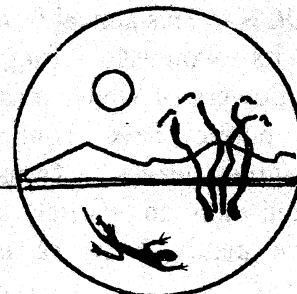


# High on the Desert

Cochise County Master Gardener

## Newsletter



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

### Cool Season Bedding Plants

Just because winter is upon us we don't need to roll over and play dead in our gardens.

Cool season bedding plants will provide us with spectacular and beautiful color until the summer heat arrives. Bedding plants that we suggest can be planted in January or February. It is best to use transplants, not that using seeds isn't the way to go, but because the soil that you are planting in may not be warm enough to cause germination and seed development. All transplants do best if the soil that they are planted in has additives.

**ASTER** – Planted in full sun in a prepared bed with lots of acidifying materials such as pine bark mulch and peat moss, this sprawling perennial will bear blue, white, pink, and purple blossoms 4 inches across on plants 12 to 18 inches tall.

**CALENDULA** – Easy to grow, this annual produces orange and yellow daisy-like flowers on 8 to 18 inch tall plants. Plant the transplants 12 to 18 inches apart in full sun.

**CORNFLOWER (Bachelor's Button)** – This spring blooming, hardy annual can be planted by seed in early fall and again in spring after the soil warms. An old-fashioned flower, cornflower is

easy to grow, tending to reseed itself and come back year after year. Plant 6 to 8 inches apart. Bears blue, purple, pink and white flowers on 18 to 36 inch plants.

**DIANTHUS** – This early spring blooming biennial blooms in various shades of white, pink, and red flowers on plants that range 6 to 15 inches. Plant seeds in the fall about 10 to 15 inches apart.

**PANSY** – This particular plant, an annual, is the staple for winter color. Space 4 to 6 inches apart in full sun to partial shade. Pansies produce large multi-color or solid blooms on plants that vary between 4 and 6 inches tall. They seem to be able to take the cold weather we have here.

**POPPIES** – Iceland poppies have 2 to 3 inch cup-shaped flowers that are on 1 to 2 foot stems in pastel colors of yellow, white, pink, and orange. Plant in well prepared soil now for spring blooms.

**SHASTA DAISY** – This sturdy perennial performs well in sunny areas with lots of space. The large 2 to 4 foot plant produces 2 to 4 inch white flowers in mid-spring and again in the fall.

**SNAPDRAGONS** – This favorite annual reaches heights of 12 to 24 inches. It is available in many varieties that include dwarf, medium, and tall. They can fit into any flower garden. Space the transplants 6 to 12 inches apart in a sunny location.

*(Continued on next page)*

#### Cochise County Cooperative Extension

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**Snapdragon**

**STOCK** – This annual is valued for its wonderful fragrance. The flowers of white, pink red, and purple have contrasting gray-green leaves. Transplant in full sun to partial shade. Space plants 8 to 12 inches apart.

**SWEET PEAS** – This spring blooming annual vine could have been planted by seed in October or November but can be transplanted now. Sweet peas grow very much like green peas in the vegetable garden, requiring staking or a trellis for support. There are also short bush varieties. All varieties bloom best in full sun.

Winters need not be dull and gray when you've got these colorful bedding plants to brighten up your home and landscape. See the certified nursery professionals at your locally owned nursery for more information.

*Barry R. Bishop  
Master Gardener/Staff Writer*

## Cuttings 'N' Clippings

➤ The Sierra Vista Area Gardener's Club would like to welcome visitors and new members at any time. The meetings are held at the Sierra Vista Public Library in the Mona Bishop Art Gallery on the third

Thursday of every month from 2:00 to 4:00 pm.

Programs on all aspects of gardening in our unique high desert climate and field trips to public gardens and the private gardens of members and their friends, nurseries, and other places of interest are just part of the fun. Members share seeds, cuttings and plants, and much useful information. Experience varies among the members with some who are just beginning to garden to others who have gardened for many years. We have several Cochise County Master Gardeners in the group also! Just drop by any meeting and we'll be happy to see you. For more information please call our President, Yvonne Jingle at 378-2833.

*Maggi Crist  
Master Gardener*

➤ Used telephone books will be recycled into new phone books, but your help is needed. Drop off your outdated phone books in the specially marked bins located in Benson, Bisbee, Douglas, Ft. Huachuca, Huachuca City, Sierra Vista, and Willcox.

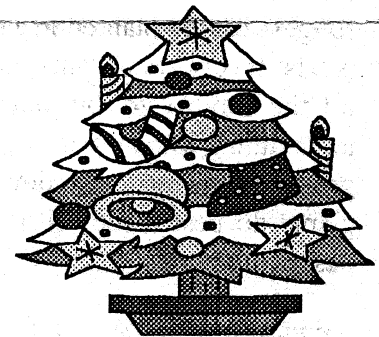
➤ Master Gardeners from California will host the next International Master Gardener Conference with the support of the University of California Davis, July 15-19, 1997 in Sacramento, California. Submittals for a logo design will be accepted until Dec. 31, 1995. They are also looking for key note speakers, instructors, and topics for theme days and special training opportunities for

advisors and volunteers alike. If you would like more information, please call the Sierra Vista Cooperative Office.

➤ In case you missed it, an article in the Sierra Vista Herald by Angie Ramirez, reports that Arizona callers can receive a free listing of Arizona Grown fruits and vegetables being harvested this month along with recipes by calling 1-800-CANCER.

➤ Just three months until the 3rd annual High Desert Gardening & Landscaping conference. Watch for registration forms in next month's newsletter! It will be held March 1 & 2, 1996 at the Wyndemere Hotel and Conference Center in Sierra Vista.

➤ Why not try a living Christmas tree this year?



# Happy Holidays!

### Newsletter Staff:

Barry R. Bishop  
Carolyn Gruenhagen  
Elizabeth Riordon  
Virginia Westphal

Robert E. Call, Extension Agent-Horticulture

## A Transplanted Gardener . . .

Companion planting has intrigued and fascinated gardeners for centuries. Companion planting consists of planting together plants that assist each other to grow well and to repel insects. On the other hand certain plants will diminish each other's ability to grow by either root secretions or odors. This is the first of a three part series on the ABC's of companion planting.

**ASPARAGUS** - Asparagus and parsley planted together gives added vigor. It also likes basil and tomatoes. Plant tomatoes along the asparagus rows to repel asparagus beetles.

**BEANS** - Bush beans planted with potatoes protect them from the Colorado potato beetle. The potatoes benefit by being protected from the Mexican bean beetle. Plant in alternating rows for the best effect. Bush beans also like cucumbers, strawberries, and corn. Dislikes fennel.

Pole beans do well with summer savory, radish, and corn. Pole beans dislike beets, kohlrabi, and sunflower. All beans dislike onions.

**BROCCOLI; BRUSSELS SPROUTS; CAULIFLOWER; COLLARDS; KALE; KOHLRABI** - Does well with dill, celery, sage, peppermint, rosemary, potatoes, beets, and onions. Does not like tomatoes, pole beans, or strawberries.

**CARROT** - Onions, leeks, rosemary, and sage act as an

repellent to carrot fly. Carrots like leaf lettuce and tomatoes but do not like dill.

**CORN** - Sweet corn likes potatoes, peas, beans, cucumbers, pumpkin and squash. Plant pole beans around the base of the corn when it's knee high and it will help anchor the corn during winds and add nitrogen to the soil which the corn will appreciate. The melons, squash and cucumbers like the shade provided by the corn and they in return protect the corn from animals which do not like to travel through the vines. Corn does not like tomatoes.

**CUCUMBER** - Likes beans, peas, radishes, and sunflowers. If you plant radishes with the cucumbers and let them go to seed it will protect the cucumbers from the cucumber beetle. Cucumbers dislike potatoes and aromatic herbs.

**GARLIC** - Garlic grown around fruit trees is good against borers. Planted around roses and tomatoes will protect them from red spider mites. All alliums inhibit the growth of legumes.

**LETTUCE** - Lettuce likes onions, strawberries, cucumbers, carrots and radishes.

**MELONS** - Practice of crop rotation is your best bet to beat pests, but do not rotate melons, squash, and cucumbers with each other. Melons do not like potatoes. They grow well with corn and sunflowers. If you want to ripen your melons faster, take a coffee can and

spray paint it black and set the melon on top of it. The black can will absorb heat and ripen the melon. This also works well for pumpkins.

**ONIONS** - Onions like the cabbage family, strawberries, beets, lettuce, and tomatoes. They do not like the legume family.

**PEAS** - Peas like radishes, cucumbers, corn (grow it up the stalk), beans, potatoes, turnips, carrots and herbs. They do not like beans. Remember to plow your pea and bean vines into the ground to return nitrogen and humus to the soil.

**PEPPERS, SWEET** - Basil and sweet peppers love each other. Also grows well with okra.

**POTATO** - Potatoes like corn, cabbage, beans, horseradish, marigold and eggplant. They do not like pumpkin, raspberry, squash, cucumbers, tomato and sunflowers. They also do well following a rye crop.

**PUMPKIN** - Grows well with corn and datura weed but do not like potatoes.

**TOMATO** - Tomatoes and the brassica family, corn, and potatoes do not like each other. Tomatoes do like alliums, carrot, marigold, parsley, and garlic. Unlike most vegetables, tomatoes like growing in the same spot each year which is okay unless there is a disease problem in the soils in which they should be planted in a new area.

*Cheri Melton  
Master Gardener*

# Congratulations!

Jo Babbie, Maggi Crist, Winnie Dill, Cheri Melton, and Van Stetler have completed their volunteer hours and are now Cochise County Master Gardeners!



*"Volunteers receive no pay – not because they are worthless, but rather because they are priceless!"*

–Unknown

University of Arizona Cooperative Extension

## Mail-Order Gardening

When the cold weather comes and people can't get outside to work in the garden as often as they wish, many spend time ordering garden catalogs, browsing through them over and over again, and writing out orders (which they may or may not send in!). If this is how you fill many of the hours until spring, you know what a fun and educational experience catalog shopping can be!

If you haven't become a garden "catalogaholic" as yet, you may not know what you're missing. Many catalogs that sell vegetables are filled with recipes for you to try using the produce you grow. There are intriguing plant pictures and descriptions on every page. Here is an example from *Shepherd's Garden Seeds 1995* catalog:

"Chard argentata – Italian heirloom. More than anyone, Italians know and enjoy chard. This heirloom is a special favorite and we make an extra effort

to get fresh seed from Italy every year. Argentata's handsome vigorous plants have wide silvery-white crispy mid ribs and savoyed deep green broad leaves. Argentata has long been selected by discerning cooks for its mild, clean, and sweet flavor. You'll find it a find alternative to spinach in omelets, in pasta dishes, and casseroles. We also love its leaves rolled around our favorite sausage stuffing and poached in chicken broth topped with a little fruity olive oil and fresh lemon slices. Leafy argentata plants stand a wide variety of weather conditions."

Catalogs are liberally sprinkled with gardening tips such as how to store seed, thinning plants, soil building, and fertilizing. One catalog contained a backyard fruit calendar listing what to do month by month.

Cultural requirements and lots of information on how to use the harvest, when to pick and how to store abound in these books which are often free for the asking. There are layouts for flower borders and herb gardens for you to copy or just to

give you ideas on designing your own plantings. Most catalogs have gorgeous color pictures – never to be matched in a "real" garden perhaps but enticing just the same.

Some seed catalogs sell gardening equipment, everything from tools to do-it-yourself greenhouses, while others specialize in garden decorations, special hand care products for gardeners, and garden furniture. Others have bird, bat, and butterfly houses for sale and bird feeders of all types.

As an added bonus, I've found that from years of looking at the pictures and reading the descriptions of plants in catalogs (books and magazines, too, I'll admit) I can often identify an unknown plant even if I've never seen it "in person" before.

Most garden magazines carry advertisements from seed companies and nurseries who would like to send you their catalog, or you can call the Cooperative Extension office for a list of names and addresses of mail order suppliers.

*Maggi Crist  
Master Gardener*



# The Agent's Observations

Continued from last month . . .

**Myth #3: Organically grown food does not use pesticides.** "Organically grown food is food grown without pesticides; grown without artificial fertilizer; grown in soil whose humus content is increased by the additions of organic matter; grown in soil where minimal content is increased with applications of natural mineral fertilizers; has not been treated with preservatives, hormones, antibiotics, ect." - Robert Rodale. This quotation from Mr. Rodale, whose father, J.I. Rodale, began *Organic Gardening Magazine*, states that "organic" growing does not use pesticides. *Webster's New Colligate Dictionary* defines a pesticide as "an agent used to destroy something that pesters or annoys." What are rotenone, pyrethrum or insecticidal soap used for? To kill pests! I believe that Friend Sykes (1888-1965), an English Estate Owner, had a better prospective on "organic" growing. He said, "Organic Farming...is another name...for Humus Farming. Organic methods are not, therefore, a matter of avoiding the use of artificials; they require that the cultivator should encourage the fertility

which lies, actually or potentially, in the soil itself, and should regard the soil not as inert matter but as a living organism."

**Myth #4: Pesticides are toxic and harmful.** Of course they are harmful they are meant to destroy pests. *Webster's New Colligate Dictionary*, 1980, defines a pesticide as, "an agent used to destroy something that pesters or annoys." What are some of these pests that we as gardeners are concerned about. There are insects, bacteria, fungi, viruses, mycoplasmas, weeds, rodents, mammals, and nematodes that are trying to make a living the best they can. When they make their living at our expense we try to limit the damage they cause. Generally people suffer from a condition known as "chemophobia." *Call's Dictionary*, 1995, defines chemophobia as "the unreasonable fear of chemicals." People are usually afraid of things they do not understand or have knowledge about. The whole earth and its populating organisms, the solar system, and universe are made up from basic 92 or so chemical building blocks found in the chemical periodic table. Some of the most toxic compounds known to man are produced by Mother Nature. A sea snake's venom from off the coast of South America is the

most toxic of all chemical compounds known to man. Several milliliters of botulin toxin could kill the entire human race. Pesticides that are used to produce food are nessecary to feed a hungry world.

One measure of toxicity given to compounds, however not the only one, is the LD<sub>50</sub> rating. This is the Lethal Dose of the compound in question needed to kill 50% of a test population, usually lab mice or rats. The LD<sub>50</sub> is calculated from animal experiments and is stated as the number of milligrams of the compound per kiligram of body weight need to produce 50% mortality. The lower the number the more toxic the compound. These numbers are developed so relative toxicities can be compared. Below is a list of some pesticides, ("organic" and conventional), and common household products and their respective LD<sub>50</sub>'s:

RoundUp - 5,000  
caffeine - 192  
coffee - 80-175  
malathion - 1,500  
pyrethrin - 1,500  
rotenone - 132-1,500  
diazinon - 1,250  
Sevin - 246  
Bleach (10%) - 11-33  
ammonium - 132  
aspirin - 1,000  
salt-3,000  
cyanide - 2.80

Source: Pesticide Coordinator's Office, U of A; Poison Control Center, Tucson, AZ (over)

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It is interesting to see that many commonly used household products have much higher toxicity levels than pesticides. Remember that the lower the number the more toxic. Also the the so called "organic" pesticides have LD<sub>50</sub>'s that are equal to conventional pesticides. Just because something has an "organic" label does not mean that it is not toxic and should be spread around with wild abandon! Always read and follow the label that comes with pesticides, it is a legal document and if not followed you break the law. It is interesting to note that coffee is more than 28 times more toxic than RoundUp herbicide to mammals in terms

of LD<sub>50</sub>'s. So just because something is natural or man-made does not mean it is benign or harmful.

Below are some quotes from persons who deal with the question of pesticides in the food we eat.

*"Our food supply is not only the safest, but it is the most abundant in the world and pesticides are one of the important tools that have made that abundance possible."* Dr. C. Everett Koop, Former Surgeon General

*"At the present time, I am unaware of any evidence that suggests regulated and approved*

*pesticide residues in food contribute to the toll of human cancer in the U.S."* Dr. Richard C. Adamson, National Cancer Institute

*"In the case of pesticides, it is our belief, as well as that of the larger medical and scientific community, that the benefits of eating fruits and vegetables far out weigh any potential risk that may be involved in ingesting foods correctly treated with pesticides."* Dr. Vern N. Houk, Center for Disease Control

**To be continued next month...**

*Robert E. Call  
Extension Agent, Horticulture*