

MADISON COUNTY 2018 Master Gardener

The Bridge to Knowledge
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Madison County
Master Gardener

U^{of}EXTENSION
INSTITUTE OF AGRICULTURE

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From The President

This will be my final letter as your president. The last two years have been quite a challenge as our membership as well as the number of projects have rapidly expanded. It has been a pleasure to become better acquainted with many of you through my four years on the board.

I would like to thank those who served alongside me over the last two years. Glen Fesmire, Wayne Gerler, Mary Kay and John Havranek, Rob Johnson, Vicki Bunch, Susan Luckey, Tammy and John Overby, Bill Wyatt and Christine Warrington. Their commitment to serve MCMG is greatly appreciated and helped the organization run smoothly. Tammy has done an outstanding job as treasurer. Mary Kay kept us on track with detailed minutes.

Being involved in MCMG has truly been a blessing. I am especially grateful to Celeste Scott for promptly and efficiently handling every request I sent her way. We are fortunate to have her on our team.

May your Christmas and New Year be filled with the love of family and friends. Elizabeth Edwards President MCMG

Elizabeth Edwards
President MCMG



Merry Christmas

M G CORNER

MCMG Christmas Party

When: Friday, December 14th at 6:30pm

Where: West TN Research & Education Center

Fun Activities

- Gift Exchange for those that would like to; \$20 limit; Gardening theme
- Handcrafted Christmas Decoration Contest
- Homemade Christmas Cookie Contest - Half dozen per entry please
- Yummy Food!!

We have had sing-ups for those who would like to contribute at the past few meetings. If you haven't signed up, or would like to help with this event, please contact Kathleen Trent at Kathleen.trent@gmail.com

November: Smoketree 'Velvet Cloak'

Submitted by James Newburn, UT Gardens, Knoxville

Fall often gives us a chance to examine and remind ourselves of those landscape plants that provide more than one season of interest. I have been struck with the beautiful fall color that *Continus coggudria* "Velvet Cloak" exhibits. Commonly called smoketree or smokebush. *Continus* is typically grown as a multistemmed shrub, though it is sometimes seen in a tree form. The value of this species in late spring or early summer is the fantastic, delicate pubescent (hairy) pink panicles (the structure that hold the insignificant flowers), that emerge and give a cloud of "blooms" above the foliage. Commercially, there are several purple leaved cultivars available that are very popular as well as green leaved selection "Velvet Cloak" is stunning with the pink blooms above the dark purple foliage in spring but equally impressive with striking red, orange and russet fall foliage.



Weather: It looks like an early and maybe a severe winter is upon us. What if the ice-free arctic allowed the ocean currents to change and threw the planet into global cooling rather than global warming? The agricultural areas of the world might be considerably changed. Climate change would have a whole new twist. Maybe it would be better than having our sea ports go under water before the end of the century!

2018 Plant Sale: We planted a few hardy begonias and bottlebrush buckeyes, Carol and I, but nothing else. Fall planting doesn't look like it will happen for us. The cold weather, my back and all of our travels seem to be three strikes and fall planting is out. I am now seeing a physical therapist about my back and it will be better by spring-if it is going to get better. Right now, I am just not physically capable of doing much.

Do Now: We have spent several days raking and grinding leaves spreading them as mulch. This has been done in short spurts as we could handle it. The leaf mulch should keep some semi-hardy plantings alive and certainly looks better. Many leaves are still to come down. Maybe the snow will bring them down.

Rain lilies: My seedling rain lilies survived the neighbor trying to freeze them last year as well as the rest of the winter. They are multiplying rapidly and even produced a single flower this fall. It was larger, taller and paler pink than the other pink rain lilies which we have. So, it is something different than we have and, on its way, to multiplying for all of us...

The Best Idea I Have Ever Heard: There is a man in the middle of Nebraska who has a greenhouse containing 19 kinds of producing citrus trees which he grows with essentially no heating bill! Now that sounds impossible but it isn't. He started with a 225' loop of several 4" pipes buried 8 feet below the soil surface where the temperature is a constant 51 degrees. Such pipes have been used to feed air to a heat pump which is then highly efficient and can be used to heat a home or any building. But a geothermal heat pump still requires considerable electricity. What this man did was to replace the heat pump with a large blower and build an efficient solar greenhouse over the blower. If the temperature goes below 52 degrees in the greenhouse the blower turns on and sucks 52-degree air from the buried pipes into the greenhouse to heat it. Likewise, if the temperature goes above 80 degrees in the greenhouse the blower kicks on and sucks 52-degree air into the greenhouse to cool it. He has used this greenhouse with no other heat source for 20 years and has large bearing citrus in it. This fascinates me! What if one used solar panels and batteries to power the blower. The greenhouse would then require only water. Someone really needs to investigate this system at the University level. It should work fine anyplace where the ground is 50 degrees or warmer which is much of the world. It could be used to grow vegetables year around and enough such greenhouses could end hunger on the planet.

Colorado: The architect who has been designing our son's new Colorado home has resigned his position and moved to another city. My current assumption is that a move to Colorado is unlikely to occur any time soon.



Organic Gardening-How Plants “Eat”

Last month I wrote about soil structure and the need for there to be spaces in the soil for the air and water to penetrate, all made possible by the addition of organic matter.

One result of improving your soil: Comparing different soil types.

Sandy soil holds 1 unit of water

Clay holds 4 units of water

Soil with organic matter holds 16 units of water. This is a huge benefit and becomes even more important when you understand how plants “feed.”

The area around the roots of a plant is called the rhizosphere. Plants create chemicals that they secrete through their roots which attract bacteria and fungi that eat what the roots exude. The bacteria and fungi, in turn, help decay organic matter and their waste (soil nutrients) can be taken up by the roots. Bacteria and fungi keep nutrients where they are needed for the roots to access. Worms pull organic matter down into the soil which is then processed by the bacteria and fungi. If there is no air and moisture this process stops working. Mycorrhizal fungi has a symbiotic relationship with plants that helps protect the roots and also extends the root’s reach.

Soil acidity impacts how many nutrients a plant will absorb.

pH is a scale from 0 to 14. Lower than 7 is acidic, above 7 is alkaline

13 is bleach (base)

9 baking soda

7 is distilled water (neutral)

2 vinegar at 5% and lemon

1 sulfuric acid

Low pH means more hydrogen in the soil and pH influences what types of micro-organisms that will live in the soil.

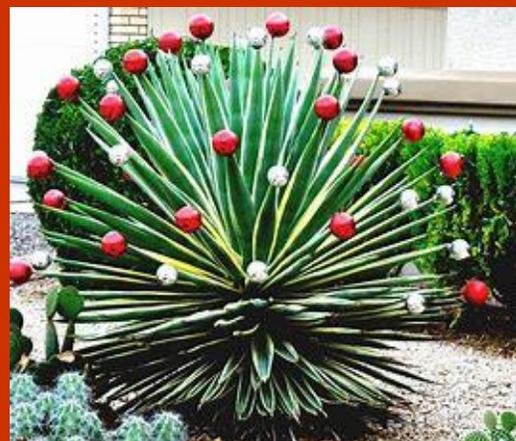
Much of the soil around our area is about 6.5 pH which is ideal for many types of plants.

However, if you want to grow blueberries, or get blue hydrangeas on your bushes, our soil is not acidic enough and steps must be taken to make and keep the soil more acid, down around 4.5 to 5.5 for blueberries. Espoma makes an organic soil acidifier and you can get used coffee grounds from your local coffee shop to add around your bushes. Just don’t put them on so thick that they cake.

Soil tests are not expensive and can be done before your gardening season starts. As you add organic matter and amendments to your soil, it is changing, so testing every two years is a good idea.

The great thing about gardening organically, (besides the produce you get) is, it is pretty hard to burn the plants like you can do when applying non-organic fertilizers and the soil organisms stay happy and healthy to support the next crop.

There is also the peace of mind that comes with gardening organically. My kids played in the garden dirt for years while I worked out there and they ate veggies right off the vine. I never had to worry about them eating anything toxic.



Recipes from Summer Celebration Meet and Greet

Chocolate Goopy Butter Cookies

1 (8 oz.) brick cream cheese, room temp
1 stick butter, room temp
1 egg
1 tsp vanilla extract
1 (18 oz) box moist chocolate cake mix
Confectioner's sugar for dusting

Preheat oven to 350F.

In large bowl, cream butter and cream cheese until smooth. Beat in the egg. Add vanilla. Beat in cake mix. Cover and refrigerate 2 hours.

Roll chilled batter into 1 inch balls and then roll in confectioner's sugar. Place on ungreased cookie sheet. Bake 12 minutes @ 350F. Cool completely then sprinkle with more sugar if desired.

LEMON GLAZED COOKIES

Cookies:

1 cup	Unsalted butter, room temperature
1/3 cup	Sifted powdered sugar
1/4 cup	Granulated sugar
1 cup	All-purpose flour
2/3 cup	Cornstarch
1/2 tsp.	Lemon zest

Lemon glaze:

2 1/2 cups	Sifted powdered sugar
1/2 cup	Unsalted butter, melted
2 Tbs	Fresh Lemon juice
1 Tbs	Grated Lemon zest

Preheat Oven to 350F. Using an electric mixer at medium speed cream butter and sugars. Sift together flour and cornstarch. Add to batter along with the lemon zest. Continue mixing until dough is softened (About 1 minute). Drop batter by teaspoonfuls onto ungreased baking sheet and bake 12 to 15 minutes (tops of cookies will not brown). Prepare glaze by combining powdered sugar, butter, lemon juice, and zest. Remove cookies to rack and frost with glaze while warm. *Yield: 36*

Butter-Pecan Blondies

ACTIVETIME: 20 MiN. TOTAL TIME: 45 MiN., PLUS COOLING i MAKES: 24 BARS



If you'd rather not use rum, increase the amount of vanilla to four teaspoons.

1 1/2 cups whole pecans
2 sticks unsalted butter, melted, plus more for brushing
2 cups unbleached all-purpose flour, plus more for dusting
1/2 teaspoons kosher salt

2 cups light-brown sugar, plus 2 tablespoons for sprinkling
2 large eggs, room temperature
1 tablespoon pure vanilla extract
1 tablespoon dark rum (optional)

1. Preheat oven to 350'. Spread pecans on a rimmed baking sheet; toast until fragrant, 6 to 7 minutes. Let cool, then chop.
2. Brush a 9-by-13-inch baking dish with butter, then dust with flour, tapping out excess. In a medium bowl, whisk together flour and salt. In a large bowl, whisk together butter and 2 cups brown sugar until combined. Add eggs; whisk until combined. Add vanilla and rum. Fold in flour mixture with a spatula until just combined (do not overmix). Fold in half of nuts.
3. Transfer batter to prepared dish; smooth top with an offset spatula. Sprinkle top with remaining nuts and 2 tablespoons brown sugar. Bake until golden around edges and a tester inserted in center comes out with very few crumbs, 22 to 24 minutes.
4. Transfer to a wire rack and let cool completely before cutting into squares. Blondies can be stored in an airtight container at room temperature up to 3 days.



Wanted!! Articles for the Newsletter

You can earn volunteer hours by writing about some garden you visited, some technique you tried which worked (or did not), or share your enthusiasm for some special plant, or condensing a gardening article you read.

Keep contributing. Keep reading. Keep sharing.

Please send your contributions to:

Liz Whitsitt lizv@tds.net

Pam Stanfield pamstanfield@gmail.com

December Meeting

**NO
MEETING!**

Happy Holidays!



**Check Out
UT Gardens Jackson
On Facebook!**

Lots of great info being shared there, and you don't have to wait for a monthly newsletter!

The Bridge to Knowledge

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Master Gardener financial standing information is available upon request.