

# COOPERATIVE EXTENSION

University of Arizona and U.S. Department of Agriculture cooperating.



the Cochise County Master Gardener

## NEWSLETTER

VOL. 4, NO. 10

OCTOBER 1992

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**MARTYNIACEAE—Unicorn Plant Family**  
*Proboscidea arenaria* (or *altheaefolia* or *parviflora*)  
Devil's Claw

Barbara Kishbaugh  
Staff Writer

Devils claw is a low growing vine-type plant with broad petioled leaves that are somewhat sticky feeling to the touch. The flowers are short-lived with quite showy large white blossoms that have a purplish and yellow center which opens wide enough for a whole bumblebee to enter. The plant seems to thrive in sandy washes and spreads somewhat like a gourd plant covering a fairly large area. The young fruit is eaten as a vegetable and the mature seeds are also edible. The devil's claw is related to the sesame family of plants.

The dried fruits of this plant have curved dehiscent prongs which seem to hook onto clothing and ankles if you happen to pass through a growing area. This persistent clinging tendency lends itself to seed transportation on the fetters of hoofed animals.

The Pueblo Indians strip fibers from the dried fruit to use as a dark contrasting band of color in their basket weaving. In the past years we collected the dried fruit pots for use in mom's craft projects, but I haven't seen any in our yard this year. If you would like to see devil's claw next year, perhaps a few of the seed pods should remain undisturbed where you find them.

Robert E. Call  
Extension Agent,  
Horticulture

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## GARDENING EVENTS CALENDAR

**Jackie Dillon—Fast**  
**Staff Writer**

Both the Tucson Botanical Garden and the Arizona Sonoran Desert Museum (and Boyce Thompson Southwestern Arboretum outside Phoenix) offer classes in gardening, desert crafts, hikes and field trips - too many to list here so ask at the membership desks for a complete listing of activities.

**October 10 & 11, Saturday & Sunday, 8 am to 4 pm (Members-Only Sale Friday, 4 pm)**  
Desert Survivors, 1020 W. 22nd Street, Tucson, 884-8806

Annual Fall Plant Sale - Huge variety of locally grown desert trees, shrubs, groundcovers, vines and cacti. No fee.

**October 14, Wednesday, 6:00 to 7:30 pm**  
Tucson Botanical Gardens  
Tucson Chapter of the Arizona Native Plant Society Regular Meeting - Dr. David Palzkill, former U of A plant sciences department faculty member, will speak on the native shrub jojoba. Potluck begins at 6 pm. No fee.

**October 17 & 18, Saturday & Sunday, 10 am to 5 pm**  
Tucson Botanical Gardens  
Annual La Fiesta de los Chiles - Features chile pepper crafts, native foods, and chile plants. Fiesta also includes educational demonstrations such as chile stringing and roasting and silk dyeing, and a wide variety of musical entertainment. Free to members and children under 12 — admission charge otherwise.

**October 24 & 25, Saturday & Sunday, 9 am to 5 pm (Members-Only Sale Friday, 3 to 6 pm)**  
Desert Botanical Garden, 1201 N. Galvin Parkway, Superior  
Fall Landscape Plant Sale - Both mid- and

high desert plants will be sold, including trees, cacti, shrubs, wildflowers, and herbs. No fee.

**October 28, Wednesday, 6:30 pm**  
Oscar Yrun Community Center, Tacoma Street, Sierra Vista  
Southeastern Arizona Chapter of the ANPS Regular Meeting - Ruken Jelkas, past president of the Arizona Chapter of Holistic Range Management, will discuss management plans for his ranch near Elgin. No fee.

**November 6, Friday, 9 am to 3 pm**  
Urban Tree Care Workshop (see info elsewhere in newsletter)

**November 7 & 8, Saturday & Sunday, 8:30 am to 4 pm**  
Arizona Sonora Desert Museum, 2021 N. Kinney Road, Tucson, 883-2702  
Desert Harvest Celebration - Plant sale limited to cacti but harvest festival includes foods, crafts, and demonstrations. There is a fee for admission to museum.



**Staff:**

Jackie Dillon-Fast  
Carolyn Gruenhagen  
Barbara Kishbaugh  
T.J. Martin  
Elizabeth Riordon  
Virginia Westphal

Articles to be published in next month's newsletter must be received at the Sierra Vista Cooperative Extension Office by October 28.

## PRESERVING SUMMER FRUITS AND VEGETABLES

Lynas Waun

Extension Agent, Home Economics

Many of you have been busy preserving the summer's harvest. There is nothing more satisfying than seeing jars of fruits and vegetables on the shelves or a freezer full of neatly organized frozen foods.

There are several extension bulletins available as a resource in preserving foods. The *Let's Preserve* series of 15 bulletins is available in the Willcox and Sierra Vista offices, as well as the *Freezing Fruits and Vegetables* and *Home Food Drying* bulletins.

Several years ago SD and Penn State began intensive research on home food preservation, due to the increasing reports of food poisoning from home canned foods at the Center for Disease Control. There have been several changes in the way USDA and Cooperative Extension teach home canning procedures as a result of the research.

In the article *Gifts From the Desert* in the September 1992 Master Gardener Newsletter, the procedure for making prickly pear jelly stated, "Pour the liquid into sterilized jelly jars and seal with melted paraffin or cap the jars and put them in the freezer." Due to the research done at Penn State, USDA, and Cooperative Extension no longer recommends sealing jelly with paraffin. Boiling water bath canner is recommended for processing jellies, jams, and spreads. For an altitude from 1000 to 6000 feet, process half-pints or pints for 10 minutes. I would like you to note this correction.

Individuals moving into high altitude areas of Arizona often have difficulty using traditional canning recipes. Adjustments in the time and the pressure are necessary when canning food in high altitudes. **To use the boiling water bath canner correctly, when processing any food item 20 minutes or less, add 1 extra minute process time for each 1000 feet above sea level. If your instructions require you to process the food item over 20 minutes, add 2 minutes of**

**processing time for every 1000 feet of altitude above sea level.**

Low acid food like vegetables, meats and poultry must be heated to 240° F for the appropriate time in order to destroy heat resistant micro-organisms that cause botulism and other types of food spoilage. A pressure canner must be used to obtain a temperature of 240° F. Pressure canners do not destroy micro-organisms, but high temperatures applied for an adequate period of time will. Two serious errors in temperature in pressure canners occur due to the following:

- **Air trapped in a pressure canner lowers the temperature obtained at 5, 10, or 15 pounds of pressure and results in under processing of food items. Dial gauge canners do not vent air during processing. To be safe, all types of pressure canners must be vented for 10 minutes before they are pressurized.**

- **Internal canner temperatures are lower at higher altitudes. To correct this, canners must be operated at increased pressures for appropriate altitude ranges. The rule is to increase canner pressure 1/2 pound for each 1000 feet above sea level.**

Home food preservers are asked to upgrade processing times for favorite recipes. USDA and Cooperative Extension encourage home food preservers to use the new research information to insure a safe food supply.

Another question I am frequently asked is what can be done with jars of canned food which did not seal properly. The food must be refrigerated and used within one or two days. **If the food is to be reprocessed, begin at the beginning. Reprocessing food must be done within 24 hours of the original processing.** Treat the food as if it were being processed for the first time. There will be changes in texture, color, and possibly flavor. Loss of nutrients may also occur.

If a group would like the lesson **UPDATE ON FOOD PRESERVATION**, please call me at 384-3594 to schedule the class. This lesson may be adjusted for experienced or beginner home food preservers.

## ARIZONA STATE MASTER GARDENER'S CONVENTION

Barbara Kishbaugh  
Staff Writer

Next year plan to attend the Arizona State Master Gardener's Convention for an exciting and informative opportunity to meet with other gardeners! The 1992 convention was held at the Arizona Biltmore Hotel in Phoenix on August 20 and 21. Conference members received a significant discount on rooms allowing us to stay in a "pricey" atmosphere without choking our budgets.

There was so much information available. I've always thrown seeds into the soil, added water, and hoped they'd come up. How many years did I live before learning that in order to propagate a seed with a hard shell, you simply file away a portion of the outside shell to allow moisture into the actual seed.

Seminars were available for all areas of interest to gardeners: Xeriscape, Wildflowers, Plant Problems, Hydroponics, Edible Desert Landscaping, Cactus and Herb Workshops, plus many others. The enthusiastic speakers were knowledgeable and interesting. Our only problem seemed to be which seminar to attend.

Many tours were also available. We visited a large tree farm and were encouraged to use native trees with our xeriscapes along with the conventional plants that do well in our area. Another tour gave us great ideas for creating micro-climates for special growth areas with the use of masonry walls and borders.

We met new friends and bumped into people we hadn't seen for awhile. We received great reference material and gained knowledge we hope to pass on. The direction of the conference seemed to be sharing, making contacts for points of information, and continuing education. The conference committee coordinated information and programs so well that being involved was relatively as easy as just being there.

## INTERESTED IN HERB GARDENING?

Master Gardener Mary Diamond would like to get in contact with people who are interested in herb gardening. Her address is Sanders Road, Huachuca City, AZ 85616.

## FALL PLANT EXCHANGE

You are invited to the first fall plant exchange sponsored by Cooperative Extension, Desert High Garden Club of Benson and the San Pedro Resource Conservation District. We plan to share plants and seeds of flowers and trees. Fall pruning, seed saving, and other gardening topics will be discussed.

Location: Judy Mikeal, Judd Street, St. David.  
Call for information and directions:  
Phone: 720-4884.



### OCTOBER REMINDERS

BE READY FOR FIRST FROST  
THIN THE SEEDLINGS  
OVERSEED LAWNS  
PLANT SPRING BULBS  
DON'T LET WEEDS GO TO SEED  
DIVIDE PERENNIALS



## WHAT'S BUGGING YOU<sup>®</sup>

by T. J. Martin

### PEST-WISE PREPARATION FOR FALL AND WINTER

Congratulations to all my fellow gardeners out there who have successfully completed yet another summer growing season in Southeastern Arizona. I hope that you enjoyed a bountiful harvest with a minimum of hassle from our local pest population. For many of us, this is the time of year that we put the garden to rest for the winter while enjoying a well-deserved respite for ourselves. For others, fall is the transition time from hot to cool-season crops and is often one of the most productive seasons of the year.

For those who followed a spring and summer pest-prevention program (from the previously published *Preparation For Spring* article or useful ideas from other sources) the fall and winter program will be along much the same lines. For those just starting a prevention program, the following are some ideas that you may want to use to get a jump on next year's pest problems, and hopefully leave you more time, energy, and money to enjoy gardening and other hobbies.

**KNOW YOUR PEST** - Try and identify the creatures that gave you the most problems during the past growing season. Study their life cycle and try to determine where and how they overwinter. This information will give you many ideas on what to do to interrupt their breeding/feeding cycles and how to discourage them from frequenting your garden patch or orchard.

**CLEAN, CLEAN, CLEAN** - If the most important word in real estate is LOCATION, it's corollary in gardening is CLEAN. Garden debris, weeds, and leftover materials such as rocks, boards, *etc.* are prime overwintering and breeding places for pests and an open invitation for trouble. Pull up all your old plants and weeds and put in the trash for pick-up, burn, or compost in a HOT compost pile. Speaking of compost piles, stir yours up, wet it down, or add a little manure to get it "cooking" again. A "compost pile" that is too cool to properly (and quickly) decompose can become simply another pile of trash that bugs and other vermin love to set up housekeeping in.

**CHANGE YOUR MULCH AND CULTIVATE THE SOIL** - If you used a mulch this summer, then rake it up and add it to the compost pile. Many insects will have chosen this material for a egg-laying, pupation, or overwintering site. By removing and destroying the remains of THIS year's pest population, you can seriously reduce the number that show up NEXT spring. Other insects survive the winter by burrowing into the top 12-18 inches of soil. By digging and turning over this soil in the fall you can expose many of these critters to the weather or predators looking for a late-season snack.

**“SOLARIZE” THE SOIL** - Some folks have had good results with using the sun to “pasteurize” their garden soil. After letting the weather and predators have a chance at the pests (see above), moisten the soil and cover with a layer of plastic tucked in securely at the edges. Our fall and winter sunshine is hot enough to heat the soil to a significant degree and can “cook” many insect eggs or pupae that you may have missed. If you use clear plastic, you will encourage growth from any weed seeds that may be present and you may go ahead and pull these up and thus prevent problems with them next growing season.

**IDENTIFY BENEFICIALS** - Insect pests are not the only ones that may overwinter on your property. Learn to recognize the pupal cases and egg masses of any “good guys” that may be helping you with your pest-control duties. Look for these during your clean-up operations and put them aside in a protected place for the winter. **DO NOT BRING THEM INTO YOUR HOME!!!** Imagine the chaos if you wake up one bright, sunny January morning to find a hundred newly hatched Praying Mantids sharing your house. Not only would your spouse probably have a few well-chosen words to say to you, but all of these helpful creatures would die once you had transferred them back outside to the cold weather and lack of appropriate prey to eat. Leave them outside to hatch at the proper time.

**ENRICH THE SOIL** - Do your pH testing (if needed) and add fertilizer and humus to the soil to give your plants an extra-healthy start next growing season. Remember, anything that you can do to strengthen your plants will make them less susceptible to pests, disease, and weather stress next spring. If you will not have a winter crop, you might want to sow a cover (or “green manure”) crop. This is often a species that can be tilled under in the spring to help provide a nitrogen boost to the spring planting. Some winter plants can also provide food or shelter for overwintering beneficials. If you do plan a winter garden, be sure to practice proper crop rotation so as to not deplete any particular set of nutrients in the soil.

**READ PREVIOUSLY PUBLISHED MATERIALS FOR FURTHER IDEAS** - My *Preparation for Spring* and *Ecologically-Sane Pest Control* publications both contain other ideas such as dormant oils, washing your trees with soap, and the use of tree wraps and agricultural fleeces that can be used in the fall as well as spring. These and many other useful articles can be obtained at the Cooperative Extension offices in Sierra Vista or Willcox. Most, if not all of these ideas can also be used by winter gardeners as they convert their plots from summer to fall/winter use. For those taking the winter off, hopefully these ideas will take away some of the work and worry as you prepare for next year's crops and you will be able to concentrate on ordering all those new seed catalogs and spend the winter anticipating a wonderful gardening experience next spring with far fewer pest problems than ever before.



## THE AGENT'S CORNER

Robert E. Call  
Extension Agent, Horticulture

**QUESTION:** My ash, plum, and pomegranate leaf margins are turning brown and drying up. The leaves are yellowish in color with some green remaining between the veins. I have been watering the trees using a well. They are planted in my lawn. I used "Weed and Feed" on the lawn this spring and again during the summer. The trees are just looking sick and I am feeling like the trees.

**ANSWER:** The trees are showing the signs of herbicide damage. "Weed and Feed" products contain fertilizer and 2,4-D herbicide. Inert particles like clay are coated with the herbicide which releases into the soil when watered. The herbicide 2,4-D will kill many broadleaf weeds in the lawn. However, the herbicide also can damage or kill other broadleaf plants. These trees are showing symptoms, but did not receive a large enough dose to kill them. The herbicide reached the shallow rooted trees, was absorbed, and you see the symptoms in the leaves. **Control:** Do not apply 2,4-D type herbicides (as a spray or in a "Weed and Feed" product) where desired broadleaf plants will absorb them through the roots or leaves. Many broadleaves like roses and grapes are very sensitive to 2,4-D type herbicides. The trees will most likely not show symptoms in the spring. For now the leaves will have to drop so that the trees will not look sick.

Just a note on the herbicide 2,4-Dichlorophenoxyacetic acid (the chemical name), or 2,4-D for short and related compounds. This herbicide comes in several different formulations. If it is to be used around plants that are susceptible, i.e. broadleaf plants, use an amine formulation. It is less volatile than an ester formulation. You must read the label and find the chemical name. If amine or ester appears in the chemical name you will know the type of formulation.



### FALL MASTER GARDENER CLASS HAS GOOD ATTENDANCE

Each Thursday night the Fall Master Gardener class is being taught with the first class held September 3. The class meets at 6:00 pm at the ABEPCO Building in Benson. There are 18 people who have signed up for the class. Any Master Gardener who would like to sit in on a class or two are welcome. Call the Willcox Extension Office for a schedule of class topics. The final class period will be November 19<sup>th</sup>.

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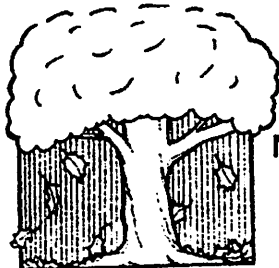
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Address correction requested



### URBAN TREE CARE WORKSHOP

November 6, 1992 — 9:00 am - 3:00 pm  
Oscar Yrun Community Center  
Sierra Vista

Subjects to be covered include:

tree selection	pruning
tree care	pest control
cultural practices	drip irrigation
tree planting (hands—on demo in the afternoon)	

Sponsored by:

Cooperative Extension	Cochise Global ReLeaf
State Land Department	City of Sierra Vista

For information or to register (a small fee will be charged to cover lunch) call Joanne McIntire at 458-3315 Ext. 65.