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the Cochise County Master Gardener

NEWSLETTER

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THE PLANT OF THE MONTH

Peter Whitman
Staff Writer

This month the "Plant of the Month" topic is about a tree which may be in the forefront of your minds right now: Acacia smallii. If you have purchased a smallii in the past year and it now appears to have frozen, you may be the victim of an uncontrollable genetic mix-up.

What you have is not a smallii. It is an Acacia farnesiana. These two acacias are genetically interlocked. Amazingly enough, if you were to plant beans from a smallii, what would grow might be either a smallii or a farnesiana...and vice versa. Their genetic similarity results in very few visible differences. However, if ignored, those differences can lead to disastrous results. As previously mentioned, the farnesiana is very frost sensitive. Additionally, it blooms in the fall as well as in the spring. The smallii, on the other hand, tolerates frost very well, and blooms only in the spring. (An interesting note: the smallii is larger than the farnesiana.) Farnesianas do very well in Phoenix or Yuma. But, in cold Cochise County, they just don't make it...even in Tucson they freeze back every year.

If the smallii were not such a beautiful tree, perfect for an arid landscape, I would say, "Don't mess with it!" But, it is beautiful. It grows to a height of about 35 feet with dark brown, beautifully textured bark, lacy fine foliage, and long straight white spines. And, it is perfect for an arid landscape because of its tolerance to both the hot desert sun and drought conditions. The smallii is an excellent tree for a patio or as an accent tree in a landscape.

What can be done about the farnesiana if you choose a smallii for your landscape? First, check with your nursery to see if they have had the plants for more than a year. If they have, and it is a reputable nursery, then they have probably weeded out the farnesianas. Second, wait until fall to purchase your smallii (choose one that is not blooming), wait until spring (around May or June) before planting...just to be on the safe side. Now, if you planted what you thought was a smallii in the spring and it is still blooming in September, check with your nursery to see if they will take it back or exchange it.

In spite of what may appear to be serious problems, the smallii is such a beautiful landscape tree that it is well worth the trouble.

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Extension Agent,
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A NEW CLASS BEGINS

On March 22, 1991, a new Master Gardener class will begin. For more information or an application, stop by the Sierra Vista Cooperative Extension office or call Monday or Wednesday between 9:00 am and noon. We will have more information in next month's newsletter.

REMINDERS

Since monthly gardening tasks rarely change from year-to-year, we decided to print condensed versions of last year's "What-to-Do" column rather than reprinting them in total. This will give us the space to try new columns while still reminding you what gardening tasks should be done this month. A complete packet - one year's worth - of "What-to-Do" columns is available in our office if you need to consult them.

WINTER PRUNING OF TREES
WATER PERIODICALLY
COLD-MOIST STRATIFY SEEDS
ORDER FROM SEED CATALOGS
PRUNE ROSE BUSHES
PLANT BARE ROOT TREES
PREPARE SPRING PLANTING BEDS
CLEAN & REPAIR DRIP IRRIGATION SYSTEM
PLANT SEEDS INDOORS FOR TRANSPLANTING AFTER LAST FROST DATE

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Jackie Dillon-Fast
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Peter Whitman

Articles to be published in next month's newsletter must be received at the Sierra Vista office by February 22.

WINTER PRUNING

Jackie Dillon-Fast
Staff Writer

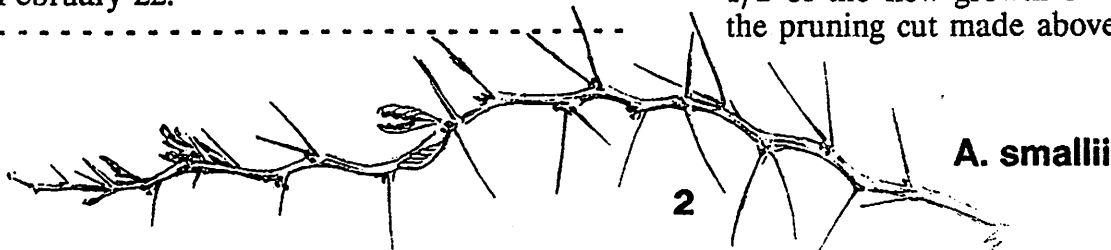
There are two main reasons for pruning: to improve a tree's shape and size, and to improve a tree's fruit production, although we don't have to worry about fruit production when pruning landscape trees. Regardless of the kind of tree, our main interest is the overall health of our trees.

Before you begin your winter pruning, you may want to review the following pruning fundamentals. Knowing why you should prune out one branch and not its neighbor will help you make good decisions when you have pruning shears in hand.

A word of caution: if you have inherited an older, overgrown and unpruned tree, don't try to prune it all in one year. You will end up handicapping the tree by removing too much healthy wood at one time. Space your pruning out over two or three years. And NEVER top trees. Topping - cutting all of a tree's limbs back to within 1 or 2 feet of the tree trunk - is one of the worst things you can do to a tree.

HOW PRUNING WORKS. Pruning reduces a tree's older top growth. This frees more of the tree's nutrients for creating healthy new growth and quality fruit. You can channel this energy into specific areas of your tree by placing your pruning cut directly above a bud or side branch. Called a Header Cut, the bud then develops into a new side branch or the existing side branch becomes stronger and more dominant. Another kind of pruning cut - a Thinning Cut - removes dead or damaged branches, crossing or crowded branches, or nonproductive fruiting wood back to within a few inches of the trunk.

Header Cuts. Used mostly on fruit and nut trees, a header cut involves pruning out 1/3 to 1/2 of the new growth on a given branch with the pruning cut made above a bud, side branch,



or main branch that will grow in a favorable direction. In windy locations, select a bud or branch that will grow into the wind to reduce the likelihood of it breaking. Make all of your cuts on an angle, with the bud or branch on the high side of the cut. On a tree less than four years old, concentrate on creating a strong branching system. Be wary of making header cuts on older branches hoping to coax out a side branch. The latent buds on older branches may have been dormant for too long to develop into side branches.

Thinning Cuts. Used on fruit and shade trees, a thinning cut involves pruning out the entire branch with the cut made close to its junction with the main branch or trunk. As a general pruning rule, never leave a stub. As with all rules, there is an exception. When removing a branch all the way back to the trunk, try to locate the branch collar - an outgrowth from the trunk which surrounds the branch and is slightly wider in diameter. Make the thinning cut to the outside of the branch collar. Although this will leave a small stub, leaving the branch collar intact will speed "healing" of the cut. If you are removing a large diameter branch, make a preliminary cut underneath with your pruning saw to keep the bark from tearing when the branch is cut. Use thinning cuts to eliminate "crows feet" (places where three or more branches join) by cutting out one of the branches and leaving in place the two branches that form the widest angle. This is the stronger union and allows more room for side branching.

PRUNING SHADE TREES. Aim for an aesthetically pleasing tree. It is healthier for shade trees to grow naturally and saves wear and tear on your pruning shears. Thin out any congested branches. To shorten an overly ambitious shade tree, cut the tallest branch lower than the rest of the branches. This is better than shearing all of the top branches equally because it retains the natural shape of the tree.

PRUNING FRUIT TREES. Make header cuts to increase side branching and fruit production and make thinning cuts to reduce crowding and to shape the tree. It is critical that you know the

growing and fruiting habits of the kind of fruit tree you are pruning. Not all fruit trees are pruned the same way and you must be careful not to inadvertently prune out the best of your fruit-bearing wood.

Peach-Nectarine Trees. Vigorous growers, naturally multitrunked and vase-shaped with fruit occurring on the previous year's growth. This growth produces fruit only once and then becomes unproductive. Prune hard to encourage side growth from these older branches by removing 2/3's of the new growth from each branch. Do not cut back to two-year old wood or you will have lots of side branches but no fruit. You can tell new growth from old by color changes in the bark as you move down the branch: older wood is a duller shade. Use thinning cuts to remove crowded branches and to open up the center of the tree to more light.

Apricot-Plum Trees. Almost as fast growing as peach but with different fruiting habit and a naturally multitrunked, vase shape. Fruit occurs on fruit-bearing branches and fruit-bearing spurs. Spurs are stubby fruiting twigs up to three inches long and resemble long thorns with buds. These spurs will be productive for three to five years. Prune 1/3 to 1/2 of new growth on each branch to promote side growth and use thinning cuts to remove older side branches to encourage new spurs to form. Do not remove spurs separately.

Apple-Pear-Cherry Trees. Much slower growing than peach or apricot with only a small amount of new fruit-bearing wood produced each year. Apple trees are naturally central leader - having one dominant or leader branch - and fruit is produced on the fruiting spurs of two year old wood. Apple tree spurs will bear fruit for five to eight years. Pear trees are central leader or multitrunked and fruit is produced on the fruiting spurs of two year old wood. Cherry trees can be central leader or multitrunked and fruit is produced on fruiting spurs that remain productive for 10 to 12 years.

PRUNING FROST DAMAGE. Wait until late March to prune out any frost damaged branches. Many branches that look dead may recover in spring if given the chance. It is often hard to tell dead wood from live wood during the winter months.

CHECK IT OUT!

The Cochise College Sierra Vista campus offers the following non-credit classes in its "Green Thumb Series". You may enroll in one for \$10 or all three for \$25.

February 21 - 7:00 - 9:00 pm
Dale Leiendecker, Horticulturist
"Will it Grow Here"

February 28 - 7:00 - 9:00 pm
David Epple, Dir. Arizona Cactus, Bisbee
"On the Desert"

March 7 - 7:00 - 9:00 pm
T. J. Martin, Entomologist
"Ecologically - Sane Pest Control"

1990 Master Gardener Newsletter Abridged Index

BARE ROOT PLANTING			
Now is the Time		Feb	90
BULBS			
Planting Bulbs		Oct	90
CACTUS			
Check Cactus for Fungus		Mar	90
Gifts From the Desert (Prickly Pear Cactus Juice)		Aug	90
COMPOSTING			
Composting is Easy		Nov	90
DORMANT-OIL SPRAYS			
Dormant-Oil Sprays: A Safe and Effective Way...		Jan	90
FERTILIZING			
Fertilizing		Apr	90
FROST PROTECTION			
Frost Protection Strategies		Nov	90
The Coming of the First Frost		Oct	90
HOLIDAY CACTUS			
Caring for Holiday Plants		Dec	90
INSECTS			
Aphids		May	90
Apple Worm		Apr	90
Cabbage Loopers		Jun	90
Cabbage Maggot		Nov	90
Codling Moth		Apr	90
Earwig		Dec	90
European Insect Pest Arrives in AZ (ash whitefly)		Feb	90
Fig Beetle		Sep	90
Grasshopper		Aug	90
Green Fruit Beetle		Sep	90
Green June Beetle		Sep	90
Mexican Bean Beetle		Jul	90
Parsleyworm		Oct	90
Peach Beetle		Sep	90
LANDSCAPE TREES			
To Wrap or Not to Wrap		Nov	90
MASTER GARDENER PROGRAM			
Gardening Videos Available		Jun	90
Part II: A New Class Begins		Aug	90
So What's a Master Gardener Anyway?		Dec	89
PERENNIAL FLOWER GARDENS			
Dividing perennials		Oct	90
PLANT OF THE MONTH			
Dalea greggii		Dec	90
PLANT PROPAGATION			
Cold-Moist Stratify Seeds		Feb	90
POINSETTIA			
Caring for Holiday Plants		Dec	90
PRUNING			
Pruning Roses		Mar	90
Winter Pruning		Jan	90
VEGETABLE GARDENS			
Planting Cool Season Vegetables		Apr	90
When Should I Plant My Vegetable Garden?		Mar	90
WATER CONSERVATION			
Deep Watering	May, Jun, Jul, Sep	Jun	90
How do You Xeriscape?		Jun	90
How to Properly Water Your Tree: Part I & II	Apr, May	May	90
Southwestern Landscaping That Saves Energy and Water		May	90
The Real Winner in the Landscape Wars		May	90
WEEDS			
Control Weeds		May	90
WILDFLOWERS			
Start Planning Your Spring Wildflower Garden		Aug	90

ECOLOGICALLY SANE PEST CONTROL

by T.J. MARTIN

January 1991

The idea behind "natural" pest control methods is to produce an acceptable "crop" (whether it be vegetables, fruit, flowers, lawn or whatever) while having the least impact on the natural ecosystem. Very few things we do (or don't do) will actually be a single, isolated incident. Things in nature are involved in "webs" that all interconnect and every action or inaction affects one or more other creatures or processes, which in turn affect still others, etc... If you want to be part of the solution rather than part of the problem, you will need to do a bit of study involving the ecology of your garden, yard or orchard. This will make you much more aware of the "ripple effect" that all actions have and why we have to be very careful not to start a chain reaction in which we will end up in worse shape than we started. The following are some ways by which we may try to learn to work with nature rather than against it and in the process, maybe we will all come out ahead.

GAINING KNOWLEDGE

A. Expectations - Idealism v/s Realism. The balance between what we think we want (or need), and what is probably going to happen.

B. Education - In order to truly work with nature, you will need to understand how the whole system works, how to identify the "players" and how they each fit into the scheme of things. Your specific crop, your geographical location, the weather, the soil, insects, other animals, diseases, your neighbors and their crops, etc.. are all important parts of your ecosystem.

TAKING ACTION

C. Discourage - This involves making your crop as uninviting or inaccessible as possible to the pest population. Cultural control measures can go a long way toward keeping most pests from becoming a major problem.

D. Encourage - Make it easy for Mother Nature to help you with your gardening. Make your yard an inviting home for beneficial natural "Pest Control Operators". Make it a dangerous place for pests to be.

E. Control - If none of the above work, or not well enough for your needs, then you may have to resort to overt control measures. This may involve the use of one or more of the following: baits, traps, homemade remedies, natural insecticides, physical controls and microbial or biological control measures.

A. Expectations - What is realistic?

1. Don't expect perfection. It is simply not possible to achieve. How many hundreds of veggies do you think the advertising folks had to look at before they found the ones they photograph for the catalog or magazine illustrations? And you can be sure that they turned the less-than-perfect side away from the camera too! A little healthy competition with your neighbor, a friend across town, your relative back East or in preparation for the County Fair is fine and dandy. But don't beat your head against the wall or develop an ulcer trying to achieve "The Perfect Garden" (or landscape or orchard, etc.). Gardening is supposed to help give you a sense of achievement as you work with nature to produce your own food and enhance your personal surroundings. Relax! Even the Garden Of Eden had a few bugs in it!

2. Define just how much damage (and what kind) that you can tolerate on your crop. Would you rather be content to cut away a bit of nibbled-upon leaf or eat your picture-perfect salad greens knowing

they probably contain the residues of chemical pesticides? If you are used to the types of produce found in regular grocery stores, you will be in for a few surprises when you see and taste your own crops. First, the taste of fresh is nothing like "store-bought". Commercial crops, more often than not, are grown not because they taste good, but because they are hardy enough to retain a good appearance as they travel to market. Secondly, commercial produce will usually look differently. You will find that many of the deep colors you are used to seeing on many fruits and vegetables come from dyes, not from Mother Nature. And the shine on cucumbers and other veggies comes from wax. Your own crops may also show a bit of cosmetic insect damage and may bruise more easily or not keep as well for as long. But you can cut away a bit of damage and just use a scrubber on the rest. At least you will not have to cut away half the fruit or vegetable in order to be sure you have gotten rid of all the pesticides, fungicides, growth inhibitors, dyes, etc. that may have been present on the peel.

3. How much time/energy/money do you honestly have available to invest in your crop? Are you a "plant it, ignore it and harvest it" person? If so, then perhaps you should consider planting certain crops that do not need a lot of attention or outside pollination and just cover them with agricultural fleece and a good mulch at planting. Add a automatic watering system that you can fertilize with also and you can pretty much be an "absentee gardener" until harvest time. On the other hand, many of us enjoy the frequent personal interaction with nature that a "hands on" gardening approach brings. After a hard day in "civilization", the peace and tranquility that can be found in the garden can be wonderful therapy. In addition, by puttering around a bit on a daily or every-other-day basis, you can usually notice and correct most problems before they get out of hand. You can even use the gardening as a tool to help improve relationships within your family. Inviting your spouse or children to join you can provide often hard-to-find opportunities for positive personal interaction and communication. Or, if you prefer, you can declare the garden "off limits" and use it for needed personal alone time! What are your needs?

B. Education - Know your crop, your pests and yourself.

1. Learn the requirements of your crop. What nutrition, water and climatic elements need to be present in order for it to do best? What is already available and what must you provide?

2. Learn to correctly identify problems. Is it a nutrition deficiency, water stress, an insect, an animal pest or a disease? Which one? More than one? Take notes: When did the problem appear (month, date, time of day, etc.). Was it an isolated incidence or is your whole crop at risk? Did it start slowly and build up or did the whole thing just kind of explode seemingly overnight? When did you last treat or feed, what did you use and how much? What has the weather been like? Become familiar with local pests and the types of damage they cause. Find out what problems your particular crop is subject to and when they are likely to appear. Get a hold of (buy or borrow from a friend or the local library) one of the many good reference books on pest and disease identification. One with lots of pictures can go a long way toward helping you recognize when you have a potential problem and what is causing it.

3. What remedies are available for you to use? When and how are they applied? What things have folks around here been using for years that still seem to work for them? What are the latest findings and suggestions by your Cooperative Extension Service, the U.S. Department of Agriculture, your local university, recent gardening publications or a reputable gardening supply company or nursery? Hopefully, the rest of this publication will give you some useful ideas along these lines.

To be continued. . .