



Pulaski County Master Minutes

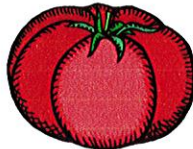
July, 2011

<http://www.arhomeandgarden.org>, <http://www.uaex.edu/pulaski/>

Volume 20, Issue 7

TASTY TOMATO TIPS

By Betty Deere



You say tomato, I say patooie! My tomatoes, although not too bad, have never been the greatest. They might be a little mealy, they might be a little hard, they might be a little small, you get the picture – not terrible, not great. That's why I'm writing this article, since this summer I've been avidly researching how to grow mouth-watering, tasty tomatoes like my dad used to produce every summer. Just never have managed to do that, and I r-e-a-l-l-y like tomatoes.

So what's the formula? Well, one thing all successful tomato-growers agree on is the necessity of good soil. You can't get over it and you can't get around it: it's just basic: good soil is essential for good tomatoes. So here are some tips I've discovered for turning your soil into a gourmet blend for breeding tasty tomatoes. First, something we all know, but bears repeating anyway: test your soil. Tomatoes need a slightly acidic pH of 6.0 to 6.8 plus a well-balanced supply of calcium, potassium, phosphorus and nitrogen to make big, healthy, juicy tomatoes. How to achieve that proper mix? Read on.

Compost, compost, compost. According to a Stephen Reiners, PhD, associate professor of horticultural sciences at Cornell University, we should compost around our tomatoes 2-3 times a season. With a title like that, he should know, I guess, although I've never done that. And since we live in Arkansas and have two seasons to grow tomatoes, the math says we should be mulching 4-6 times a summer. (This adds up to be a big clue as to why my tomatoes are always lack-luster.)

Dr. Stephen suggests using bio-activated compost tea, a fancy name for soaking compost and bagged worm castings, while keeping the conglomerate

aerated. Keep mixing and stirring and soaking until you get "tea". (It's good on everything; everything you "plant" that is; not directly on what you eat, of course!)

Advocating here for organic fertilizer, my dad always poured so much non-organic fertilizer and chemicals on his tomatoes that one year he had to burn off his garden patch, and I believe he then covered it for a period of time. This was all to kill off a withering, stunting, fatal problem for his entire garden. (But the next year he went right back to chemicals and crappy stuff – he had a hard time changing the way he did anything!) My tomatoes last longer than yours! Here in Arkansas we have such long summers/heat we easily get two seasons of tomatoes. But we can help stretch that out and have tomatoes right up to frost (hopefully) by taking a few simple actions.

(1) Give 'em room; give 'em land -- lots of land, underneath the starry skies. Two or even three feet apart is a good rule of thumb -- plants too close together don't do well. They like to hug each other which has a smothering effect, no air circulating.



(2) Bury the plant halfway up the stem. Why? It makes for more roots, which makes for a stronger better plant, which makes for more and tastier tomatoes. Also you don't want to remove the branches; because roots grow from them, too. (This is contrary to everything my dad ever taught me, but as I said above, father did not always know best.)

(3) Put the pruners down! I know pruning sometimes just "gets good" to gardeners, me too. But removing branches gives you bigger tomatoes, but also gives fewer tomatoes. (It's my experience that most men like "bigger" and most women go for "more".) The more branches you leave on the plant, the more fruit you get at different times, allowing

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your plant to develop along in natural stages. This way, all your eggs are not in one basket, so if a cold wet spell happens, you don't lose everything.

(4) Cage them. Another thing most gardeners know and do already but again, it's worth mentioning. Cages are made of concrete-reinforcing wire bent into 3-foot rounds. The goal? Keep the vines off the ground, where they pick up bugs, diseases, and ugly spots. Also it keep them away from each other, so you get good air circulation (back to the "give 'em room" tip).

(5) Check calcium. We all learned in Master Gardener class (and tried to remember on the test) that tomatoes that don't get enough calcium get blossom-end rot, a very ugly awful thing. It's a dry, sunken rotted end where the flower once was. The way I devised to remember what prevented blossom rot was associating it with tooth cavities -- get it? We need calcium to help keep our teeth from rotting; likewise, tomatoes need calcium to keep their "ends" from rotting. Crushed eggshells or dolomitic lime sprinkled around tomatoes increases the calcium content. So make sure your soil is slightly acidic, has enough calcium, and don't forget to water regularly so the plants can take up the calcium.

(6) Last but most important, tomatoes need at least six hours of sunlight -- and not just for optimum photo-synthesis but for protection from disease. Plenty of sun allows the dew and rain and sprinkler water to evaporate off the plants quickly -- plenty of breeze and air flow helps too.

Aha! This last tip is my main excuse for my not-so-hot tomatoes, since my yard is located amongst many trees. Six hours of sun is impossible, except where my yard connects to the street edge, and I don't care what anyone says, that's just NOT a good place for tomato plants. I also didn't compost nearly enough and making the tea all summer long was too much for me. Maybe I'll do better with that this summer. So there you have it -- you could say that the building blocks for tasty tomatoes are six hours direct sun and a nice breeze, organic fertilizer very often, and plenty of room. Otherwise, like my past experiences, they could perhaps survive o.k., but would never win the "tasty tomato" prize.

Mount Holly Garden Series for 2011



Lectures are at 9:00 on the 3rd Saturday morning of each month. We meet in the shade of the historic bell house in the middle of the cemetery.

Sponsored by the MORE Group, a downtown ladies group, a \$5.00 suggested donation benefits Mount Holly Cemetery.

Here is 2011's remaining schedule:

July 16, Phil Cato (About Vase) Flower Arranging
August 20, Carnivorous Plants
September 17, Beth Phelps, Getting Your Garden Ready For Winter
October 15, Susan Rose, Bulbs In Your Garden For A Burst Of Color



Checklist by Carol Randle

Summer is really here with hot, dry weather. Temperatures are heating up, natural rainfall can be hit and miss and insects and diseases have found their foothold. Try to garden smart, working early in the day. Watering in the early daytime hours is also better - the foliage dries quicker, the moisture can work its way into the root profile before the heat stresses the plants, and we lose less water to evaporation. Remember to avoid peak hours when watering. Pay close attention to raised beds and container plants. Cutting flowers for indoor bouquets and harvesting vegetables in the early part of the day can also improve their lasting power and flavor. Mulching will help to keep out the weeds and pests and will preserve moisture so that you don't have to water as often, and will improve your soil and your garden's overall appearance.

FLOWERS

Keep flower beds well weeded. Remove faded blooms. Make sure you keep the soil moist but not soggy around ferns. They may become dormant if they get too dry. Now is the time to pick those beautiful perennials for a fresh bouquet indoors. This will also encourage more blooms on most perennials. Salt deposits can build up in the soil of container plants. This will cause the foliage to burn. Flush out these deposits with water once during the summer. If your Gardenias and Hydrangeas need pruning because they are big and overgrown, now is the time to do it as they finish blooming. They set buds in the fall. Shear back Gardenias by selectively thinning branches and growth. Hydrangeas need older canes to be removed down to the ground line. Lightly fertilize after pruning. Heat and humidity may take their toll on humans, but tropical plants are in their element. The more humidity, the better they like it. Since we grow most of our tropical plants in containers, water is still a vital element for success. Soil in containers dries out much more quickly than soil in the ground. Because we water so frequently, we also need to fertilize more often. Water soluble fertilizers have less potential to burn our plants, but even so, we don't want to use fertilizer amended water on bone dry plants.



FRUIT

Rabbiteye Blueberries, Blackberries, and Peaches are in season. Keep canes that are bearing fruit moist throughout the summer. Remove old canes after they have finished producing fruit. If your fruit trees appear to be producing too much fruit make sure you thin it out some. Keep grass around your fruit short. Grass deprives the trees of nitrogen. Throw away any fruit you find that has been affected by scab (a fungus).

HERBS

Harvest blooms of Lavender now to keep the plant tidy and encourage more blooms. Cut sprigs of Rosemary and freeze whole for future use. Cut back about three-quarters of the new growth on your Thyme plants regularly throughout the summer. For a nice fragrance in your kitchen, tie several branches of Sage together and hang it

upside down in your kitchen. Pinch the stems of Basil regularly to prevent flowering. Harvest about once a week. Clip the flower stalks off Garlic. Once the leaves have turned brown Garlic can be harvested.



TOMATOES

If you are growing Tomatoes - the number one vegetable in the home garden- don't be alarmed if your plants quit setting fruit in the hottest days of summer. Many varieties won't set fruit if the daytime temperatures exceed 95 degrees and the nighttime temps stay above 75 degrees. Keep the plants watered and mulched and they should rebound and begin to set fruit once the temperatures settle down. If the plants are strong and viable they can continue to bear through frost. If blights have taken their toll, consider starting some new plants from the suckers of your existing plants, or buying new plants. Blossom End Rot is a calcium deficiency controlled by Stop Rot. Even moisture helps prevent cat-facing and fruit cracking. Mothballs around the base of cucurbits control vine borers.

VEGETABLES

While many people may be longing for the cooler temperatures of fall, fall vegetable gardening is upon us. You can plant all of the summer crops again starting in mid July through early August for a fall harvest. By early August it is time to start planting Broccoli, Cabbage, Onions, Carrots and other fall crops. Fall gardens aren't as easy as early spring gardens, because it is hotter and drier, but also diseases and insects are waiting to attack. Monitor your garden frequently and catch problems as they arise. In addition to planting more vegetables, gardens that have been watered and maintained are producing a bountiful harvest. Tomatoes are in season, and nothing is better than biting into a home grown juicy tomato. Remember that Peppers are heavy feeders and to keep them producing you need plenty of nutrition. Use caution when applying fertilizer or pesticides when it is hot and dry. Make sure there is ample moisture in the ground and in the plants before fertilizing. Avoid using many pesticides. If you have to spray, do so very early in the day after you have irrigated.



INSECTS

When temperatures heat up and dry weather occurs, some insects start to build up in large numbers. Aphids, white flies and spider mites are all poor swimmers and thrive in dry conditions. Using a spray from the garden hose can knock them down, but pay attention and try to catch them when they get started. There are numerous insecticides on the market that can work. As with any pest problem, the sooner you catch them, the easier they are to control. Other insects which are becoming a problem include grasshoppers. They can ravage a plant in a short amount of time, so move quickly when you see problems.

ROSES

Lightly prune bush Roses to encourage fall bloom. Continue spraying Roses for Black Spot. Use a registered fungicide (i.e.. Funginex) or an organic one (i.e. 4 t. baking soda +1 t. liquid soap/or vegetable oil per gallon of water) on affected foliage (try not to spray the soil) for fungal problems.

PERENNIALS

Perennial plants that are in their prime now include the Echinaceas (Coneflowers), Rudbeckia, Hostas, and the Agastache or Hyssop. Coreopsis will be ending its bloom cycle at the end of summer, so allow the last set of flowers to set seed. Save the seeds to sow in October. Hardy Hibiscus plants are blooming now as well. The dinner size blossoms are a show stopper. Be sure to give them ample moisture and sunlight for the best performance. Varieties range in mature size from 24 inches to six feet or more. Choose based on maximum size. Flower colors range from whites, pinks, and reds.

ANNUALS

Mid to late summer is a great judge for heat tolerant annuals. Geraniums have gotten smaller, if they are blooming at all, and Petunias and Callibrachoa are slowing down if they have not been kept fertilized. Sweet Potato Vine, Angelonia, Lantana and Melampodium are blooming like crazy. The new Snow Princess Lobularia has not stopped since it was planted, and the Diamond Frost Euphorbia looks like a mist of white. Deadhead plants as needed and cut back leggy

annuals. A shot of fertilizer and a quick haircut can help them rebound. If it isn't a lost cause, they can be back in bloom in no time and continue to bloom until a frost. For those that are still blooming well, don't cut them back, but do continue to water and fertilize. Annuals are in the ground for one season, so we want to get our monies worth of blooms. If they are too far gone to save, go buy some new plants. In today's nurseries, annuals are available almost year-round.



SHRUBS

Many gardens are a sea of color in the spring, but by midsummer we have green gardens. If your garden needs some color consider Shrubs and Perennials that bloom now. Crape Myrtles are a standard bearer for summer color and they come in all sizes. Clethra is blooming now, along with Althea and Summer Spirea, and many Hydrangeas are still blooming their hearts out. Repeat bloomers like Endless Summer and Blushing Bride will continue to bloom Through Fall.

Roses are blooming and perennials such as Liatris, Lilies, Cannas and Elephant Ears are in season. Hostas and Heucheras look good all summer with regular water and fertilizing and Hardy Hibiscus has large showy flowers now. If you need color in the garden, go get some. It may not be ideal planting conditions, but container grown plants can be planted year-round. All you need is water and mulch.

LAWNS

Deep water lawns, trees, and shrubs to encourage deep rooting and to avoid heat stress. Watch out for yellow patches, leaf curl, or poor growth. Increase watering if you notice any of these signs. Set your lawnmower at a higher level. Longer grass will shade the roots from heat. Don't forget to save your clippings for the compost pile but never add your cuttings after a weed treatment. Feed lawn with slow release nitrogen fertilizer. If you want to control any weeds, now is the time to do it before they get too large. You will find that some weeds are easier to kill than others. Nut Sedge is tough. Sledgehammer is probably your best bet. Always read and follow label directions.

If you want one final application of fertilizer, mid to late August is the time to do it. Pay attention to weather conditions.



MOISTURE AND NUTRITION

The main ingredient for success in a summer garden in Arkansas is ample moisture. Flowers will continue to bloom if they have enough to drink. If summer annuals are beginning to get leggy, pinch them back and lightly fertilize. Remember when using fertilizers or pesticides that it is important to have ample moisture in the plants before applying products. If the plants are too stressed, they may take up all the chemicals and suffer burn. Wave Petunias should also be constantly blooming, provided you have been fertilizing. These plants are heavy feeders and will stop blooming without ample nutrition and water. Impatiens need water to thrive, but will take the heat well. If you need extra summer color, plants are still available at nurseries and garden centers statewide. Tropical flowering plants can really stand up to the heat and give you fabulous blooms up until frost. Fertilization is important-especially if you are growing them in containers. Container grown plants often need daily watering in the summer months. This constant watering leaches nutrition out of the soil quicker. Use a slow release granule and follow that up with a water soluble form. Fertilizing every two to four weeks should give you outstanding results.

JULY BLOOMS

Althea, Anise Mint, Artemisia, Balsam, Beautyberry, Belamcanda, Buddleia, Butterflyweed, Cannas, Chive, Cleome, Clerodendrum, Coneflower, Coreopsis, Crape Myrtle, Crinum, Dahlias, Daisies, Echeveria, Euphorbia, Feverfew, Gaura, Gladioli, Hibiscus, Hostas, Hydrangea, Kerria, Lantana, Liatris, Lilies, Lythrum, Lycoris Marigolds, Marjoram, Miscanthus, Nicotiana, Oxalis, Petunias, Phlox, Portulaca, Roses, Rudbeckia, Salvia, Scabiosa, Snapdragon, Tuberosa, Verbena, & Zinnia.

Mackie Hamilton Greenhouse Grant Announcement



Photo Courtesy of David Werling

Job Descriptions

By Lorraine Hensley



Most of us have worked at one thing or another either for ourselves, a private sector employer, or perhaps for some segment of our government. In order to do those jobs, we need to know exactly what is expected of us so that we can hold up our end of the employee/employer relationship. Vital to the whole process is something named a "job description." We need to know what to do in order to do it. Our reward is a paycheck and the employers reward in that a needed work function is competently performed. Plants and people pretty much follow the same game plan here. Purpose is different as are the rewards – although probably not so different as it may seem. The ultimate reward for plants is simply survival and the paycheck for workers has a great deal to do with their survival as well. Takes money to purchase food, shelter, clothing, etc. and all those things must be purchased with some form of money; which is when that paycheck steps center stage.

All plants have built in job descriptions. And they perform the same functions with the shared goal of survival for the lifespan of that plant. Some vital job descriptions of plants which we seldom consider are the processes of Respiration, Transpiration, and Translocation. Each function is just as important to plant life as the other for they certainly affect plant health and survival which, in turn, affects ours.

Respiration is a chemical process of oxidation where sugars and oxygen biologically “burn.” This process acts slowly without any rapid heat buildup. “Respiration equals a process of oxygen and sugars consumed (oxidized) to produce other substances needed for growth and survival.” By-products of this process, carbon dioxide and water of respiration are released into the atmosphere as is any excessive heat that may result from the process.”



Transpiration takes place when water evaporates from plant leaves. The combination of evaporation from soil and transpiration from plant leaves is called evapotranspiration. (Seems everything needs a language of its own and plant life processes provide no exception.) Waxy cuticles on leaf surfaces (stomata) restrict diffusion which means that most water vapor, oxygen and other gases must pass through the stomata. These small openings are usually found on both the upper and underside of the leaf although occasionally they are found only on the leaf underside. Stomata are surrounded by guard cells which control the opening and closing of the stomata. When plant roots become dry these guard cells close the stomata in order to conserve moisture for that plant. This is a survival move for if the plants transpire more moisture than they can absorb through their roots they will die.



Translocation is a term used “to describe movement of substances through plant leaves.” This movement involvement involves two very complex tissue system; xylem and phloem“. The primary purpose xylem is to move minerals and water from the roots to the plant foliage. Sugars and other dissolved foods move from the plant foliage to all non-green cells the phloem. The xylem and phloem also have secondary and interconnecting paths that allow them to reverse their primary functions under certain conditions.” Additional research on this function can keep many a master gardener busy for hours. As professionals in the discipline continue to identify what plants do and how they do it.

Specific information for this article came from How To Grow Fresh Air by Dr. B C. Wolverton. Check your local bookseller for a copy. It’s a wonderful read.

**PULASKI COUNTY MASTER GARDENER
MEMBERSHIP MEETING by Bren Coop
Tuesday, June 21, 2011 11:30 a.m.
St. James Methodist Church**

President Jet Cuffman called meeting to order at 11:30 a.m.

Jet recognized the death of Michael McCourt who was a member of the Amy Sanders Library committee.

Jet recognized Tracy Rhodes who was returning to active status.

ANNOUNCEMENTS:

David Werling Chairman of directory asked those who needed pictures etc. to meet down front.

Marcella Grimmatt Travel Chairperson announced the North Little Rock tour of gardens planned by Arline Jackson will be Saturday, June 25th.

Marcella Grimmett announced The Ice Cream Social and Tour of Master Gardener Projects will be July 19th. The Ice Cream Social will be at the Art Center from 9:30a.m. to 11:30 a.m. The projects on tour will be Historic Arkansas Museum, Curran Hall, the Contemplation Garden and Art Center. Marcella encouraged members to stay tour the Art center and eat at the Art Center restaurant. An email with details will be sent.

Beth Phelps announced that the Wildwood Asian Garden won Master Gardener Project of the Year at the State Meeting.

Beth Phelps announced that mentors are needed for the new class and asked for volunteers. Contact her is you are willing to be a mentor.

Beth announced that applications for the fall Master Gardener class will be accepted until the end of July.

Patti Womble announced that \$19645.10 had been raised for the new greenhouse and repairs on the old greenhouse. She thanked the committee, to all that had donated.

Patti Womble announced the Stella Boyle Smith Trust gave a \$10,000 gift for the new greenhouse project and that the new greenhouse would be named the Stella Boyle Smith Greenhouse.

Mike Mayton of the Stella Boyle Smith Trust thanked the Pulaski County Master Gardeners for giving the trust the honor of contributing to the new greenhouse and support the Master Gardener projects. He announced that the Stella Boyle Smith Trust would like to make another \$10,000 gift in honor Mackie Hamilton on her birthday.

Marcella Grimmett introduced the program: Water Conservation in the Landscape by Mark Brown, Pulaski County Extension Agent – Water Conservation.



Upcoming Events By Libby Thalheimer



July 10, 4:00-7:00 p.m.

"Adult Naturalist Series: How to Design & Build Your Own Labyrinth" Gardening 101 Workshop @ Garvan Gardens in the Magnolia Room presented by Roxanna Rose. Space is limited. Advance reservations and pre-payment required. Cost is \$10 for GWG members; \$19 for non-members

July 13, 6:30 p.m.

Mark Brown, Pulaski County Extension Agent, Water Conservation Workshop @ Central Ark Library in Otter Creek.

July 19, 9:30 a.m. – noon

"Bonsai" Gardening 101 Workshop @ Garvan Gardens in the Magnolia Room presented by Norma Welch and Weldon Adcock.

July 19, 1:00-3:00 p.m.

"Herbal Vinegars and How to Use Them" Gardening 101 Workshop @ Garvan Gardens in the Magnolia Room presented by Debbie Tripp.

July 28, 9:30 a.m.- noon

"Bromeliads and Other Great Indoor Plants" Gardening 101 Workshop @ Garvan Gardens in the Magnolia Room presented by Nancy Peters.

July 28, 1:00-3:00 p.m.

"Cold Hardy & Indoor Tropicals" Gardening 101 Workshop @ Garvan Gardens in the Magnolia Room presented by Charles Harper.



DIG IN HERE...

For answers to your gardening and horticultural problems, try these helpful resources:

- Master Gardener Website:

<http://www.arhomeandgarden.org/mastergardener/mastergardeneronly>

Username: mastergardener
Password: compost

- PC Cooperative Extensions Website:

<http://www.uaex.edu/pulaski/mastergardeners/default.asp>

- U of A Cooperative Extension Website:

<http://www.arhomeandgarden.org>

Pulaski County Cooperative Extension Service
2901 W. Roosevelt Road
Little Rock, AR 72204
501-340-6650



Pulaski County Master Gardeners are trained volunteers working with the University of Arkansas Cooperative Service and Pulaski County Government to provide demonstration gardens and horticultural-related information to the residents of the county. In 2010, these volunteers gave **22,987** hours of service. Elisabeth J. Phelps, County Extension Agent, Staff Chair



Everyone is encouraged to submit interesting information, committee reports, newsworthy photos, etc. to the newsletter. Bring your information to the Master Gardener meeting, or

send it to:

Jennice Ratley
22 Cobble Hill Road
Little Rock, Ark. 72211
gardenrat@comcast.net
412-8299

The deadline is the **second Friday** of each month. For late breaking news after the deadline, send information to:

Beth Phelps
Pulaski County CES
2901 W. Roosevelt Road
Little Rock, Ark. 72204
bphelps@uaex.edu
340-6650

Master Minutes Staff



Bren Coop
Betty Deere
Lorraine Hensley
Helen Hronas

Jennice Ratley
Carol Randle
Phyllis Barrier
Libby Thalheimer

Photographers



Cheryl Kennedy
David Werling
Lynn Winningham
Bonnie Wells

Margaret Schultz
Herb Dicker
Ann Owen
Martha Bowden