**Events & Activities**

MG Association Meeting, There is no meeting in December.

Alta Vista Gardening Club, Prescott, fourth Tuesday of the month, 12:30pm. Call 928-443-0464 for information.

Prescott Area Gourd Society, third Tuesday of the month, 6:30 pm, at the Smoki Museum.

Prescott Orchid Society, 3rd Sunday of the month, 2pm at the Prescott Library, (928) 717-0623

Prescott Area Iris Society call 928-445-8132 for date and place information.

Verde Valley Iris Society call Janet Regner at 602-370-4836 or email her at jkregner@aol.com

Mountain View Garden Club, Prescott Valley, Dewey area, 2nd Friday of month, 1:30pm, call 775-4993

Native Plant Society Meetings - Prescott. 2nd Thursday of the month, 6:30pm. Attending the talk qualifies as Continuing Education. Non-members are welcome. Highlands Center for Natural History, 1375 S. Walker Rd. (928-776-9550).

The Verde Thumbs Garden Club, Cottonwood 2nd Tuesday, 6:30 pm at The Seventh Day Adventist Church. (928) 634-7172

**Check out the new MG blog. More garden information, events and pictures.**

http://yavapaigardener.blogspot.com

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**Brugmansia or Angel Trumpets**

by Nora Graf

This is not a plant for the faint-hearted gardener. One of the things I read about Brugmansia is that they can be rewarding but frustrating, just like children. Well, that could be discouraging! But press on because they are beautiful and unusual. The other thing is they can’t take the cold so you will need to do a bit of moving inside-outside depending on the season and they would do best if grown in containers.

When ordering Brugmansia (you rarely find them in nurseries) many are tree-sized. Yes, a small tree, but a tree none-the-less, so make sure you know what you are buying! There has been quite a bit of hybridizing done therefore a number of varieties are available; so read the descriptions carefully.

Botanically these plants are often confused with the datura plant and they do have similar flowers. Datura is a native wild plant in Arizona, but is not related, being in a separate genus. They do share the same family, Solanaceae. The Solanaceae family also contains tomatoes, potatoes and peppers. One way to tell them apart—Brugmansia flowers hang down, datura flowers stand up. There are seven species of Brugmansia. The flowers come in a wide variety of colors—white, yellows to oranges to pinks, reds and greens and usually have a strong but pleasant odor, most noticeable in the evenings. Only one species lacks a scent. Hybridizers have also produced plants with double or more flowers. Flowering starts in mid to late spring and may continue to bloom into fall. The flowers are fragrant in the evenings, to attract moths. Hummingbirds pollinate the species that does not have a fragrance.

The plants are native to the tropical areas of South America from Venezuela to northern Chile and southeastern Brazil. They have become naturalized in parts of North American, Africa, Australia and Asia.

While these are tropical plants, they can be easily grown in containers but will eventually need a container two feet in diameter. The larger the pot, the bigger the plant will grow. This does mean you should think about how you are going to move it when the weather changes. A large container is heavy and a pain in the neck to move. The plant can tolerate temperatures above 50°F, so at that point can be moved outside; once it drops below 50°F it will need to be moved to warmer quarters (more on that follows).

Water is key to its survival and blooming. In our climate plan on watering twice a day. In containers, the plant can grow to about 12 feet, but it can be pruned to a smaller plant and pruning
should not affect the plant’s flowering. It needs a moist, fertile, well-draining soil. Soggy roots will kill the plant. In our climate they will likely need afternoon shade; morning sun should be ok.

The plant can sometimes be temperamental and difficult to get to bloom. It just means you aren’t giving it the conditions it needs, so keep in mind the following tips:

Maturity: The plant needs to be mature before it blooms. If grown from seed it could take as long as five years before the first blooms appear. There are two stages of growth in the plant. The first is the vegetative stage, the seedling grows up as a single stalk until it reaches a height about 2 to 4 feet, where it will branch. It will not flower until after the fork has developed. Interestingly, if you take cuttings below the fork even if the tree is mature, you will still have to wait for blooms until it reaches the forked stage.

Water: Since the plants are tropical they need more water. For blooming they need 4 to 5 inches of water a week.

Fertilizer: These plants are heavy feeders. One source recommended liquid fertilizers versus slow release fertilizers in the growing season because the slow release may not provide enough nutrients when the plant needs them most. Fertilize two to three times a week. Brugmansia do not like to be root-bound. They should be repotted every 2 to 3 years.

Pruning: It is important to prune Brugmansia and you can prune at anytime. They can be grown as bushes or trees. To correctly prune them is to prune off everything but the newest growth. Prune tips to about ½ inch from a node. If you want a bushy tree, prune the lateral branches at the joint. Begin pruning the plant when the main trunk forms its first “Y” and then prune back any older branches to encourage additional branching. Cut back as much as 1/3 of the plant. For larger plants, this could be as much as 1-2 feet. Trim when the growth becomes excessive. The plant needs new wood for blooming and it will take about a month or more for blooms to appear after pruning. Leaving them unpruned during the winter also offers some protection against cold damage but if you are bringing them inside for the winter prune in the fall. If you do prune in the fall leave enough nodes on the branches (above the “Y”) for additional flowers next season. There seems to be no one best time to prune. Since the plant flowers on new wood, you can prune once the flowering is completed to encourage new growth and flowers later on in the same season. Only prune out old growth not green growing stems. You can prune anytime during the growing season to remove lopsided or damaged branches. This website has some good tips and pictures on pruning: http://www.trumpetflowers.com/info/pruning-a-brugmansia.htm

When you repot your Brugmansia you will need to root prune. Trim enough to fit into the container. Root pruning helps stimulate new growth and you can continue to use the same pot over again. Prune in the spring before any new growth starts. To do this, slip the plant out of its container, loosen the roots from the soil, removing as much soil as possible. Cut the thickest roots back by approximately 2/3’s. Retain as many of the feeder roots as possible only lightly pruning the ends at the maximum. When finished repot with new soil.

In our climate the real challenge is getting it through the winter. It’s a shame these plants aren’t more hardy but they will have to be sheltered in the winter. There are two ways to go about it. These guys are really tender so once temperatures drop below 50°F it’s time to move them to a warmer locale. Put the plant in a dark, poorly lit place, a closet, basement whatever. They need to be above 40°F and below 50°F. Water about once a month (these instructions probably came from a more humid climate; you might have to water more here) and do not fertilize. The plant should go dormant and lose all its leaves. An alternative to dormancy is to simply keep them going all winter long. They do need lots of light so place...
them in a south facing window and treat as you would the rest of your houseplants. Water once a week. The plant may droop with the change to indoors but that is normal.

Pests seem to love Brugmansia. Spider mites, aphids, snails and slugs, mealy bugs, fungus gnats, white flies, caterpillars are all potential pests. In its native habitat some insects that eat the plant use it to collect the toxins much like the caterpillars of monarch butterflies. Keep a lookout for infestations and then treat accordingly.

Like other members of the Solanaceae family Brugmansia is toxic, in this case, the entire plant is poisonous with the seeds and leaves being the most dangerous. The plant contains a variety of alkaloids like scopolamine and atropine. While native cultures in South America use the plant for ritual hallucinogenic experiences it is not a plant for experimentation. The hallucinogenic experiences are labeled horrific as they can include extremely dangerous effects like temporary insanity. The toxicity can vary from plant to plant and vary with seasons and how much water the plant received. It is recommended that you wash your hands thoroughly after pruning and bag up pruning debris to keep children and pets from getting into it.

Air layering, cuttings and seeds can easily propagate Brugmansia. Working with the seeds can be a little tricky so I suggest going to the website below for information.

Brugmansia Growers International
http://www.brugmansia.us
Sources of plants, photos of varieties

December Hiatus

It’s time for my vacation, yeh!!! This is the time of year I take time off from writing the newsletter, so this issue will be the last newsletter until February 1. I would like to thank Marilyn Perkins, Pam Bowman, Paul Diemer and Mary Barnes for all their help in putting the newsletter together. Thanks to everyone at the Extension office for their help and support through the year.

I hope everyone has a wonderful December and January and if anyone needs something to do this winter, I could always use some new articles for the newsletter. It could be a New Year’s resolution—write an article for the newsletter. Think about it—it could be fun.

Congratulations

to the Master Gardeners below for completing their 50 hours.

Ruth Stoddard, mentor Barbara Saul
Joan Pierce, mentor Janet Mansoldo
Jodi McBride, mentor Donna O’Rourke
One of the most amazing things I have ever seen was the fall day I saw spider rain. Before you run off screaming to your closet, it was baby spiders (spiderlings). Hmmmm, on second thought, that may not reduce the anxiety. Anyway, it was at Jerome State Park one afternoon and the light was perfect. Thousands of glistening threads filled the sky. On each one of the threads was a baby spider.

Upon hatching, many spiderlings climb to the top of any tall object available, then shoot silk threads that form a sort of parachute upward where the wind actually pulls the silk threads out of the spinnerets until long enough for the wind to gather up the thread with spider attached and set them sailing or **ballooning**. The silk is usually quickly caught up in branches or other objects but spiderlings have been known to travel great distances, depending on the wind. They have been found in the upper atmosphere on atmospheric data balloons located 16,000 feet up. They have been found in the sails of ships traveling across the ocean. Most spiders are very tiny with gossamer webs but several larger spiders are known to balloon using rising thermals. The larger spiders create 10 to hundreds of silk strands that form a web that is as large as one meter by one meter in size. Just to ease your mind, these spiders are not found in Arizona.

One of the spiders that balloon as a youngster is the green lynx spider. There are two species *Peucetia viridans* (viridans is Latin for “becoming green,”) and *P. longipalpis*, but it is viridans that is found in Arizona. This is a beautiful green spider about ¾ inch in length. It has very long translucent spiny legs and has an oblong abdomen. It usually has a red patch between its eyes and has red to brown spots over its body and legs. You may have seen it in prickly pear flowers, apparently a favorite home of the lynx spider. It likes being around flowers.

A female lynx spider spins a web for her eggs usually in September and October. She will lay up to six hundred bright orange eggs and then hang above the eggs hugging the sack with her legs. She continues to guard the eggs and young until their first molt. Normally the spiders are very solitary and as the spiderlings grow the adult will guard them for a short period, but have been known to eat their young.

Lynx spiders, like most other spiders, are hunters, but they do not use a web. The name lynx came about because it acts like a cat. It lays in wait and pounces when prey is close but will also chase down prey over considerable distances. The venom the spider injects paralyzes the prey. It rarely bites humans and is considered non-poisonous although the bite can hurt. In agricultural circles it is a welcome insect as it preys on several crop pests including bollworm moths, leafworm moths and cabbage looper moths. Of course they are opportunistic feeders so will also hunt insects we consider beneficial, like honeybees.

This spider is found in the southern United States and into parts of northern California. It is also found in Central America, the West Indies and Venezuela.
Not much is going on in the garden now, so that means you have time to take on a new project. A simple one is to make your own stepping stones for the garden. It's really easy and not expensive.

**Materials list**

- Quikrete mix (available at any hardware store.) You can use regular concrete but you will have to allow it to dry for several days. Quikrete is fast-setting. The blocks should be set enough to walk on in 30 mins.

- Hoe (something to mix the concrete with)

- Plastic bucket or wheelbarrel (something for mixing the Quikrete in).

- Concrete dye (optional)

- Petroleum jelly (get a large jar) or spray oil like Pam (There is also a concrete release that you can purchase at the hardware store)

- Plastic wrap

- Trowel

- Heavy-duty rubber gloves

- Forms (cardboard boxes or strips of lath, Styrofoam, cake pans)

- Dust mask

- Decorations, leaves, pine needles, flowers, mosaic glass—use your imagination

Basically you are going to be pouring the concrete into the form. You can use cardboard boxes (one use only). You can also use old lasagna pans or other baking pans. You can also buy forms or make your own. The size doesn’t matter so you can have a variety. If you make your own, you can make them any size you want using lathe or any wood. It’s easy to make a form from pieces of wood nailed together into a square or rectangle. 2 x 2’s and 2 x 4’s work fine. With 2 x 4’s you won’t need to fill the form all the way up to the top. Approximately 2 inches is deep enough.

Grease the molds by liberally slathering on petroleum jelly or spray with non-stick oil, otherwise it will be difficult to get the stepping stone out of the form. With cardboard molds, line the mold with plastic wrap to keep it from absorbing water from the concrete. Spray the plastic with non-stick oil.

You have a choice about the decorations. You can lay out your decorations now and pour the concrete over or pour the concrete first and then lay out your design. If you pour the concrete over the design, tap on the sides of the form to get the concrete to seep down over your decorations. If you are laying them on top, get a board that you can lay on top of the decorations and gently press down so that they adhere to the concrete.

Mix the concrete. Make sure you have your forms ready before you start to mix or have the decorations at hand to lay in as soon as you pour the concrete into the form. A dust mask and gloves are recommended, as the dust from the Quikrete mix can be harsh and not good for one’s health. Mix enough water and dye if desired into the Quikrete until the consistency is firm but not runny. Once the consistency is good, pour into your forms. Smooth the surface with a trowel or a scrap of smooth lumber. If you are setting the decorations on top, press in firmly. You don’t want it to go too deeply as you don’t want to create deep places where water could pool and any “ledges” that could be broken but you also don’t want it to be uneven make it a tripping hazard.

In 30 minutes with Quikrete you will be able to remove it from the mold and have a garden-ready stepping stone.
Pecan Pumpkin Pie
Gourmet  | November 2003; originally published November 1985

This is an indulgent pie, great for when you have guests to share it with. Hope everyone has the opportunity to be with family and friends this year.

yield: Makes 8 to 10 servings
active time: 45 min
total time: 4.5 hrs
To make it easy, just use a store bought pie shell.

For pumpkin filling
3/4 cup canned solid-pack pumpkin
2 tablespoons packed light brown sugar
1 large egg, lightly beaten
2 tablespoons sour cream
1/8 teaspoon cinnamon
1/8 teaspoon freshly grated nutmeg

For pecan layer
3/4 cup light corn syrup
1/2 cup packed light brown sugar
3 large eggs, lightly beaten
3 tablespoons unsalted butter, melted and cooled
2 teaspoons vanilla
1/4 teaspoon finely grated fresh lemon zest
1 1/2 teaspoons fresh lemon juice
1/4 teaspoon salt
1 1/3 cups pecans (5 1/2 ounces), chopped if desired

Prick bottom and side of pie shell all over with a fork and then chill shell 30 minutes. While shell chills, put oven rack in middle position and preheat oven to 375°F. Line shell with foil and fill with pie weights, then bake until pastry is set and pale golden on rim, about 20 minutes. Carefully remove foil and weights and bake shell until pale golden all over, 6 to 10 minutes more. Cool on a rack.

Make pumpkin filling: Whisk together pumpkin, brown sugar, egg, sour cream, cinnamon, nutmeg, and a pinch of salt in a bowl until smooth.

Make pecan layer: Stir together corn syrup, brown sugar, eggs, butter, vanilla, zest, lemon juice, and salt in a bowl, then stir in pecans.

Assemble and bake pie: Spread pumpkin mixture evenly in shell, then carefully spoon pecan mixture over it. Bake pie until crust is golden and filling is puffed, about 35 minutes. (Center will still be slightly wobbly; filling will set as it cools.) Cool completely on rack. Serve at room temperature.

Cooks’ note:
Pie can be baked 4 hours ahead and kept, uncovered, at cool room temperature. Pie can also be baked 1 day ahead and chilled, loosely covered with plastic wrap. Reheat in a preheated 350°F oven until crust is crisp, about 15 minutes.

Nutritional information per serving.
8 servings, calories 548, Sat fats 16g, Polyunsaturated fats 2g, Monosaturated fats, 7g, Cholesterol, 155g, Sodium 536g, Carbs 78g,fiber 2g, sugar 47g
FROM THE EDITOR: Please send or email articles and announcements to the address below. All articles must be in my hands by the 10th of the month. Short announcements (no more than 2 or 3 lines) will be accepted until the 25th.

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Searching the MG Newsletter on the Extension Website

Trying to find something in the back issues of Yavapai Gardens has always been difficult. There is a partial index available. Steve Moody has figured out a way to do it and it works better than the U of AZ’s CALS search engine.

Go to: http://www.arizona.edu/search/google

In the search window type in: “Yavapai Gardens” (including the quotes) and the topic you are looking for. For example:

"Yavapai Gardens" tomato blight

The search engine retrieves all the issues with tomato blight information.

Yavapai Gardens Subscriptions

If you’d like to receive Yavapai Gardens via U.S. Mail in 2013 please have your check to Karen Pizzuto in the Prescott Ext Ofc by January 8th, 2013. The price is same as this year, $21.00 for 11 issues. Make your checks payable to University of Arizona.

Year End Report

Please submit all Volunteer and Continuing Education hours for 2012 by the end of December so they can be included in our annual results.
Next Meeting

There is no Meeting in December. The next meeting will be January 16 in Prescott.