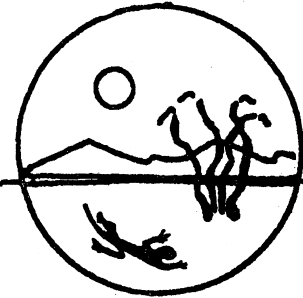


High on the Desert

Cochise County Master Gardener

Newsletter



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

PLANT PROFILE— Ornamental Grasses

The grass family is important in the plant world. Many are cultivated for turf, food, revegetation, erosion control, shelter and food for wildlife, and ornamental uses. Grasses are divided into two groups: cool-season grasses which grow from fall to spring and warm-season grasses which grow from spring to fall. Warm-season grasses often display brilliant fall colors which look nice through the winter. Ornamental grasses are low maintenance plants. Since there are so many varieties, it's best to check with catalogs and garden books for the species' moisture requirement and soil conditions. All benefit by having their tops cut back to ground level before the new growth emerges and large, older clumps may be divided in early spring.

The *Miscanthus* species is a large group of warm-season grasses. The *Limerock Ornamental Grasses, Inc.* catalog lists 35 cultivars! One favorite is *M. sinensis* 'Gracillimu,' or maiden grass, which has grey-green leaves that form a vase shape and feathery, copper-colored flower plumes in late fall. It has a nice fall golden color and is considered one of the better grasses for dried arrangements. *M. sinensis* 'Morning Light' is a variegated form of 'Gracillimus.' *M. sinensis* 'Siberfeder' is a German cultivar which has white plumes, green foliage, and blooms in early fall. Uses for *Miscanthus* include specimens,

borders, screens and hedges, background plants, groupings, waterside plantings, fall color, Victorian gardens, and flowerheads for fresh or dried arrangements.

Another outstanding group of grasses is the *Pennisetum* species. *P. setaceum* 'Cupreum' is probably the most common variety, also known as purple fountain grass, and is the one you see planted all over Sierra Vista. *P. setaceum* 'Rubrum,' red fountain grass, has rose-colored foliage and spikes. *P. alopecuroides* 'Little Bunny' is a dwarf selection. Buff-colored and 10" tall, great for small gardens or patios. *Pennisetum*'s are warm-season grasses and are useful for specimens, borders, edging (small cultivars), waterside plantings, fall color, and attracting birds.

Muhlenbergia species heralds our native deer-grass, 'Rigens.' An evergreen grass, it is very well suited to our climate being heat and drought tolerant. *M. lindheimeri* is a particularly beautiful grass. 'Autumn Glow' has tan stalks and the flower plumes are wide open which gives it a dense appearance. Its sister, 'Regal Mist' has spectacular flower plumes of rosy-purple.

In the cool-season grasses, the *Festuca* species does well here and its small size makes it suitable for rock gardens, ground covers, edging, and it looks good massed in groups. Most *festucas* are in beautiful hues of blues.

Ornamental grasses—a group of plants that can form the backbone of a garden all year round.

Cheri Melton
Master Gardener/Staff Writer

Cochise County Cooperative Extension

1140 N. Colombo, Sierra Vista, AZ 85635
(520) 458-8278, Ext. 141

450 Haskell, Willcox, AZ 85643
(520) 384-3594

Cuttings 'N' Clippings

➤ Interested in the Arizona Tree Seedling Program for 1997? Application forms are available at the Sierra Vista Cooperative Extension Office. Greenwood Nursery of McMinnville, TN offers a wide variety of shrubs, trees, and ground cover bareroot seedlings at a very reasonable cost. All seedlings grown for the program are grown in Arizona, Colorado, and Montana.

➤ Rodents have been found to be one of the most common carriers of the hantavirus, which has caused the deaths of 67 people living in the United States since 1993. Follow these precautions to help protect you and your family.

1. Never sweep or vacuum dry mouse droppings which could disperse virus-laden dust into the air.
2. Never touch a dead mouse with your bare hands.
3. Avoid practices that might attract mice by keeping all food and garbage in covered containers.
4. Take steps to keep rodents out of your home.
5. Control the rodent populations outside.

Newsletter Staff:

Carolyn Gruenhagen
Barbara Kishbaugh
Cheri Melton
Virginia Westphal



Robert E. Call, Extension Agent,
Horticulture

➤ The Sierra Vista Area Gardener's Club will meet November 21 at the Mona Bishop Room of the Sierra Vista Library. Virginia Denison will present the program "Spices of the Southwest."

➤ Watch for details on the High Desert Gardening & Landscaping Conference coming up on February 13-15, 1997!



A Favorite Vine

There are many beautiful vines that will grow and flower in our climate: some are annuals, some perennials, some lose their leaves in winter, and some remain evergreen.

Here's an idea for a nice evergreen vine to grow on a trellis, fence or lattice and it is one that has done well for me—*Jasmine polyanthum*. One of the common names for it is "winter jasmine," but that name is also used for several other types of true Jasmynes, as well as some plants that aren't Jasmynes at all. It is available in many places in the local area.

J. polyanthum is fast growing to about 20 feet tall. It will get over 10 feet tall in just a year or so from planting if it is happy. Mine grows on the North side of my house on a lattice attached to the back patio. It can take full sun, but in our hot summers I think it does better with a little afternoon shade. Prune it after flowering and just like Jack's beanstalk, it will climb right back up in no time.

➤ The Butterball Turkey Co. will have a turkey hot line available to offer you assistance weekdays from 7 am - 7 pm Nov. 1 to 27 and Thanksgiving Day from 5 am - 5 pm. The number is 1-800-323-4848. You can even contact them by e-mail at <http://www.butterball.com>.

It is a "light weight" vine, which can climb on lattice work without getting too heavy for its support.

It's hard to decide what is the best feature of *J. polyanthum*, since it stays green the year around and in April (in Sierra Vista) it covers itself with clusters of blooms that are pink in bud and white upon opening. They are sweetly fragrant, and will perfume a large area such as the whole patio when planted nearby. Hummingbirds seem attracted by the flowers, and even though they bloom here so early (before many of the hummingbirds have returned from their winter homes) we do have some year 'round residents—mostly Black Chinned Hummingbirds. I keep two small feeders up for them in winter, and then when spring arrives and more birds return, I put up the larger feeders in addition to the small ones. This year we had a hummingbird nest in the tangle of our *J. Polyanthum* vine, and we could watch developments from the kitchen window.

Maggi Crist
Master Gardener

How to Buffer the Wind

Last month at the School of Hard Rocks I briefly discussed Cochise County wind. This month I want to offer further suggestions on how to confuse the wind.

In Cochise County we have prevailing southerly winds in the summer and some strong northerly storm winds in the winter. If you are in a forest on a windy day, you will hear the wind whistling around and see the wind shaking the boughs of the trees. But the wind will not push you to the ground because the trees act as buffers and disperse the wind around the trunk and through the branches and leaves/needles. We can use this same idea to buffer winds around our homes.

When planning a homesite, trees act as buffers and should be planted as soon as the well is in and water available. When placing your windbreak, three or more plants staggered in height will force the wind upwards and away from structures. They also add privacy and act as a dust barrier along a country road.

Evergreen trees—Arizona cypress, Aleppo pine, junipers and oak trees are a good selection. Evergreen trees are preferred as they remain full and will bow with the wind without breaking limbs. These trees may reach twenty feet high in about ten years if a drip system is installed with a steady water supply. The Heritage oak is a fairly good grower, also.

Cottonwood, elm, and eucalyptus trees can also be used, but they are not recommended for placement near the house. Winds can easily snap limbs causing them to fall onto the roof.

Orchards placed around your house will also break up the wind. Pecan trees grow successfully in our area and are relatively easy to plant and maintain. If you purchase a three or four year old tree, harvesting nuts in two years is possible and likely.



Oleanders are wonderful southern Arizona plants and will make terrific windbreaks and a great habitat for desert creatures. They are fast growing, bushy and full, evergreen, and flower at an almost constant rate. It is a lovely plant, but remember the leaves and seeds are poisonous. (See *High on the Desert Newsletter*, August 1996, Page 3)

Desert hackberry and pomegranate are perfect as windbreaks and also for the bird lovers. They have multiple small branches to protect the small nests. *Pyracantha* is used extensively in the urban setting and is a good evergreen selection. The red berries provide winter food for native bird species. *Pyracantha* can be trained as an espalier plant, a hedge, or even to look like a tree. Many other evergreen hedges can also be used as medium growth perimeter plants.

Clumps of fountain or other decorative grasses between the house and the initial windbreak will further disburse the force of the

wind. Placing them near the house or path is not recommended since the dense growth is a cool summer snake hideout.

Around the house vining plants make great wind buffers. Grapes grow well in Cochise County, giving shade in the summer with the added bonus of fruit. Passion vine, catclaw vine, and honeysuckles around a porch create a semi-secluded area filled with fragrance and color.

Native plants can also be used to inhibit the force of the wind. Agave are formidable barriers when mature and there is nothing more southwestern than an ocotillo fence. The wind passes between the upright ocotillo limbs diminishing the force.

Barbara Kishbaugh
Master Gardener/Staff Writer



November Reminders

- ✓ This is a good time to install a drip system.
 - ✓ Replace summer mulch with fresh mulch.
 - ✓ Start a winter herb garden.
 - ✓ Protect plants from frost.
- (The Cooperative Extension Office offers a bulletin *Frost and Frost Protection*. Call for a copy.)

Happy Thanksgiving!

The Agent's Observations

This month Dr. Robert Smith, Department of Entomology, University of Arizona, answers questions about pest control services in Arizona.

Question: What is a pretreatment?

Answer: A pretreatment consists of a chemical treatment (with an EPA registered termiticide) of soil to form a barrier against subterranean termites invading a structure. A termite pretreatment is an important part of any structure built in Arizona.

Question: How do chemical barriers work?

Answer: Chemical barriers work by repelling/killing termites that contact the treated soil.

Question: Does pretreatment protect against all kinds of pest termites?

Answer: No. Pretreatments do not protect structures against drywood termites.

Question: What are the chemicals used for pretreatment?

Answer: There are several including a new penetrating boric acid spray.

Question: Do all EPA registered termiticides perform equally well in protecting Arizona structures.

Answer: Absolutely not! The measures of the quality of a termiticide are how effective it is in excluding termites, and how long it lasts. In Arizona chlorpyrifos performs well initially but loses its

effectiveness rapidly. Permethrin, on the other hand, is very persistent in Arizona, lasting longer than 15 years.

Question: Do all termiticides have the same performance in all parts of the county?

Answer: No. Every region has its best and worst performers and they differ from locality to locality.

Question: Why does chlorpyrifos perform so poorly in Arizona?

Answer: It is not known for certain, but the poor showing probably has something to do with our very high temperatures and our dry, alkaline soils.

Question: Are termiticides harmful to people?

Answer: All pesticides are potentially injurious to humans, pets, and other nontarget organisms. Observe all label instructions. EPA registered termiticides are presumed to be safe for use in accordance with label instruction.

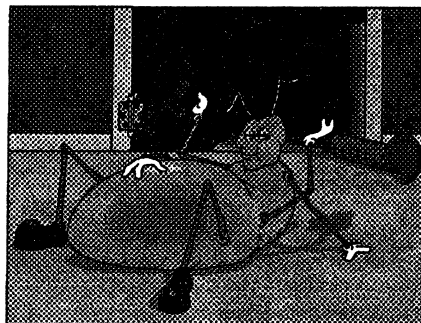
Question: Are pretreatments always effective in excluding termites?

Answer: Properly applied and well-designed pretreatments can be expected to exclude termites from structures for many years.

Question: What constitutes a properly applied and well designed pretreatment in Arizona?

Answer: A first-rate pretreatment requires cooperation between the applicator and the building contractor. In selecting the best termiticide for Arizona, use a 1% active ingredient (A.I.) concentration and the application of the

termiticide at the highest labeled rate.



Question: Why do pretreatments fail within months or a few years after construction?

Answer: Pretreatment failures result from poor coordination between applicator and building contractor and or poor pretreatment design which may involve selection of a termiticide that does not hold up well in Arizona, using low concentration of active ingredient (A.I.), incomplete coverage of the soil, or use of an inadequate volume of finished spray.

Question: Is someone at fault if a pretreatment fails to exclude termites?

Answer: Absolutely! If your new house has a leaky roof, isn't there someone at fault and responsible to fix it?

Question: Is there a pretreatment for drywood termites?

Answer: Yes, in a manner of speaking. Well maintained painted wood cannot be infested by drywood termites. Also, the treatment of unpainted wood of any kind with a borate product such as Tim-bor® or Boracare® will render the wood

(Continued on next page)

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uninfestable by termites of any kind so long as the wood is kept dry after treatment.

Question: What is the treatment for a structure infested with subterranean termites?

Answer: Remedial treatment for subterranean termites employs the same chemical termiticide that are used for pretreatment, but the termiticide must be applied using techniques that require special equipment. Essentially, remedial treatment attempts to renew a broken chemical soil barrier. Some of the retro-treatment techniques are subslab injection, rodding, trenching, treating, and backfilling.

Question: What is the treatment for a structural infestation of drywood termites?

Answer: Usually drilling the infested wood and injecting it with a termiticide is a reliable and economical treatment for drywood termites.

Question: I have a drywood termite infestation and my pest control company says I need to have my house tented and fumigated. This procedure is very expensive, is it really necessary?

Answer: No! Tenting and fumigation for the drywood termites that occur in Arizona is almost never necessary nor is it especially effective. Spot treatment is the effective and economical treatment for our drywood termites.

Question: If tenting is not really necessary and not especially effective why do pest control companies recommend the procedure?

Answer: Profit and marketing, pure and simple. Tenting and fumigation is a spectacularly showy pest control procedure that gives the consumer the impression he is

getting a lot for his money. Fumigation is in fact a low overhead, extremely high profit operation. That's why the pest control industry likes it.

Question: How does the pest control operator know where to spot treat for drywood termites?

Answer: Drywood termites always produce sculptured pellet frass which they dispose of from so called "kick holes" in the infested wood. The telltale accumulations of drywood termite frass will show the homeowner where drywood termites are working and where the wood must be drilled and injected with termiticide. No frass, no drywood termites!

Question: How do I find a reliable pest control company?

Answer: Ask your friends and neighbors. Also, you may call the Arizona Structural Pest Control Board and ask for the complaint record for any licensed pest control company in Arizona. Finally, get proposals and bids from several companies to do the needed work. Ask questions about the proposed procedures and fees. Compare!

We will conclude this four-part series on termites next month with a discussion of wood infestation reports disclosure and buying a home in Arizona.

Robert E. Call
Extension Agent, Horticulture



Did you know . . . The word *deciduous* comes from the Latin word that means 'to fall off.'

Why do leaves turn colors in the fall? In the summer, the leaves constantly replace the green chlorophyll. When the days shorten, the

tree is signalled to cease production of chlorophyll. With no green being added to the leaf, other colors that have been present in the leaf all along finally come out. The colors are caused by sugars that are stored in the leaf. They change color when exposed to sunlight. The best conditions for brilliant autumn colors are dry summers followed by early autumn rains. The fall nights should be cold but not freezing. Wet weather in late autumn kills the color. Trees growing near streetlights keep their leaves longer than other trees, because it is the length of the day that triggers the change—not the temperature.

The Virtual Gardener— Gardening in Cyberspace

There is a wealth of information on gardening on the World Wide Web. You can learn how to tap into the gardening expertise available free from university research centers, the Cooperative Extension Service, and world class gardeners with your Web browser. I will be teaching a class on Gardening in Cyberspace at Cochise College, Sierra Vista Campus on Saturday, Dec. 7 from 10:00 am until noon. For information or registration, contact Cochise College, Non-Credit Program, 901 N. Colombo Ave., Sierra Vista, AZ 85635 or call 515-5496.

Gary A. Gruenhagen
Master Gardener

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JOHNSONGRASS (the "Wicked Weed")

GRASS FAMILY—Gramineae

JOHNSONGRASS—
Sorghum halepense (L.) Pers.

Johnsongrass is usually considered by many stockmen to be a good feed for their animals. It is a "good" feed source as long as the leaves do not produce a cyanide type of poison known as hydrocyanic (prussic) acid and then the grass becomes extremely deadly for all livestock.

What causes Johnsongrass to become poisonous? It appears that anything which influences normal plant growth may trigger the release of HCN within the plant: rapid leaf growth, or wilting caused by trauma in the form of trampling, freezing,

dryness, or even the cutting of the plant.

How do you know when a plant has been traumatized and may be producing HCN? One doesn't know and stock are apt to be poisoned by Johnsongrass at any time. Acute poisoning results in death from respiratory failure following the first appearance of symptoms within a few hours; rapid and complete recovery may occur after a sub-lethal dosage (even after severe poisoning). Breathing is, at first, deep, becoming rapid and labored, finally resulting in noisy, violent gasping, then trembling, staggering, and convulsions; bloat is common in the late stages of poisoning.

This grass is a prohibited, noxious weed in Arizona and total eradication is almost impossible, due to its lengthy underground stems, rhizomes (up to 2 ½ feet deep), and dormant seeds. An attractive leafy perennial, its height may reach between three to seven feet

in height, and its blades may be two feet long and 1/4 to 3/4 inches in length. The plant's flowering tops may be as much as two feet long and produce dark, reddish-brown grains. It flowers from April to November and prefers to grow in irrigation ditches and in cultivated fields. It is found in elevations up to 6,000 feet.

Peggy Dierking
Master Gardener

[Poaceae. The grass family is undoubtedly the most important plant family in terms of usefulness to humans. All the world's important grain crops are grasses; the bamboos (giant grasses) are useful in building and crafts. Many grasses are used in lawns or as ornamental annual or perennial plants. Some botanists use Gramineae as the family name for grasses.]

-*Sunset Western Garden Book, 1995*