mow within the row. Any tall grass between the trees will likely be a haven for pine and meadow vole. I have seen an apple orchard in Illinois in 1994 where every tree within a row was damaged by voles because the grower failed to mow between the trees. It is also important to keep a clean area of about 150-200 feet around the orchard to prevent any meadow voles from moving into the orchard. Such practices can cut vole population by more than 50% in any given year. A herbicide strip or a circle around the tree can also be effective in reducing pine and meadow vole populations. Herbicide strip alone, however, will not eliminate the problem of vole damage, especially of meadow voles. When combined with chemical treatment, herbicide strips will reduce vole populations. Another important non chemical practice is to encourage vole predators to move into your orchard. A good example is to encourage cats to live in and around the orchard. Also build an observation tower for owls, hawks, and other predatory birds. This observation tower can be as simple as a 10 to 15 foot pole with a “T” top.

- Chemical baits. At the present, there are two types of chemical baits available for vole control in apple and peach orchards. These baits are: acute baits (zinc phosphide) and anticoagulants (chlorophacinone and diphacinone). Deciding which of these chemical baits to use depends entirely on the vole species. Although these chemicals will provide some control of both vole species, zinc phosphide has been shown to be more effective against meadow vole, while chlorophacinone and diphacinone have been shown to be more effective against pine vole. Zinc phosphide baits are marketed either as weather resistant pellets or combined with several types of grains, such as cracked corn and oats. When the vole population is very high an additional application of zinc phosphide may be made within 1 to 2 months. Zinc phosphide grain baits applied by hand were found not to be very effective against pine vole, however. Better control was achieved when apple slices were coated with zinc phosphide liquid at the rate of one teaspoon per quart of water. Phacinone baits are marketed in a weather resistant pellet form. Several days of continuous feeding on these formulations are needed for an effective control. A second application may be added within 3 to 4 weeks after the first one, but not within 2 weeks, because the first application will not take its effect until about 18 to 20 days.

**Methods and Timing of Bait Application**

Baits can be applied in several different ways, however, not all of these methods are effective.

- Hand baiting in the active run. This method involves placing baits in the active runs at each hole. This method is very effective, however it is not practical in large planting with sever vole population. An alternative method is to place the bait under a bait station, as will be described in the next section. This method is more practical and effective for vole control. It is also less hazardous to other animals and birds in the orchard.

- Broadcast baiting. This method is effective for control of meadow vole, but not for pine vole. Other animals and birds may be harmed by broadcast bait and, therefore, it is not recommended.

- Trail baiting. A trail building machine may be used to apply the bait in furrows. This method is not very effective for control of meadow vole and only slightly effective for pine vole.

- Spray. Zinc phosphide spray in late fall was found to be somewhat effective against meadow vole population. This practice is harmful to the environment and to other animals and, therefore, we do not recommend it.

Placing bait by hand under bait stations is a better way of controlling voles in apple orchards. The best time to apply these chemicals is late summer through early spring when there is little vegetation for these animals to feed on.

**Bait Stations**

The most effective bait station is the one that will provide dark shelter with some ventilation to prevent the bait from molding. Shingles, PVC pipes, metal sheets, split tires, and many other types of stations have been used to cover chemical baits. Metal stations may damage the blades of mowers. If you do use metal stations make sure to remove them in early spring.
Beyers from Virginia found that split tires were more effective than other stations that he tested. The tires are split in half along the thread. It is very important to place bait stations in the field by mid summer so the animals will get accustomed to their presence. However, there is still time to place the stations before any snow buildup.

**General Recommendations**

- Mowing is critical especially during late summer and early fall to prevent any over growth. Mow between rows and between trees in each row.
- Remove any shrubs and tall grass at least 200 feet around the orchard.
- Never place straw or any type of mulch around the tree that will attract vole.
- Place bait stations 2 to 3 months before baiting.
- Check bait periodically for mold.
- Move stations to active runs.
- Avoid placing bait immediately before or immediately after a rain storm.
- Zinc phosphate is not a good repeat bait.
- Read the label and follow it carefully.
- Acquire any necessary permits before you apply any type of bait.

**Vegetable Production and Pest Management**

**Anthracnose of Cucurbits**

Anthracnose, caused by the fungus *Colletotrichum orbiculare*, is an important disease of cucumber, muskmelon, and watermelon in the Midwest. Pumpkin and squash are reported to be less susceptible; however, mini-pumpkins in northeast Illinois became severely infected in 2004. This disease causes significant yield losses when conditions are favorable to disease development.

All parts of foliage, stems, and fruit can become infected. Symptoms of anthracnose are roughly circular lesions, light brown to reddish, that can reach 0.5-inch in diameter. Leaves may be distorted, and the center of the lesions may crack or drop out, creating a shot-hole appearance. On petioles and stems, lesions are shallow, elongated tan areas. On fruit, lesions are circular, sunken, water-soaked areas which first develop as the fruit approaches maturity. In the moist weather, these lesions turn black and are covered with pink spore masses.

The pathogen survives between crops on infected plant residue or infected volunteer plants and can be carried on seed harvested from infected fruit. Conidia (spores) are produced and disseminated primarily by splashing water and to a lesser extent by wind and on people and machinery. Spore germination and growth are optimum at 72- 81°F (22-27°C) and 100% relative humidity for 24 hours. Visible symptoms appear about 96 hours after infection. Several races of anthracnose pathogen vary in virulence on cucurbit hosts are known.

Anthracnose is difficult to manage once it becomes established in the field, thus practices should be employed to prevent contamination of clean fields. Cucumber cultivars resistant to anthracnose are available. Also, watermelon cultivars resistant to some races of the pathogen have been developed. Since the pathogen is a seed-borne fungus, planting should be initiated with pathogen-free seed. Deep plowing of crop residue immediately upon completion of the harvest effectively reduces the inoculum level and should be combined with a crop rotation schedule in which no cucurbits of any kind are grown for at least one year. Overhead irrigation should be avoided or minimized. Also, working in wet fields should be avoided. Anthracnose is controlled with foliar fungicide applications. Many protectant fungicides (e.g., chlorothalonil and strobilurins) control anthracnose.

Mohammad Babadoost (217-333-1523; babadoos@uiuc.edu)
Mohammad Babadoost (217-333-1523; babadoos@uiuc.edu)
This week’s words of wisdom ...

A regular contributor submitted the following quiz under the title, “Test for Dementia.” That’s probably not a P.C. title, and I’m not sure I want my score assessed on such a scale, but riddles are good ones anyway. So give it a try ... and be honest about whether you really got the right answers before looking.

Below are four (4) questions and a bonus question. You have to answer them instantly. You can't take your time. Answer all of them immediately. OK?

First Question:
You are participating in a race. You overtake the second person. What position are you in?

• Answer: If you answered that you are first, then you are absolutely wrong! If you overtake the second person and you take his place, you are second!

Try not to screw up in the next question. To answer the second question, don't take as much time as you took for the first question.

Second Question:
If you overtake the last person, then you are...

• Answer: If you answered that you are second to last, then you are wrong again. Tell me, how can you overtake the LAST Person?

You're not very good at this! Are you?

Third Question:
Very tricky math! Note: This must be done in your head only. Do NOT use paper and pencil or a calculator. Try it.

• Did you get 5000? The correct answer is actually 4100. Don't believe it? Check with your calculator! Today is definitely not your day. Maybe you will get the last question right.

Fourth Question:
Mary's father has five daughters: 1. Nana. 2. Nene. 3. Nini. 4. Nono. What is the name of the fifth daughter?

• Answer: Nunu? NO! Of course not. Her name is Mary. Read the question again.

Okay, now the bonus round:
There is a mute person who wants to buy a toothbrush. By imitating the action of brushing one's teeth he successfully expresses himself to the shopkeeper, and the purchase is done. Now if there is a blind man who wishes to buy a pair of sunglasses, how should he express himself?

• He just has to open his mouth and ask, so simple.
### University of Illinois Extension Specialists in Fruit and Vegetable Production & Pest Management

<table>
<thead>
<tr>
<th>Extension Educators in Food Crop Horticulture</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill Shoemaker, St. Charles Res. Center</td>
<td>630/584-7254</td>
<td><a href="mailto:wshoemak@inil.com">wshoemak@inil.com</a></td>
</tr>
<tr>
<td>Maurice Ogutu, Countryside Ext Center</td>
<td>708-352-0109</td>
<td><a href="mailto:ogutu@uiuc.edu">ogutu@uiuc.edu</a></td>
</tr>
<tr>
<td>Elizabeth Wahle, Edwardsville Center</td>
<td>618-692-9434</td>
<td><a href="mailto:wahle@uiuc.edu">wahle@uiuc.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Extension Educators</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Hoard, Mt. Vernon Center</td>
<td>618-242-9310</td>
<td><a href="mailto:hoard@uiuc.edu">hoard@uiuc.edu</a></td>
</tr>
<tr>
<td>Suzanne Bissonnette, Champaign Center</td>
<td>217-333-4901</td>
<td><a href="mailto:sbisson@uiuc.edu">sbisson@uiuc.edu</a></td>
</tr>
<tr>
<td>George Czapar, Springfield Center</td>
<td>217-782-6515</td>
<td><a href="mailto:gfc@uiuc.edu">gfc@uiuc.edu</a></td>
</tr>
<tr>
<td>Dave Feltes, Quad Cities Center</td>
<td>309-792-2500</td>
<td><a href="mailto:dfeltes@uiuc.edu">dfeltes@uiuc.edu</a></td>
</tr>
<tr>
<td>Russel Higgins, Matteson Center</td>
<td>708-720-7520</td>
<td><a href="mailto:rahiggin@uiuc.edu">rahiggin@uiuc.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Campus-based Specialists</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mohammad Babadoost, Plant Pathology</td>
<td>217-333-1523</td>
<td><a href="mailto:babadoos@uiuc.edu">babadoos@uiuc.edu</a></td>
</tr>
<tr>
<td>Raymond Cloyd, Greenhouse insects</td>
<td>217-244-7218</td>
<td><a href="mailto:rcloyd@uiuc.edu">rcloyd@uiuc.edu</a></td>
</tr>
<tr>
<td>Kelly Cook, Entomology</td>
<td>217-333-4424</td>
<td><a href="mailto:kcook8@uiuc.edu">kcook8@uiuc.edu</a></td>
</tr>
<tr>
<td>Mosbah Kushad, Fruit &amp; Veg Production</td>
<td>217-244-5691</td>
<td><a href="mailto:kushad@uiuc.edu">kushad@uiuc.edu</a></td>
</tr>
<tr>
<td>John Masiunas, Weed Science</td>
<td>217-244-4469</td>
<td><a href="mailto:masiunas@uiuc.edu">masiunas@uiuc.edu</a></td>
</tr>
<tr>
<td>Chuck Voigt, Veg Production (&amp; herbs)</td>
<td>217-333-1969</td>
<td><a href="mailto:c-voigt@uiuc.edu">c-voigt@uiuc.edu</a></td>
</tr>
<tr>
<td>Rick Weinzierl, Entomology</td>
<td>217-333-6651</td>
<td><a href="mailto:weinzier@uiuc.edu">weinzier@uiuc.edu</a></td>
</tr>
</tbody>
</table>

Return Address:
Rick Weinzierl  
Department of Crop Sciences  
University of Illinois  
1102 South Goodwin Ave.  
Urbana, IL 61801

---

[University of Illinois Extension logo]