Chickpeas

by Nora Graf

The chickpea or garbanzo bean is a cool season annual. Can we grow them here? Hummmmm, that’s a good question. Maybe not, but for the adventurous out there perhaps this is something new to try. I did read about someone growing them successfully in the high desert of New Mexico. They are also mentioned in the Maricopa County MG Manual and I found a farmer who is raising them in Yuma. I’m sure he grows them in the winter down there. This means it is possible to grow them here. Besides, what a treat to make hummus from your own homegrown chickpeas. The information below will help you figure out if you can grow them or not. Good luck.

Traditionally, the chickpea was grown in the hot, dry climates of southern Europe, North Africa to China and in India, but today is also grown in higher elevations in Mexico. There are several different varieties usually differentiated by having smooth seeds, seeds shaped like an owl’s head and wrinkled seeds more like a ram’s head. There is one other specie grown in the Himalayas. The oldest records of the plant come from Neolithic B levels (whatever that is) in Jericho. In Turkey there are records that date to 5450 BC. It was grown from an early date in the Mediterranean and Ethiopia.

The seeds are very high in protein (20%). Smaller seeded varieties are sold as split peas and made into dahl (a stew-like dish) or flour. Larger seeded varieties are usually roasted and eaten whole or made into hummus.

Chickpeas are considered beans but botanically they are neither bean nor pea. The pods are slightly oblong, about an inch long and nearly as wide. Each pod contains one or two seeds. The plant resembles a vetch with dark green compound leaflets. Depending on the species, the flowers are white or violet.

The leaves exude a slightly acidic substance that some people might be sensitive to. There is some literature about how the Indians (India) collecting the acid to use as vinegar or to make a cooling drink. They spread a cloth on the plants overnight and then wring out the dew in the morning. It seems it would take a lot of cloth and wringing out to get a useable amount but no specifics were given.

Something we do have is a long growing season of about 100 days. You can start the seeds inside for planting when the last chance of frost is gone. One website recommends planting them in paper or peat pots so you don’t have to disturb the roots. Place the...
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seeds 1 ½ to 2 inches deep. Plant when the seedling is about 4 to 5 inches tall. If you are planting seed directly in the ground, do not soak the seeds beforehand or over-water. This will keep the seeds from cracking. Chickpeas will tolerate shade although it does reduce the yield; full sun is recommended. Here is the tough part—they grow best in temperatures between 70 and 80°F and with nighttime temperatures no lower than 65°F. Space the young plants 3 to 6 inches apart. Keep the young plants well-watered, (not sopping wet!). Mulch well to help retain soil moisture. Regular even water will help with pod formation. Do not overhead water as it could actually knock the flowers and pods off the plant.

Because they are legumes they do not need supplemental nitrogen as they have nitrogen-fixing capability. They do best with a side dressing of compost. Keep weeds under control taking care not to disturb the chickpea’s shallow roots.

The plants are susceptible to a variety of pests and diseases. The following list is kind of a who’s who of them. Pests include aphids, bean beetles, flea beetles, leafhoppers and mites. Some of these can be controlled with insecticidal soap. Diseases are blights, mosaic and anthracnose. There are disease-resistant varieties available. If you find a diseased plant, remove it immediately, bag it and throw it away. Never grow chickpeas in the same location more than three years in a row.

I hope you noted the date when you put the seed in the ground as you can pick chickpeas 100 days after planting. They can be eaten fresh like snap peas, when pods are green and immature. To harvest, pick the entire plant once the leaves have gone brown, place it on a flat warm surface and allow the pods to dry. Collect the seeds when the pod splits. The seeds are dry enough when they barely dent if you bite them. Unshelled peas can be stored in the refrigerator for a week. Dried and shelled peas will keep in a cool dry place for up to a year. They can be frozen, canned or sprouted.

The best variety for hummus, according to one source, is the Middle Eastern varieties. They are smaller, wrinkled types. You might see them called Hadas chickpeas, Baladi, or the Bulgarian chickpea. Apparently for the best hummus, variety is important.

**Hummus**

4 garlic cloves
2 cups canned chickpeas, drained, liquid reserved (if you want to use homegrown chickpeas, see below)
1 1/2 teaspoons kosher salt
1/3 cup tahini (sesame paste)
6 tablespoons freshly squeezed lemon juice (2 lemons)
2 tablespoons water or liquid from the chickpeas
8 dashes hot sauce

Turn on the food processor fitted with the steel blade and drop the garlic down the feed tube; process until it’s minced. Add the rest of the ingredients to the food processor and process until the hummus is coarsely pureed. Taste, for seasoning, and serve chilled or at room temperature.

**Preparing home grown beans**

**Step 1: Rinse beans.** Place the garbanzo beans in a bowl and fill with water. Move the beans around a little with your hand or a spoon to allow any dirt to come loose in the water. Drain the water. Repeat until the water appears clear. Don’t worry if you can never get the water to be perfectly clear. If any garbanzo beans float to the top, pick them out and throw them away. Pick out and throw out any other beans that look bad.

**Step 2: Soak overnight.** You will use 3 cups of water for each cup of garbanzo beans Note: Do not soak garbanzo beans in the fridge! Soak them at room temperature. *Do not add baking soda or salt to the beans.

**Step 3: Drain the garbanzo beans.** Move them to a large pot. Add 3 cups water for each cup of dried beans that you use.

**Step 4: Boil the Garbanzo Beans.** They should take between 2 and 3 hours to cook (excluding the time it takes to bring the garbanzo beans to a simmer). First, bring the water to a boil under medium-high heat. Scoop out any froth that forms with a spoon. Once the water starts to boil, set the heat to low and cover the pot. Set a timer to 3 hours. Keep them in for the full 3 hours to ensure that they are fully cooked,
however, cooking times vary depending on the amount of beans, the pot, and time spent soaking the beans. For your first time cooking garbanzo beans, you may want to check after 2 hours and keep checking the beans until they are done. Whenever you take the lid off the pot and replace it, check to make sure the water is still at a simmer. If it isn’t, temporarily bring the heat up to medium heat until the water is simmering again, then set the heat back to low.

Stir the beans a few times throughout the cooking process to ensure that the beans get cooked evenly. To test if they are done take a bean and bite into it or squeeze it between your fingers. You should be able to squeeze it with your fingers, at least. It should have a very soft consistency. Note that you can decide how cooked you want the beans to be. If you find that they are cooked but you prefer them to be a little softer, go ahead and let them simmer for a little while longer. (for hummus softer is better)

Drain the beans and they are ready to use.

Sources
Bountiful Gardens
1726-D South Main Street Willits CA 95490
Phone: 707 459 6410
http://www.bountifulgardens.org It’s listed as garbanzo in their catalog

Seed Savers
http://www.seedsavers.org
Through their yearbook only. You will need to be a member if you wish to receive their yearbook. If you are not familiar with the yearbook, it is a person-to-person seed catalog, with varieties from all over the country. You purchase directly from the gardener who grew the plant. It contains thousands of entries. They say they have listings for 4,000 tomato varieties.

Chickpea Stew

4 servings
Total: 45 minutes
Recipe by The Bon Appétit Test Kitchen

Ingredients
4 tablespoons olive oil, divided
2 skinless, boneless chicken thighs
Kosher salt
3 large garlic cloves, minced
2 tablespoons ground cumin
2 tablespoons tomato paste
3/4 teaspoon crushed red pepper flakes
2 bay leaves
2 15-ounce cans chickpeas, rinsed, drained
1/2 cup chopped drained roasted red peppers from a jar
2 tablespoons (or more) fresh lemon juice
2 cups 1” cubes country-style bread
3 tablespoons coarsely chopped flat-leaf parsley

Preparation
Heat 2 Tbsp. oil in a medium pot over medium-high heat. Season chicken with salt; add to pot and cook, turning once, until browned, 8-10 minutes. Transfer to a plate. Reduce heat to low and let oil cool for 1 minute; add garlic and cook, stirring often, until fragrant, 30-60 seconds. Add cumin, tomato paste, and red pepper flakes; stir until a smooth paste forms, about 1 minute. Add reserved chicken with any accumulated juices, along with bay leaves and 4 cups water. Scrape up any browned bits. Bring to a boil; reduce heat to medium-low and simmer, uncovered, occasionally stirring, until chicken is tender, about 20 minutes.

Transfer chicken to a plate. Add chickpeas to pot; bring to a simmer and cook for 5 minutes. Shred chicken; add to stew. Add red peppers. Stir in remaining 2 Tbsp. oil and 2 Tbsp. lemon juice; simmer for 1 minute. Season with salt and more lemon juice, if desired. Divide bread cubes among bowls. Ladle soup over. Garnish with parsley.

nutritional information

1 serving contains:
Calories (kcal) 483.0
%Calories from Fat 40.3
Fat (g) 21.6
Saturated Fat (g) 3.4
Cholesterol (mg) 40.4
Carbohydrates (g) 47.3
Dietary Fiber (g) 9.7
Total Sugars (g) 3.8
Net Carbs (g) 37.5
Protein (g) 23.9
Sodium (mg) 249.2
Maybe you have never heard of a Pinacate beetle, but you have probably seen one. They are the black flightless beetles that stick their rear ends up in the air when they are disturbed. Just so you know, that posture is a warning. When disturbed the beetles spray a stream of liquid that has a very pungent odor and taste. A couple of creatures have figured out a way to eat them without getting sprayed. The grasshopper mouse avoids the rear by grabbing the beetle by the head and then sticking the rear in the ground. The mouse then just eats the head half. The desert hairy scorpion has also been observed eating the beetle. The scorpion turns the beetles rear away from it before he stings it. Then the scorpion breaks it in half and eats the internal organs.

For its diminutive size there are a lot of stories about it. Its other common names are clown bug and stink bug. The southwestern Cochiti people say the beetle is ashamed. It had the task of placing all the stars in their proper place in the sky. The beetle was careless though and dropped the stars. The spilled stars formed the Milky Way. The beetle hides his face because he is ashamed of what he did. A Zuni story says the beetle saved its life by convincing a coyote that when he dipped his head he was listening to messages from the gods under the ground.

You will find them wandering about in the hottest parts of the day. The black pigment of their shell acts as a sunscreen. This protects them from ultraviolet rays and allows them to forage in the extreme summer heat although most seem to go underground in the hottest part of the day. These insects are persistent foragers working night and day to find something to eat. The beetles are detritivores, meaning they feed on dead and decaying organic matter. They are often found near anthills, they can even repel ants.

Pinacate beetles are native to the Sonoran desert. There are a number of species of *Eleodes* (*eleodes is greek meaning olive-like*) that range into Western Mexico and the Western United States. They are difficult to tell apart. I read a couple of things about the name pinacate. One is that it is derived from the Aztec, pinacatl that translate to “black beetle”. The other says the word means acrobat or tumbler.

The beetles can be found any time of year although in some populations there appear to be peaks in the spring and fall. Eggs are laid in loose organic matter and when the young hatch they feed on the organic matter and things like the dead root systems of trees and cactus. The larvae are known as wire worms. In laboratory situations it took nine months for complete development. If you want to keep one as a pet, keep it in a terrarium and feed it fruit and vegetable waste. It could live a year or more.

If you have ever been to Rocky Point you will have seen the Pinacate Mountains, named for the beetle. Someone online was saying that the volcanoes of the Pinacate are ripe for reawakening… but that is another story…….

Pinacate beetles have even hit the Hollywood big time even if you don’t recall any strolling down the red carpet. In “For a Few Dollars More” the character Indio, while being held at gunpoint, crushes a beetle that scurries across the table in front of him. This was in the climactic final scene. What a way to go. Then in “The Outlaw Josey Wales”, Wales (Clint Eastwood himself!) is showing spitting tobacco juice at one of the beetles. While not the glamorous roles, they were pivotal moments!
Also known as Crisphead lettuce, this was the lettuce that was in the stores when I was growing up. In fact, at the time you didn’t see much else besides iceberg. Besides it was grown in Yuma and southern California by the mile, so it was readily available and cheap. Once I discovered butterheads, romaine and the leaf lettuces I never bought iceberg again. I never liked the Midwest take on salad with the iceberg wedge. Remember that big hunk of lettuce, covered with a big gloppy dressing, thousand island or blue cheese. If you were really, really lucky you would get some wedges of under-ripe tomatoes with it. I know I shouldn’t pick on Midwesterners, they have some really great comfort food, but they took their time to move out of the meat and potatoes and the wedge mindset. (To save everyone from cringing I am not going to talk about my experience with Mexican food in Illinois in the mid 90’s.) Lately I’ve noticed resurgence in restaurants of the iceberg wedge, so iceberg lettuce is making a comeback.

If you want to embrace the new iceberg revolution there are some things you need to know. Iceberg was really developed as a field crop and not for the home garden so when you are buying seed avoid any that say “supermarket” types. The supermarket types take longer to mature than other lettuces and wants to bolt at the earliest opportunity. When buying seed look for Batavian or summer crisp types. These won’t have that incredibly compact head but they are a bit more heat tolerant, don’t bolt as easily and are faster growing. Even with it’s ability to tolerate more heat they still don’t like temperatures over 75°F (max 80°F) which makes them ideal candidates for the early spring and/or fall garden. Nighttime temperatures shouldn’t go below 55°F. (Min 50°F). They will need two months at this temperature range to produce a good head. You may need row covers or some sort of protection for either end of the temperature range.

As with any lettuce you can start it early indoors or seed directly in the ground when the soil temperatures are above 60°F. They require at least six hours of sunlight, but with spring plantings afternoon shade would be a plus to help prevent early bolting. Lettuce has shallow roots and likes to be kept moist, not wet. Even watering is best: don’t let the soil dry out; provide good drainage so the soil doesn’t stay wet. Avoid overhead watering. Use a drip system or someway to keep the water from splashing on the leaves. Mulching is good idea for lettuce. Use compost or even wood chips. Lettuce makes a good container plant by the way.

Time your picking carefully. Wet weather can ruin your entire crop, lately not much of a worry for us. As the heads are close to maturity they are susceptible to rot. At the moment they are nearing maturity the plants want to bolt. The heads get bitter with the onset of bolting. If the plant starts to elongate it means that a flower stalk is forming and it is past its prime. Pick when the heads are fully formed and firm.

Pests include slugs and snails. Commercial slug traps work to control them and keep the bed weeded. If you keep the leaves dry you won’t have to contend with the only two disease problems, fungus and mildew.

Batavian and summer crisp varieties are available in many different seed catalogs.

**The Wedge Salad**

An updated wedge salad, from the Outback restaurant.

1/2 head iceberg lettuce, cut into a wedges
1 cup grape tomatoes, cut into halves
1/2 cup red onion, chopped
6 slices cooked bacon, crumbled
1/2 cup blue cheese, crumbled
1/2 cup pecan pieces, toasted

**DRESSING**

3/4 cup mayonnaise
3/4 cup buttermilk
1/2 cup blue cheese, crumbled
1/4 teaspoon garlic powder
1/4 teaspoon onion powder
1/4 teaspoon black pepper

Directions:

Place lettuce wedge on a salad plate. Add grape tomato halves and onion on top of wedge.

Sprinkle with crumbled bacon, crumbled blue cheese and toasted pecan pieces.

Dressing: Mix ingredients and allow to sit for 30 minutes or more for flavors to meld. Drizzle on top of salad.
Now is the time to plant bulbs. Tulips, daffodils, onions (yes, onions!) and lilies can all be planted now. The term bulb is used as a somewhat generic term that includes things like corms, tubers and rhizomes. Tulip, onions, daffodils and lilies are considered true bulbs. A true bulb is a large bud with a short stem with fleshy leaves or scales. Sugars and starches are stored in the thickened bases of the leaves while the roots grow from the base of the stem. Whether true bulb, corm, tuber or rhizomes these structures are designed to store energy that the plant will need.

Gladiolus and crocus grow from corms, which is a stem. Dahlias and potatoes come from tubers, which are swollen underground roots. Iris grows from rhizomes, which are similar to tubers.

Tulips are a favorite of peoples and they come in an amazing variety of colors and shapes these days. The plus is they are beautiful. The minus is that the javelina love them. They are also a bit more difficult to grow. They just don’t like the heat. Temperatures above 70°F will damage the flower bud inside the bulb. They evolved in high elevations and cooler temperatures and need to have a cold spell. Most people overwater them, which can cause the bulb to rot. Sure, give them a try, but in spite of the fact that stores around here are filled with tulip bulbs this time of year, they are not the best for this area. So stop feeding the javelina and try something else.

That something else could be daffodils. While their color palette isn’t as wide ranging as tulips they can be reliably grown here and can even naturalize and continue to rebloom year after year. I have a small batch that I give NO CARE to and they have been showing up and blooming for 20 years, every spring. Not all daffodils will do well here. I also had a patch that showed up but never bloomed. My giant amaryllis plants finally overwhelmed them. Some are better suited to the heat than others. Old House Gardens which is a company that sells heirloom bulbs recommends these varieties: Avalanche, Conspicuous, Double Campanelle, Grand Primo, N. jonquilla Early Louisiana, and White Lady.

Lilies are a broad category of unrelated plants, the daylily being one of the more common non-lilies. It is the oriental or trumpet lilies that I am talking about. Unfortunately these lilies are a favorite of animals so if you can’t protect them from javelina and small rodents don’t bother with them. Lilies will grow here although they do need some special consideration and care. They like their head in the sun, feet in the shade in general but around here could use afternoon shade also. Mulch, mulch, mulch! When you plant pay attention to the instructions, they do like to be planted deeply. Plant three to four times the bulbs height. They also don’t do well in clay soils. If you have clay soils you might just want to create a lily bed with heavily amended soils. They need good drainage!

Just so the vegetable growers out there aren’t forgotten, it is time to plant onions also, including ornamental onions. Eating onions should be short season onions. These are onions that need 12 hours of daylight. Purchasing sets is the easiest way to go this time of year. Look for bunching, multiplier onions. If you are planning ahead, onions start easily from seed. Start seeds eight weeks before you want to plant. Keep them weeded and pick once the leaves fall over.

Time Magazine (October 1 issue) reported that Peter Glazebrook at the Harrogate Autumn Flower show presented a world record onion weighing 18 pounds 1 oz.

The one ton barrier for pumpkins has been breached. The new record holder this year weighs 2009 pounds.
**MG Recognition Picnic**

Our annual MGA Recognition picnic will be held on Oct 14th at Alcan- tara Vineyards and Winery in the Verde Valley, 11:30am. This is in lieu of an October MGA meeting. Master Gardeners will be recognized for their volunteer hours, and it is a great way to meet other Master Gardeners. Spouses/families are welcome.

We need a few volunteers to help with parking, unloading, etc. You will need to be there by 11am. Contact Terrilyn Green, larsngm@commspeed.net, 567-7116

This is a potluck, so please let Kathy Sisley know how many are coming, and if you are bringing a main dish, appetizer, side dish, or dessert. klsisley@gmail.com, 445-5142

After our picnic/recognition program you are welcome to stay for some wine tasting – cost $10 to $15.

Here is a link for more information about the vineyard http://www.alcantaravineyard.com/
Directions on last page.

**Phoenix Botanical Garden Fall Plant Sale 2012**

This fall’s sale will have our largest selection of ever, with many new and unusual plants and seeds available.

Members Preview Day Friday / October 19 / 7 a.m. - 5 p.m.
Open to General Public Saturday / October 20 / 7 a.m. - 5 p.m.
Sunday / October 21 / 9 a.m. - 5 p.m.

**Searching the MG Newsletter on the Extension Website**

Trying to find something in the back issues of Yavapai Gardens has always been difficult. There is a partial index available. Steve Moody has figured out a way to do it and it works better than the U of AZ’s CALS search engine.

Go to: http://www.arizona.edu/search/google

In the search window type in: "Yavapai Gardens" (including the quotes) and the topic you are looking for. For example:

"Yavapai Gardens" tomato blight

The search engine retrieves all the issues with tomato blight information.

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FROM THE EDITOR: Please send or email articles and announcements to the address below. All articles must be in my hands by the 10th of the month. Short announcements (no more than 2 or 3 lines) will be accepted until the 25th.

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Next Meeting

Our annual MGA Recognition picnic will be held on Oct 14th at Alcantara Vineyards and Winery in the Verde Valley, 11:30am. This is in lieu of an October MGA meeting. Master Gardeners will be recognized for their volunteer hours, and it is a great way to meet other Master Gardeners. Spouses/families are welcome.

DIRECTIONS

From I-17, take exit 287 (route 260) west towards Cottonwood. Thousand Trails Road is located 7 miles west of I-17 off route 260 on the right near mile post 211 (look for the Alcantara and Thousand Trails signs); turn right onto Thousand Trails Road.

From other areas of the Verde Valley, take route 260 East to Thousand Trails Road (located about 4 miles east of Walmart and near mile post 211). Turn left off route 260 to Thousand Trails Road. If you pass the Coury Ford Dealership on route 260, you ’ve gone too far.

Follow Thousand Trails Road for one mile and turn left onto the dirt road to Alcantara (only six tenths of a mile). Signs will be posted. Do not drive into the Thousand Trails RV Park.