

The Vegetable & Small Fruit Gazette

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Quote for Thought from [Pete Ferretti](#)

*Common sense is the least common of all the senses.
~The Lion, September 2006.*

Come to the Hort Show Dedication at 9 am Saturday, October 14th

Submitted by [Pete Ferretti](#)

The Penn State horticulture club is made up of students who are working toward a career in horticulture and landscaping. Each autumn, club members organize an important fundraising event and attraction - Hort Show. Visitors are invited to the Ag Arena (across from the football stadium) to come view the indoor gardens, purchase plants, bulbs, and a variety of local produce. Plant materials for sale come from donations from local nurseries. Profits are mainly used to send members to industry-related competitions such as PLANET Student Career Days, to provide monetary support to charitable organizations like THON, and to fund trips to flower shows, public gardens and parks to learn more about horticulture.

Hort Show is a Penn State tradition (this year is the 93rd annual show). Each fall the local community looks forward to attending it for quality plant materials, educational displays, and the expert advice provided by knowledgeable horticulturalists and landscapers. A great deal of work goes into preparation. The theme for this year's show is "Backyard to Backwoods". The show uses accents such as indoor water features, brick paver walkways, and hanging plant arbors that are all constructed by the students. This year's show will also feature a water wheel. The addition of plant material transforms Ag Arena into an indoor botanical garden. The show is open October 14 and 15, during the Penn State football home game weekend against Michigan. Bring a friend and come a little early on Saturday for the 9 am dedication and coffee, juice and doughnuts. The event is for anyone interested in horticulture. Right after the dedication there will be a free breakfast for everyone – until we run out of food.

Tomato Greenhouse and High Tunnel Short Course

Submitted by [Steve Bogash](#), Regional Commercial Horticulture Educator, Franklin County Cooperative Extension

Two locations and dates:

- Cumberland County Cooperative Extension Office, Carlisle, PA. November, 15, 2006
- Rural Electric Cooperative, Somerset, PA. November 16, 2006

The 2006 Tomato Greenhouse / High Tunnel School will teach new growers the latest techniques to produce high quality tomatoes for marketing outside of the regular outdoor growing season. Marketing tomatoes in the 4-6 weeks before and after the traditional outdoor production season has the opportunity to yield enterprising producers substantial profits. Topics will include: Economics and Market Considerations, Tomato Types and Varieties, Production Systems, Nutrient Management, Training and Staking, Pollination and Fruit set, Managing Pests, Harvesting, and Marketing. PDA pesticide credits will be awarded to licensed applicators. Join Penn State Cooperative Extension and your fellow growers for what should prove to be a very informative program.

This program will be repeated at both sites/ dates. You can choose which date and location is most convenient. Penn State programs are open to all persons regardless of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Cost of the program is \$75.00 and includes all handout materials, lunch, and break snacks. Preregistration is required by November 9, 2006. For more information or registration brochures, please contact Steve Bogash at 717-263-9226 for the Carlisle site or Tom Ford at 814-940-5989 for the Somerset site.

Powdery Mildew in Strawberries

[Kathy Demchak](#), Department of Horticulture

I've gotten a number of calls from around the state concerning powdery mildew on strawberry plants this fall. Whether this will translate into increased problems with powdery mildew next spring or not largely depends on weather conditions next year. However, it's probably a good idea to review the symptoms so you can tell whether powdery mildew is present in your fields, whether this fall or next spring.

Powdery mildew can be present on either the leaves or on the fruit. Usually the first symptom noticed is leaf curling, with purplish blotches appearing on the leaves. White powdery fungal growth is present on the lower leaf surface, and sometimes on the upper leaf surface. The fungal growth on the leaf undersides is difficult to see without magnification because the leaf undersides are light-colored. Typically, with June-bearers, we think of powdery mildew as affecting the fruit only when the problem is severe. However, with day-neutrals, it appears that in the fall the powdery mildew is primarily present on fruit, especially around the seeds, and also on either the

opened or unopened flower blossoms, with only small amounts present on the leaves. This is problematic because the powdery mildew is in close proximity to developing fruit and floral parts, and is causing greater fruit losses than are normally experienced with powdery mildew in June; Seascape appears to be especially susceptible. In addition, the infection is causing deformed fruit due to pollination problems. As a final problem, treatment with fungicides has had little effect. This may be because the fungus is better-protected in and on the flower blossoms, or perhaps because conditions are too conducive to fungal growth at this time of year.

Powdery mildew development is favored by conditions of high humidity and no rain – so it can be especially problematic in high tunnels and under row covers. Hot weather with low humidity impedes its development, as does constant rain (contrary to other fungal diseases). Consequently, cultural management strategies include any practices that reduce humidity, such as avoiding excessive vigor (in a day-neutral study at Rock Springs, this is really apparent), and controlling weeds. Effective chemical fungicides are Nova and Procure (both are in the same chemical class), Pristine, Cabio, and Abound (all three of these either have or contain an active ingredient that's a strobilurin). Softer, but effective, materials are sulfur and Stylet oil, which fit best for use either in the fall or early spring. Treat small areas with these last two to check for phytotoxicity under your conditions.

Thanks to Jim Travis and John Peplinski at PSU, and Bill Turechek at USDA-Beltsville for input on this problem.

The 2006 Southeast Strawberry Expo in North Carolina

Kathy Demchak, Department of Horticulture

The 2006 Southeast Strawberry Expo is being held at the Sea Trail Resort and Conference Center at Sunset Beach, North Carolina, on November 9-11. Intensive workshops “High Tunnel Production” and “Strawberry Plasticulture for New Growers” will be held during the morning on Thursday, November 9, with a bus tour of Indigo Farm, Rabon’s Strawberry Greenhouse, and Lewis Nursery and Farms during the afternoon. The tour concludes with a seafood dinner at Lewis Nursery. There are three breakout sessions on Friday which include presentations on strawberry diseases, mites, methyl-bromide alternatives, day-neutral cultivars, farms sales, people management, and a “technotrack” with information on sprayers, frost/freeze protection, high tunnels and new pesticides. Fred Funk will be a featured speaker during lunch, and will discuss farm sales during the afternoon. On Saturday, November 11, breakout sessions will have presentations on row covers, row middle weed management, marketing, hosting school kids on the farm, and growing strawberries organically. The main conference registration fee is \$130 for the first registrant from an operation with lower charges for additional attendees from the same operation. Workshops and the bus tour are additional. You must be registered by November 2 to avoid a \$10 late fee. For additional information, visit <http://www.ncstrawberry.com/> and click on the words “Southeast Strawberry Expo” - or get someone who’s “connected” to do this for you and print off a brochure.

The Organic Way – Using Tissue Analysis Recommendations on Organic Farms

Elsa Sánchez, Department of Horticulture

Note: Yellow Nutsedge Part II will appear in next month's Gazette.

Tissue testing is a common practice, especially in fruit production. Results can be used to monitor and modify nutrient management practices. Tissue analysis recommendations have not generally been developed for organic growers; however, with a little interpretation, they can be an important tool for nutrient management.

Many of the products to correct micronutrient deficiencies are restricted, meaning they can only be used with documented soil deficiency. Tissue testing is acceptable to document deficiency according to Pennsylvania Certified Organic. However, as when applying any product to your fields, include your certifying agency in your decision to avoid the risk of compromising your organic certification.

National Organic Standards states that “Soil deficiency must be documented by soil testing”. Tissue testing levels can be categorized as deficient, low, normal, above normal and excessive. The category low is intended to indicate a level below optimal and as such is a deficiency. Check with your certifying agency to verify this interpretation; Pennsylvania Certified Organic indicated that a low status would be considered a deficiency.

Below are products recommended by the Penn State Agricultural Analytical Services Laboratory for correcting below normal nutrient levels along with some other alternatives. Also indicated is whether or not they are prohibited, restricted or allowed in organic production according to the Organic Materials Review Institute's (OMRI) Generic Materials List.

Nitrogen. Specific nitrogen products are not recommended for some crops. Instead a suggestion for increasing the rate of nitrogen application by 10 percent for each 0.1 percent that the sample is below normal is included. Ammonium nitrate, ammonium sulfate and urea are sometimes recommended – these are all prohibited in organic production. Compost that meets the requirements of the National Organic Standards can be used as well as a host of other organic fertility products that can be purchased.

Phosphorus. Superphosphate is often recommended to correct below normal phosphorus levels in tissue test analysis. It is prohibited in organic production. Compost that meets the requirements of the National Organic Standards can be used as well as a host of other organic fertility products that can be purchased.

Potassium. Sulfate of potash-magnesia (Sul-Po-Mag) is recommended if magnesium levels are also below normal. Sul-Po-Mag is allowed in organic production. Potassium sulfate is allowed if it is from a nonsynthetic source. Synthetic potassium sulfate products are prohibited.

Calcium. Lime in the form of limestone or calcium sulfate (gypsum) is allowable to increase calcium levels. Burned, hydrated and slaked lime are prohibited for use as a fertilizer.

Magnesium. Sulfate of potash-magnesia (Sul-Po-Mag) is allowed in organic production. Magnesium sulfate (Epsom salts) is allowed only with a documented deficiency.

Manganese. Manganese sulfate and manganese chelate are allowed only with a documented deficiency.

Iron. Ferrous sulfate and iron chelate are allowed only with a documented deficiency.

Copper. Copper chelate is allowed only with a documented deficiency.

Boron. Solubor is recommended on tissue test analyses for correcting below normal boron levels. It is allowed only with a documented deficiency. Borax and sodium borate are also allowed only with a documented deficiency.

Zinc. Zinc chelate and zinc sulfate are allowed only with a documented deficiency.

Different brands can have different ingredients accompanying the active ingredient and those ingredients may not be in compliance with the National Organic Standards. In those cases, the product would be prohibited. As an example, some chelates could be prohibited depending on the chelating agent. So always check with your certifying agency before applying a product.

Upcoming Meetings

If you have a meeting you would like to announce, please send the meeting title, date, location and contact information to esanchez@psu.edu.

Local

November 15, 2006. Tomato Greenhouse and High Tunnel Short Course, Cumberland County Cooperative Extension Office, Carlisle, PA. For more information or registration brochures, please contact Steve Bogash at 717-263-9226.

November 16, 2006. Tomato Greenhouse and High Tunnel Short Course, Rural Electric Cooperative, Somerset, PA. For more information or registration brochures, please contact Tom Ford at 814-940-5989.

Regional

October 26 & 27, 2006. Greenhouse Design & Operation, Cook College Office of Continuing Professional Education, New Brunswick, NJ. For more information contact Karen Tizzano at ktizzano@rci.rutgers.edu.

November 9-11, 2006. 2006 Southeast Strawberry Expo, Sea Trail Resort and Conference Center at Sunset Beach, North Carolina. For additional information, visit <http://www.ncstrawberry.com/> and click on the words "Southeast Strawberry Expo".

National

None listed at this time

International

None listed at this time

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The newsletter is also posted within three days on the Department of Horticulture Vegetable program website at: <http://hortweb.cas.psu.edu/extension/veg crops/newsletterlist.html>.

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