Inside this Issue:

Growing Pinto Beans 2
Companion Planting 2
August Planting 3
Veggies by the Season 3
Snap shots 3
Fall Companions 4
A Note from Denise 6

For more than 35 years, the National Gardening Association has been working to renew and sustain the essential connection between people, plants, and the environment.

Website of Interest:
www.garden.org

Desert Favorite  By Master Gardener Andrea Meckley

One of the many species in the agave family is the Century Plant - *Agave americana*. This large evergreen succulent will do well in full sun to part shade. It is a low water user that will accept shallow but well-draining soil and temperatures in the teens. Although the original habitat is unknown, in Mexico they grow wild and this is where they are thought to originate. Two other varieties of this species are available: *Agave americana* var. *marginata* which has narrower leaf blade and yellow stripes along the leaf margins on both edges, and the smaller growing *Agave americana* var. *mediopicta* ‘Alba’ (shown in picture) which has a white stripe down the center of the leaf. *Agave americana* has bluish leaves forming at the base of the plant with sharp pointed tips. Leaves are toothed on the margin, curved downward and show an attractive pattern on the backside of the leaves. Reaching 5-7 ft high and spreading 8-12 ft. wide allows room for these plants to grow. The exact triggering mechanism is not well understood but when Century plants are 10 years old or more a striking flower is produced. A large, yellow asparagus-like stalk branching up to 6 ft across and 15-30 ft. tall emerges from the center. After flowering, the plant dies but it produces many “pups,” or baby plants, which remain to take its place that can easily be transplanted. Maintenance is minimal. Removal of lower leaves can be dangerous and removal of entire dead plant after blooming can be difficult due to its large size. Plants are susceptible to Agave weevil, especially when weakened. Keeping in mind (Continued on page 3)
A little info on Growing Pinto Beans

Q. I've looked all over and can't find much info on growing pinto beans. Do you have any info on this? Start indoors or out? Space how far apart? Start when? How much yield per plant?

A. Dry edible beans are high in protein, phosphorus, iron, vitamin B1, fiber, with no cholesterol. Fresh pinto beans are far superior to the dried pinto beans you find in the stores. They should be planted directly into the garden when all danger of frost has passed.

We have two general seasons for planting pinto beans here, spring and fall. So, now would be a good time to plant for fall planting. In the spring, you would plant them around mid-March. Most pinto beans will vine and are not the bush types. Bush types, if you can find them, might be a better choice for our valley. But if it does vine, give it a chance and see how you do with it.

Before planting, mix a fertilizer high in nitrogen and phosphorus in the soil such as 16-20-0. Make sure the soil has been amended with organic matter, such as compost, at the same time. Seed would be spaced about 12 to 18 inches apart in the row if they are bush types or vines with no support.

If you are going to trellis the vining type then you can plant them six inches apart and put up some trellising for them to climb. You can also put up poles like you would for pole beans.

Plant the seed about one inch deep. It will take about 10 days to germinate, but make certain the soil stays wet. You should see flowers in about 40 to 50 days. When you see flowers, side dress the row with a high nitrogen fertilizer like ammonium sulfate applied at about one cup per 50 foot row. Side dressing just means dribbling some fertilizer at each plant location and let the water move it into the soil. Only nitrogen is needed at this point.

Even though pinto beans are a legume and can take nitrogen from the air without any additional nitrogen applied as a fertilizer they are not terribly strong at doing this in our arid zone. And our soil is not adapted for legumes without adding some inoculants for helping them develop this capability.

They will take about 90 to 100 days to get to the harvesting stage if you were to use them dry, but I would sample them earlier as the pods are beginning to fill out with the beans. You will probably like them at this stage to use fresh when cooking. If we have a stretch of real hot weather at the time of bloom you might not see a very good set from the flowers.
You know you’re a Master Gardener if your bumper stickers read: 'I brake for worms,' 'I'd rather be weeding' and 'Have you hugged your cactus today?'

Desert Favorite - Continued from page 1

the sharp points, uses for these agaves are specimen or accent plants, or in a large container. Century plants are used as fencing to keep livestock contained and trespassers at bay. A thick row of century plants is virtually impenetrable to humans and animals. The plant's leaves are harvested for their fiber, known as pita, which is used to make rope and cloth. Another common use of the plant is the commercial production of agave nectar, which is marketed as a natural sugar substitute. The seeds of *Agave americana* can be ground into flour and used in baking, and the heart of the plant is often roasted and eaten for its sweet flavor. The plant's sap is also fermented to create a beverage similar to beer, which is known as pulque. Century Plants look good all year round and are a good plant to add some texture in the landscape.

August Planting

<table>
<thead>
<tr>
<th>Basil</th>
<th>Cabbage</th>
<th>Onion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans, Pinto Beans</td>
<td>Cauliflower</td>
<td>Spinach</td>
</tr>
<tr>
<td>Beets</td>
<td>Carrots</td>
<td>Squash, winter</td>
</tr>
<tr>
<td>Black-eyed peas</td>
<td>Chard</td>
<td>Sunflower</td>
</tr>
<tr>
<td>Bok Choy</td>
<td>Corn, Sweet</td>
<td>Tomato, transplants</td>
</tr>
</tbody>
</table>

Veggies by the Season

Veggies by the season is a series of year round, month-by-month gardening classes designed to educate people on producing timely vegetables in their back-yard gardens.

**Fall**

**August 8** – Irrigation demonstration

**August 22** – Soil Improvements

**Sept. 05** – Seed sowing and transplanting

**Sept. 19** – Thinning, Harvesting and Irrigation timers

**Oct. 10** - Season extenders and Mulching

**Oct. 24** – Seed Harvesting and Storing

$5.00 each

For more information call Denise at 702-397-2604 x 4

Or visit the website! http://www.unce.unr.edu/news/article.asp?ID=1719

Master Gardener Evonne Burris going out on a limb for fig preserves.
Fall Companion Gardening
By Tony Sarah, Horticulturist

Companion planting is the practice of planting mutually beneficial plants together to benefit your garden in a number of different ways. Certain plants provide nutrients or fix nitrogen in the ground, making it available to other plants. Others repel insect or animal pests, nematodes, or soil borne pathogens. Host plants attract beneficial insects, pollinators, or other organisms which benefit plants. Some plants, especially herbs, can subtly change or enhance the flavor of other plants around them. While this is an exhaustive subject that warrants more comprehensive coverage, we have put together an abridged list of plants and the benefits or drawbacks of planting them together. This list is designed to cover plants suitable for fall gardens.

**Allium** (Onion Family) repels aphids, powdery mildew and black spot. Alliums grow well with roses, which are susceptible to these plant problems. **Alyssum** attracts Syrphid flies, which eat thrips and aphids. **Asparagus** grows well with parsley. Asparagus does not grow well with onions or garlic. **Beets** grow well with garlic, onions, lettuce, brassicas (cabbage, broccoli, cauliflower, Brussels sprouts, mustard, etc.), and kohlrabi. Garlic improves growth and flavor. Beets are also good for adding minerals to the soil. **Borage** grows well with strawberries and fruit trees. Attracts bees and repels tomato hornworm and cabbage worm. Borage also supplies calcium, potassium and other minerals to the soil. **Broccoli** grows well with dill, rosemary, sage, peppermint and oregano; also beets, celery and onions. Do not plant with strawberries. **Cabbage** grows well with chamomile, dill, garlic, mint, oregano, thyme, hyssop, etc. Wormwood helps to repel cabbage white butterflies. Plant with vegetables such as beets, celery, chard, spinach. Does not grow well with grapes, strawberries or rue. **Caraway** planted throughout the garden helps to loosen up the soil. Do not plant near dill or fennel. **Carrots** grow well with lettuce, peas, radishes and anything in the onion family. Chives improve growth and flavor. Rosemary and sage help repel carrot fly. Does not grow well with dill. Carrots also attract the following beneficial insects: lacewings, assassin bugs, big-eyed bugs and parasitic wasps. Carrots release a fluid into the soil that is beneficial to the growth of peas. **Cauliflower** grows well with celery as celery repels the white cabbage butterfly. Do not plant with strawberries. **Celery** grows well with spinach, cauliflower, cabbage, and leeks. **Chamomile** grows well with onions, basil and cabbage. **Chives** grow well with carrots, improving growth and flavor.
**Cilantro** (aka Coriander) grows well with spinach and helps to repel aphids. When left to go to flower, it attracts bees to the garden. Do not plant near fennel.

**Dill** improves growth and vigor of cabbage. Dill grows well with onions and lettuce, but will stunt the growth of carrots.

**Fennel** doesn’t really grow well with any other plants, and actually inhibits the growth of many plants such as kohlrabi and caraway.

**Garlic** is a wonderful companion to roses, helping to prevent black spot, powdery mildew and aphids. If you plant garlic (or any member of the Alliums) around fruit trees, preferably at the same time you’re planting the tree, you can help prevent fruit tree borers. It may take up to 3 years to show the benefits of garlic around your trees.

**Hyssop** grows well with grapevines, increasing fruit production. Hyssop also grows well with cabbage, as the white cabbage butterfly prefers hyssop. Inhibits the growth of radishes.

**Kale** grows well with cabbage and peas.

**Kohlrabi** grows well with onions and beets. Do not plant with strawberries.

**Leeks** grow well with carrots, celery and onions.

**Lettuce** grows well with strawberries, onions, carrots and radishes.

**Lovage** grows well with, and improves the flavor of, most plants.

**Marjoram** grows well with other plants and helps to improve growth and flavor.

**Onions** grow well with cabbage, broccoli, Brussels sprouts, cauliflower, etc. (Brassica family). Onions also grow well with strawberries, lettuce and beets. Do not plant with peas.

**Oregano** grows well with Brassicas (broccoli, cabbage, etc.) to help repel the white cabbage butterfly.

**Peas** grow well with carrots, radishes, turnips and most herbs. Do not plant with onions or garlic. Peas are wonderful for fixing nitrogen in the soil (taking nitrogen from the air and change it into nitrogen in the soil, making it available to other plants).

**Rosemary** grows well with sage, cabbage and carrots.

**Rue** grows well with roses, helping to repel Japanese beetles. Do not plant it with basil.

**Sage** grows well with cabbage, repelling the white cabbage butterfly. Sage also grows well with carrots and rosemary. Do not plant with cucumber.

**Shallots** (Allium species) grow well with the cabbage family and most fall vegetables. Do not plant with peas.

**Spinach** grows well with strawberries, the cabbage family, celery, fava beans and peas.

**Thyme** grows well with most vegetables, and repels the white cabbage butterfly.

**Yarrow** improves soil quality and helps other garden plants to be more resistant to pests and disease.
Here we are in the middle of a good old-fashioned warm summer! That’s what we’re talkin’ about - nice ripe tomatoes, loads of zucchini, butterflies and hummingbirds. Wondering what to do this time of year to keep your garden happy?

**Water wisely** - It’s important that your irrigation system is set and functioning properly when it’s hot, or you will suffer losses faster. When watering by hand, stay consistent. If you need watering advice, certainly ask me - I’d be happy to guide you!

**Mulch** – Apply mulch around plants to keep root zone cooler and prevent evaporation. Mulch can be obtained for free at the Master Gardener Orchard on Tuesday, Thursday and Saturday mornings from 8:00 am to noon.

**Solarize** – Solarizing the vegetable garden involves covering the bed with a plastic sheeting and allowing the sun to do the work of eliminating weeds, pests and plant diseases without applying chemicals. Thickness of 3-4 mils is recommended.

**Planning** – Start shopping for fall bulbs as soon as you see them available on-line or in the stores. Plan you fall/winter vegetable garden and buy seeds to start indoors.

**Herbs** – Start an herb garden. Chives, basil, oregano, rosemary, sage, and many other herbs can go in the ground or in pots in August.

See? It’s not too hot in the garden after all.

---

The University of Nevada, Reno is an Equal Opportunity/Affirmative Action employer and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, or sexual orientation, in any program or activity it operates. The University of Nevada employs only United States citizens and those aliens lawfully authorized to work in the United States.