

Yavapai Gardens

Master Gardener Newsletter

May 2007



Events & Activities

MG Association Meeting, Wednesday, May 16, Prescott, 6:30pm, See page 8 for more information.

Yavapai Rose Society - ,May 21, 2pm, 1st Christian Church, 1230 Willow Creek Rd, Prescott. Program: Floral Arrangements Using Roses. For more information call 771-9300,

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

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

Pond Club -this is an informal group that meets every couple of months, usually the 3rd week. Email aquaticgardens@esedona.net for more information.

Prescott Orchid Society, meets 3rd Sunday of the month, 2pm at the Prescott Library, call Cynthia for information. (928) 717-0623

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

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Martynia

by Nora Graf



I've been doing this newsletter for awhile and have scoured books, newspapers, magazines and the internet for new ideas and information. While I don't claim to know everything (by a long shot) many of the same ideas and information crop up over and over and you get a little jaded when searching. For example-tomatoes, still a popular plant for gardeners, but do you know how many articles I've seen that talk about tomato varieties and growing tomatoes? After awhile you really don't pay much attention. On the flip side, every once in awhile something pops out and you go WOW, I didn't know that. Something that changes long-held beliefs. Today was one of those days.

I grew up with Devils claws. I've seen them growing, had them grab hold of my leg while walking through the desert, learned early that Native Americans used them for weaving materials in their baskets. Definitely a southwestern plant.

The surprise came in when riffling through a 1885 English book on vegetable gardens; there they were in a small article towards the back of the book—

“UNICORN-PLANT

Martynia, Lindl. Sesamaceae
French, Martynia. German, Gensenhörner”

Not only was it known in England, but they listed its French and German name. Guess others have had the opportunity to have their leg grabbed by a devil's claw besides us kids who grew up in the desert. The article does mention that it “requires a moderate amount of heat, and it is advisable to sow the seed in a hot-bed and either allow the plants to complete their growth there or plant them out in good soil in a warm place.”

While today we use the dried pods for decorative needs, Devil's claws do have a culinary use. “The fruit, gathered while young and tender, is pickled in vinegar. It should be gathered when not



more than half-grown, as, after that, it becomes too tough and leathery.”

The name *Martynia* comes from Dr. John Martyn, professor of botany at Cambridge University in the eighteenth century, but the interesting thing about its history is that it was domesticated. It was one of the few plants that was domesticated north of Mexico. It is also thought that it was women who domesticated the plant. When cattle came to the desert, O’odham women, who used the pods for baskets, planted seeds in protected areas to prevent cattle from eating the plant. Over time they produced varieties with longer capsules and seeds that germinated faster. This particular cultivar was so important that it spread over 25 native cultures, well beyond the plant’s natural range.

Martynia is an annual, with one exception. It grows two to three feet tall, with large round, slightly pointed, leaves. The flowers are orchid-like, either lavender or yellow depending on the species. The plant itself resembles a squash plant.



The Devil’s claw or unicorn horn, is a drupaceous capsule with a woody inner part surrounded by a fleshy layer. Each capsule contains about 40 black seeds that are released as the claw splits apart. The name unicorn horn probably came about because the green fruit is curved and shaped like a single horn. As it dries it splits apart, splitting into two hard but flexible “horns” that form the devil’s claw. If you’ve ever had one wrap around your foot or ankle you’ll understand the name. Ranchers hate them because they

can cause problems with livestock. They can also become entangled in the fleece of sheep. As you can guess, this is a great seed dispersal device (as long as you are not the carrier!) Bison, antelope, deer and elk are primary seed dispersers. In South America various animals, like agoutis,



tapirs and peccaries eat the rotting pods to get to the sweet interior pulp and seeds and play a minor role in seed dispersal.

There are two major species in the Southwest. *Proboscidea parviflora* has pink-flowers; *P. althaeifolia* has yellow flowers. (*Martynia* is the family name, *Proboscidea* the genus within that family. You’ll

see both names used.) Both plants exhibit the sprawling, pumpkin-like growth habit. The name *Proboscidea* refers to the long beak or horn of the fruit. The *Martynia* family is closely related to the *Catalpa*, *Jacaranda* and *Bignonia* families. (If you’ve seen the flowers of any of those, Devil’s Claw is similar) They will actually cross with the related wildflowers of *Mimulus* and *Diplacus* and with other species of *Proboscidea*, so if you have several growing, you never know what will come up next year.

There are several other species that are interesting. *P. louisianica ssp. louisianica* has pinkish-white flowers with strongly scented (described as unpleasant and overpowering) foliage. *P. louisianica ssp. fragrans* from Texas and NE Mexico has beautiful violet to reddish-purple flowers. *P. lutea (Ibicella lutea)* has yellow flowers and is from the Central Valley of California.



Martynia annua is a tropical variety and the fruit resembles the upper jaw and fangs of a pit viper, the horns are very short. It has pink flowers. *P. parviflora ssp. parviflora* hangs on branches like okra and has pink flowers.

Since it is a southwest native, they should grow in our area. Heck, if they grow in England they should grow here. The flowers are quite attractive; the plant is green through the summer and blooms during the summer, so it might make a nice addition to a desert garden. If you can grow okra, you should be able to grow *Martynia*. You can direct-

seed or set out transplants. If you are sowing early to transplant, sow each seed in individual containers. They don't like their roots disturbed when transplanting. You want to keep as much soil as possible around the roots.

If you are growing lots of them, the "seeds may be planted in well-spaced basins or in rows 2-4 feet (1.2 m) apart, just as you would plant cucumbers or squash. You should plant the seeds in late spring when the soil is warm and there is no danger of frost. Soaking the seeds of *Proboscidea parviflora* ssp. *parviflora* in warm tap water appears to stimulate germination and increase the percentage of young seedlings. Seeds should be covered with a half inch (1.3 cm) of soil (preferably with a top layer of planter mix/mulch) and kept moist until germination. Annual Devil's Claw plants grow in a variety of soils, but thrive in rich loam soil with regular weekly soaking. They are very heat tolerant and their blossoms and foliage make an attractive midsummer flower garden. *Proboscidea louisianica* ssp. *louisianica* readily reseeds itself and becomes naturalized but poses no serious threat to your garden unless you step on one of the hooked claws barefooted." (Cultural information is from the Native Seed/Search website.)

There is a perennial Devil's Claw, *Martynia proboscidea altheaefolia*. It forms a tuberous root. It has bright yellow flowers that are fragrant. I found this one on the Yuma County Cooperative Extension website. Look for the Moody Demonstration Garden. They have a discussion on its pollination by a small bee, *Perdita hurdi*, that you might be interested in.

http://cals.arizona.edu/yuma/horticulture/moody_garden/garden_plant/desert_unicorn_martynia_proboscidea_altheaefolia/desert_unicorn.htm

Apparently they are more interested in these plants in England than here. Seeds are available from Chiltern Seeds, one of the great seed-sellers in Britain.

The good news is that you don't have to buy your seeds from England. Native Seed Search in Tucson has them available. See their website www.nativeseeds.org/ or call 520-622-5561 or 866-622-5561 for a catalog. (They also have lots of great food items for sale—YUM! and are a nonprofit organization to boot.) This year they have four varieties for sale.

Plants of the Southwest has one variety.
<http://www.plantsofthesouthwest.com>
1-800-788-7333

GARDEN AND LANDSCAPE TOUR

The first Master Gardener Garden and Landscape Tour will be held Saturday, July 28, from 9:00 am—2:00 pm. We will be meeting in the Sculpture Garden at Yavapai College at 9:00 a.m. (1100 E. Sheldon in Prescott) The garden is just to the side of the Performance Hall. There will be tours through the garden or you can walk through it on your own. Refreshments will be served from 9-10:00 am. You can then take them with you on the rest of the tour. There will be a Farmer's Market going on in the college parking lot so you may want to browse through the stalls before or after you visit the Sculpture Garden. Then we will have garden descriptions and maps/directions to guide you to the Master Gardener's gardens. The number of gardens has not been decided yet. The Program Committee will be visiting gardens on May 15th and will make a decision at that time.



Learn About Noxious/Invasive Weeds

Invasive and/or noxious weeds are spreading across wildlands and private property in northern Arizona. Invasive, noxious weeds impact everyone by displacing native plants and wildlife, impacting recreation, and lowering property values. The West Yavapai Weed Management Area is hosting a Noxious/Invasive Weed Workshop on Monday May 14, 2006 from 9 AM to 3 PM at the University of Arizona Cooperative Extension Office in Prescott at 840 Rodeo Dr #C (on the Prescott Rodeo Grounds). The morning will be an indoor seminar covering: impacts of noxious/invasive species in Arizona, a closer look at identification and management strategies for noxious/invasive weeds in and around Yavapai County, biocontrol strategies used to manage noxious/invasive weeds in Arizona, and how the average citizen can make a difference in controlling the spread of noxious/invasive weeds. A local field trip will follow the morning seminar. Carpooling on the field trip is encouraged.

Presenters will be Ed Northam, University of Arizona Invasive Plant Program Manager; Dewey Murray, USDA APHIS; and Jeff Schalau, University of Arizona Cooperative Extension. The program costs \$15.00, includes lunch, refreshments, and printed materials. Pre-registration is not necessary.

Larry Combs Retires as Phone Volunteer

by Pam Bowman

On Tuesday, April 10, 2007 Larry Combs worked his last afternoon as a Master Gardener phone volunteer at the U of A Extension Office in Prescott. Several Master Gardeners and Extension Office staff attended a “retirement party” in his honor. Karen Pizzuto presented Larry with a Certificate of Appreciation from the U of A and everyone enjoyed the cake and coffee. Larry was duly surprised, thanked all who attended and returned to the Master Gardener desk. Dependable to the end, Larry enthusiastically returned to the desk where he had questions to research. A big Thank You is extended to Larry for his work as a phone volunteer for the last 6 years and for training all the new phone volunteers.



8th Annual Iris Exhibit

The Prescott Area Iris Society invites you to enter your iris blooms in “Iris Splendor” our 8th Annual Iris Exhibit. The exhibit will be held Saturday, May 19, at Mortimer Nursery in Prescott from 10 a.m. to 3 p.m.

This exhibit is free and open to the public. If you have iris blooming, join the fun and enter your prettiest blooming iris stalks and iris floral arrangement. There is no entry fee. Entries will be accepted from 8:30 to 9:30 a.m. Exhibit tubes will be supplied for the individual iris stalks.

Floral arrangements should feature iris and may include other flowers of your choice. Mark your container on the underside with your name and address. The public will be voting for their favorite iris and favorite artistic arrangement. Prizes will be awarded to named iris only.

For an exhibit brochure or more information: call Bonnie: 445-4357 or jbook@cablone.net.

Mark your calendars:

August 4—Annual rhizome sale, Sharlot Hall Museum



Aphids

by Nora Graf

Everyone has had aphid problems in their garden at some time . They are one of the most common pests around. Around my house their favorite plant seems to be roses but they can occur on a variety of flowers and vegetables. Aphids are soft-body insects that pierce the plant and feed on the sap of the plant. Normally, you will find them on the undersides of leaves in the youngest vegetation, but if heavily infested they may occur in a variety of locations. There are many species of aphids. Some are very specific in the plants they feed on. For example, pine aphids feed on pine trees. They come in a variety of colors depending on the species; yellow, green, black, brown, red, pink or other colors. On the roses you usually see green aphids. Another variety I have seen on milkweed plants are a vibrant yellow.

Aphids produce a sticky honeydew that will attract ants. If you start finding sticky streaks or spots, (usually on your car,) you probably have aphids. When the infestation gets severe leaves can wilt or turn yellow. While this may look ugly, well-established plants should survive the onslaught. Some plants are more sensitive to aphids than others. Leaves can become distorted, even with small infestations, or the flowers and buds can be permanently damaged. Aphids can also spread diseases and sooty mold can grow on honeydew deposits.

Aphids generally fly in looking for a suitable home. Once they settle, the colony can grow rapidly. The life cycle of aphids is rather complicated. They are grouped as three types.

Number one is when the female gives live birth to female nymphs that start feeding on the plant immediately. They will shed their skin several times before they become adults, after which they start giving birth to more aphids. A complete cycle takes around 10 to 14 days. Winged forms develop as the colony grows. These insects fly out in search of new plants to start new colonies on.

The second type lives on one plant or group of plants but alternates from a spring asexual form of repro-

duction to a fall sexual cycle. These generally over-winter as eggs. The eggs hatch in the spring as females who give live birth to more female aphids. Asexual reproduction also produces winged forms. In the fall, asexual reproducing females produce sexual males and females. These mate and lay eggs for over-wintering.

Last is the most complicated form that alternates from asexual to sexual but also switches host plants. Spring and summer they will live on one host but fly to an alternate plant for production of sexual forms. The upshot of all this is they reproduce rapidly and, since they

can fly, can go anywhere in your garden!

Aphids can infest your garden but may not do much damage in the long term. Control of aphids can be relatively easy to complicated, depending on the size of the plant and how heavily the plant is infested. Sometimes the best thing is to just ignore them. Aphids will also attract a variety of insects that eat them, lady beetles and lacewings are especially fond of them, but

there are other insects that also eat aphids, including earwigs, assassin bugs, minute pirate bugs, stink bugs, soldier beetles, parasitic wasps and others. Sacrificing a plant to aphids may help your garden overall by attracting more predators. If you find them unsightly or the plant seems to be suffering, there are some controls.

Good cultural practices is the first step. Keeping plants healthy is one of the best preventatives. Avoid heavy applications of nitrogen that cause the plant to produce lush quantities of appetizing foliage. There are some plants that are resistant to aphids. Select those plants that seem to not to have any problems.

If you still have problems, the simplest remedy is to use a hard jet of water directed at the infestation. The plant has to be hardy enough to withstand this. Don't use it on some tender seedling. I support the plant with my hand, if needed.

Ants tend aphids so they can collect the honeydew. To prevent these "farmers" from encouraging an aphid colony, sprinkle diatomaceous earth around the base of the plant.



Insecticidal Soaps are a good choice. They disrupt the cell membranes. Soaps do need to make direct contact with the aphid, so make sure you get good coverage when you spray. There is no residual effect to soaps.

Summer oils can be used on some trees and ornamentals. These suffocate the insects. Oils can cause injury to foliage, though, so make sure you read the labels carefully on any product you plan on applying. Horticultural oils can cause foliage burn.

There are a variety of pesticides that are available to use on aphids. Read the label carefully and apply as directed. Make sure the pesticide is licensed for aphids and



for the plant you plan on spraying it on. Another type of insecticide is systemic insecticide. In this case the plant actually takes up the product and, when the insect feeds, the sap is basically poisoned. ALWAYS APPLY ACCORDING TO THE LABEL.

For large plants these products are hard to apply evenly, so some insects may escape to repopulate the plant. No doubt you will have aphids on something this year, but don't panic,

don't rush to the store for something to spray on them and certainly don't chop anything down, as aphids, in spite of their numbers, are one of the easiest pests to control in home gardens.

Master Gardener Website

We now have a Yavapai County Master Gardener website. Here is the direct link <http://ag.arizona.edu/yavapai/anr/hort/mastergardener/>

You may also access it from the U of A Yavapai County Home Page or the Horticulture page. Some of the things you will now do from this site::

Electronically submit your Volunteer and Continuing Education hours or print forms for manual submission

Access the monthly Yavapai Gardens Newsletter

Access the U of A Master Gardener Manual

View the MGA meeting schedule and get directions (new feature)

Submit changes to your contact information (new feature) Sending me an e-mail or noting the change on your hours report are also still acceptable.

Request monthly e-mail notification of Yavapai Gardens (new feature)

Access all the Master Gardener documents and forms (new feature)

Please visit the site to see all the information it contains. I'm sure you want to add it to your Favorites J.

Insect and Disease Identification

The Insect and Disease pages (accessed from the Horticulture page) have a new format. <http://cals.arizona.edu/yavapai/anr/hort/>

Electronic Hours Submission

Coincident with doing the final coding on the MG site we found that only 10 lines of entries on the electronic Hours submission form were being transmitted (the on-line form allows 16 lines of data). Please check your records (I'm sure you print copies before submitting). If there are any months beginning with July 2006 where you submitted more than 10 lines of data, please resubmit hours that were entered on the last 6 lines. When you resubmit them, post a note in Comments stating in what month you submitted them.

If you have any problems or questions let me know.
Mary Barnes

2007 CALENDAR OF EVENTS FOR MASTER GARDENERS

May 16, 6:30 (Prescott) MGA meeting, Social/Information evening with 2007 MG class

June 16, Annual Arboretum Field Trip, Sign up by contacting Patti Conrad (in the evening) at 778-4810

June 20, 6:30 (Cottonwood) MGA meeting, Cacti and Other Succulents for the Arizona Central Highlands—Gene Twaronite, Defensible Space Education Specialist for the Cooperative Extension

July 28, MGA Field Trip, Sculpture Garden at Yavapai College plus a Master Gardener Garden Tour (for information email Missy Sandeen at rmsandeen@bullerinetworks.com)

August 15, 6:30 (Cottonwood) MGA meeting, Horticultural Techniques for Plants in Higher Elevations -- Steve Yoder, Executive Director, The Arboretum at Flagstaff

August 25, V Bar V Ranch Field Day, Call Cottonwood office for more information

September 15, (Prescott) Recognition Awards & Picnic

September 20-23, Yavapai County Fair

October 11/12, Highland Garden Conference, Apache Gold Casino, San Carlos

October 17, 6:30 (Prescott) MGA meeting, Insect Identification--William Currie, Entomologist from Ash Fork

November 14, 6:30 (Cottonwood) MGA meeting, Elections, Flora and Fauna in the Verde Valley--Janie Agyagos, District Wildlife Biologist, Red Rock Ranger District, Sedona and Master Gardener

Volunteer Opportunities

Highlands Garden Conference

Yavapai County Master Gardeners are responsible to the goody bags at the October Highlands Garden Conference. Collecting the items needs to begin soon. Two to three MGs are needed. If you can help, please contact Beverly Emerson, bjemerson11@juno.com, 646-0379.

Prescott Farmers Market

Still need a chair and a co-chair for the Farmers Mkt, The market is held from May to Aug – we staff a table every other week. I'm sure we will have lots of volunteers, as the MG class is in Prescott this year, but someone needs to coordinate. Contact Mary Barnes, mcbarn1@cableone.net, 583-0889

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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MG NEWSLETTER

MG Association Meeting Prescott, May 16, 6:30pm

The Master Gardener Association will be welcoming the graduating Class of 2007 to their Dessert Social May meeting at the Prescott Extension Office.

On the agenda: Yummy food, Committee volunteer information, Mentor introductions of their students, lots of give-aways, and some members will be talking about their special interests and passions!

Come and join in the fun and get to know our newest class members!

