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2024 GARDENING GUIDE

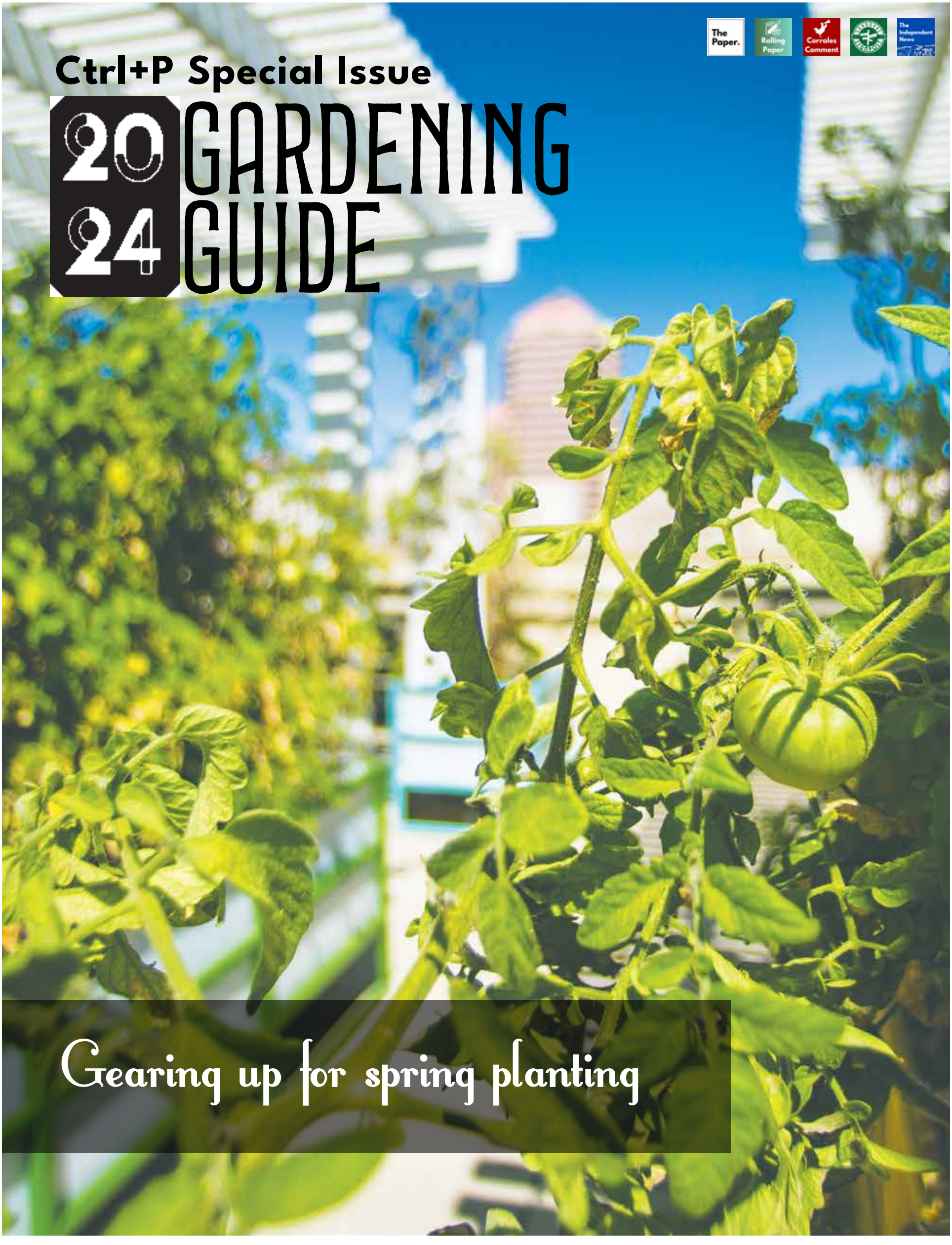

Photo courtesy City of Albuquerque

Gearing up for spring planting

A Child's Garden

(Credit Sara Atencio-Gonzales)

By Sara Atencio-Gonzales, Sandoval Signpost

It's "thyme" to start gardening… again for the Placitas Elementary School (PES). After a long break from budget setbacks and a pandemic, PES is bringing back its popular gardening program. The program was started by Principal Joseph Lepre back in 2015, who understood that some parents couldn't pick up their children right when school ended.

The school had already offered many after-school programs including chess and sports. However, Lepre thought of a garden program to help teach students about botany. The program was originally open to 4th-5th graders, nicknamed the Caterpillars, to have a day during the week after school that allowed garden-related activities and work sessions during the school year.

When the program first started, the garden was maintained by the school's janitor, James Tellez, during the summer months. During the school year, the Caterpillars and teachers' aides maintained the garden. The program would meet indoors during the cold months and students would still be able to learn about gardening while doing some fun activities.

Then, the school lost funding for teacher aides, so the teachers and some Sandoval Extension Master Gardener volunteers started to help maintain the garden. In 2020, due to the COVID-19 pandemic and some other setbacks, the program shut down.

The garden program is now being rebooted, with hopes of staying active for many years to come. Four Sandoval Extension Master Gardeners are currently running the program; Sandra Liakus, Pat Wright, Donna Popp, and Rachel Goshey.

On March 20, Liakus, Wright, and Popp had their first day back in the PES garden with kids from all different age groups. They also received some help on the first day from three students and one teacher from Bernalillo High School. The group all spent the day cleaning up leaves from the garden and getting them into their compost piles, and planting seedlings.

Liakus, Wright, and Popp originally joined the Sandoval Extension Master Gardeners program when they moved to New Mexico from different places across the U.S. and wanted to learn what to plant and grow here in the southwest.

"I wanted to learn more about the maintenance care of native plants in New Mexico and how to better care for them. You know, the right type of watering because the climate is so different here compared to Illinois," said Popp.

The Master Gardeners have a lot of goals for the future of the garden to be able to get it back to what it once was. "We're looking forward to working with the students through early June and by the time the students come back, it's harvest time," said Liasuk.

The three also hope to teach the kids some gardening-related skills so hopefully, all the kids will find their green thumb but they also hope to expand on the types of plants, fruits, and vegetables they plant in the garden. "We're trying to expand the tastes of the children too," said Liasuk.

The program is currently being held every Wednesday after school and currently has all age groups involved. Organizers hope to get more parents involved as volunteers to make sure that every child is having their needs met during the program.

To get involved with the Sandoval Extension Master Gardeners, visit sandovalmastergardeners.org

Shade Trees for New Mexico

By New Mexico Cooperative Extension Service

Less than one-third of New Mexico is naturally forested. The rest of the state is natural grassland or desert, with small areas of tundra. Thus, trees planted in our cities and around our homes must grow under climatic conditions and in soil that does not naturally support tree growth. Yet trees are valuable in our environment, making our surroundings more pleasant and ameliorating the effects of development and other human activity. They cool our cities, cleanse the air, and absorb noise. New Mexicans need tree species that can tolerate the soil and environmental conditions of an arid or semi-arid region. Also, because many trees are not native to our state, they require special care.

Selecting a Tree

There are a number of factors to consider when selecting a tree for landscaping, including tree size, water requirements, temperature and other weather conditions, and potential problems. All trees listed in Table 1 will grow in New Mexico. This table does not represent an exhaustive list of all potential trees for New Mexico, but it does provide good selections for a variety of situations. A tree should never outgrow its site, yet it must be large enough to fulfill the purpose for which it was planted. Become familiar with the mature size of a tree in New Mexico before deciding to plant that species.

Species native to areas with acid soil may be 15–20% smaller in New Mexico than in their native environments.

The tree you choose must also be able to survive on the amount of irrigation it will receive. Some trees grow naturally in streambeds and need large quantities of water. Others can survive on very little water once they are established. Plan an irrigation system that will meet the needs of the trees you choose. Minimum temperatures and other climatic factors affect tree survival. For example, some trees do poorly in southern New Mexico because the summers are too hot and dry for them. Be sure a tree species will survive where you live before deciding to purchase it.

Trees grow at different rates. As a general rule, the faster a tree grows, the weaker its wood and the more likely it is to be attacked by insect pests and diseases. Slow-growing trees, on the other hand, are difficult to transplant and take years to reach salable size. Therefore, large, slow-growing trees are hard to find in nurseries. The best choices are to select a tree with a medium growth rate, or to select a fast-growing tree and plant a slow-growing tree nearby to replace it when the fast-growing tree dies.

Other features to look for when selecting a tree are the texture or apparent coarseness of the tree (both in leaf and without leaves), leaf color, presence of flowers and fruit, whether there is any fruit drop, and whether the pollen presents a potential allergy problem. In the case of dioecious trees (trees that have male and female blossoms on different plants), a male tree may present a pollen problem while a female does not. Trees with attractive flowers do not generally have high allergy potential. For many trees listed in Table 1, information on pollen allergy potential is unavailable, either because the tree has not been extensively studied or because the pollen allergy potential is so low that medical references do not consider it worth mentioning.

Planting a Tree

When planting trees in urban areas or other areas disturbed by construction, soil compaction caused by heavy equipment used in construction must be remedied. The soil has been compacted in these areas to the extent that neither water nor oxygen can adequately penetrate the soil. Site preparation for tree planting should consist of digging or rototilling at least 8 to 12 inches deep. This restores the pore space in the soil, permitting permeation of water and oxygen and facilitating the spread of roots throughout the soil. This results in more rapid tree establishment and a root system that better provides water and nutrients and supports the tree against New Mexico winds. The larger the area prepared by this process, the better able the tree is to grow in the landscape. Do not limit soil preparation to only the size of the rootball of the tree to be planted. Organic matter (peat or compost) may be added over this prepared area to encourage root extension. Once the soil has been loosened over a large area, dig a hole in this area of prepared soil large enough to contain the roots of the tree.

Remove containers from around the roots of container-grown trees and cut through any circling roots to encourage growth of new roots and reduce the potential for girdling by the circling roots as the trunk enlarges. Also, cut large roots that had emerged through drainage holes in the container.

Remove wire or twine from the trunk and roots of balled and burlapped trees. After placing the tree into the planting hole, cut any chicken wire or heavy wire cages at the bottom of the planting hole and remove the wire. Roll any burlap to the bottom of the hole to prevent interference with root growth outward into the prepared soil of the planting site.

Backfill the hole with soil identical to the soil at the prepared planting site; do not add additional compost or peatmoss.

Caring for Trees

Water all trees regularly for the first two years after they are planted. After two years, reduce the watering frequency for trees with low and medium water requirements. Each time you water any tree, water until the soil is moistened to at least 30 in. deep. Trees need nitrogen fertilizer only when they are growing less each year than is normal for the species. Consult your nursery or county agent to determine appropriate growth rates. When trees need to be fertilized, spread 1 lb of actual nitrogen (5 lb ammonium sulfate) per 1,000 sq ft beginning under the dripline (farthest extent of branches) and extending outward several feet beyond the dripline, and water it into the soil. Add 3 lb of superphosphate at the same time as the nitrogen. Only fertilize trees in the spring or early summer. Otherwise, if you apply nitrogen fertilizer in late summer, trees will be more susceptible to freeze injury. With early training young trees will produce good form and need less pruning when they are mature. Check with your county Extension agent for information on proper pruning techniques.

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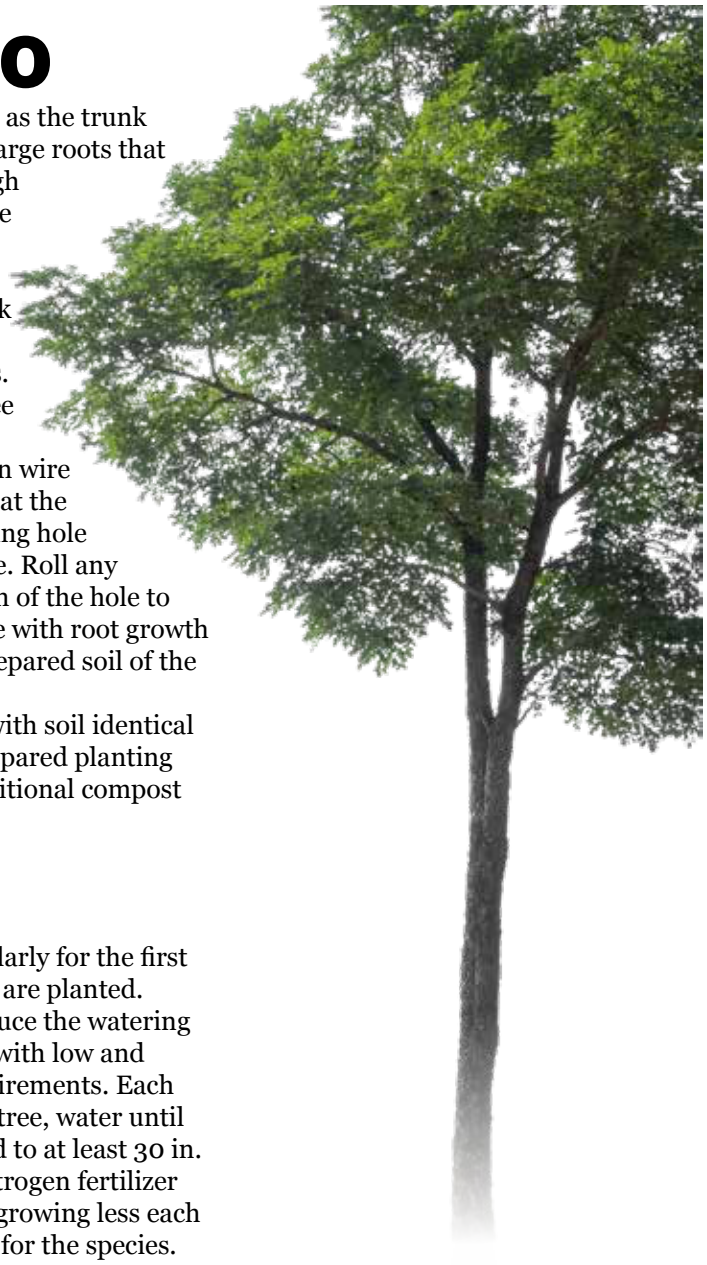

The Albuquerque Bernalillo County Water Utility Authority offers rebates to customers who plant qualifying trees such as elm and oak trees.

For more information about the 100+ qualifying species, visit 505outside.com

High Desert Gardening

By Corrales Garden Tour

One of the things those of us who arrange the Corrales Garden Tour each year understand is that gardening in the high desert is not always easy. Corrales and much of Sandoval County have two distinct ecosystems. The Bosque and the sand hills and each have their own issues, but most will agree that it can be difficult to plant a garden in the sand hills. Whether it be for eating from or enjoying the beauty of a garden, the heat, lack of shade and, not to mention, the virtually pure sand offers a challenge to the would-be gardener (but you'll find it offers many more benefits). Leaving the Bosque challenges for another day, here are some tips for creating a garden in the sandier parts of the high desert.

Benefits of sandy soil

• There are a handful of plants that thrive in sandy ground, herbs, root vegetables and some berries.

• Sandy soil is much easier to work with, it's easy to dig and is lighter.

• Sand doesn't compact, it is easier to dig in.

• It's easily amended with compost.

• The fact that it is well-drained benefits most flowering plants.

• You really don't have to worry about over-watering or root rot.

• Transplanted plants can establish a little bit faster in sandy soils since it is easier for their roots to get a foothold.

• Sandy soils warm up a little faster in the spring for earlier planting.

The downside to sandy soil

Sandy soils don't hold water or nutrients very well because sand is composed of silica, usually quartz crystals, and these have relatively no ability to hold onto nutrients and little ability to hold on to water.

Even the plants that do well in sandy soil are going to need water and nutrients in order to thrive. In addition to amending the soil with compost and other soil amendments, it is a good idea to cover your plants with a garden shade cloth. Interestingly, tomatoes, who love the sun, wilt and gasp under the intense high desert sun. Being in the high desert means that you and your garden are closer to the sun. However, it doesn't make any sense to grow flowers and other plants that are appreciated for their beauty, not their nutrition under a cloth, so choosing hardy sun-loving ornamentals and/or planting them in micro-climates, like close to the house, under a tree or in the north side of your house works to protect while providing the desired esthetics.

It doesn't have to be hard to grow a vegetable or ornamental garden in the high desert and in fact it can be quite rewarding because the growing season is often longer. A little preparation is all you need to grow nearly anything you want.

Sandy soil amendments

Choose fruit and vegetable plants that need fast drainage. Bramble berries, herbs, and root crops are all good choices. Most importantly, increasing soil organic matter is the key to gardening in sandy soil. You have to make the soil more "sticky," so water and nutrients don't just flush through every time it rains.

In Corrales, the Village Mercantile has organic fertilizer and compost and Alameda Greenhouse near Los Ranchos at 9515 1/2 4th St. NW has a bevy of berry and herb starters to get your garden started.

The Corrales Garden Tour 2024 will offer a combination of unique and traditional residential gardens as well as commercial and community properties. Visit Corrales gardens on June 2 and learn about creating a pollinator garden, get water harvesting ideas, and see composting demonstrations. Tickets go on sale on May 1, 2024 at visitcorrales.com.

Courtesy Corrales Garden Tour

Garlic Production in New Mexico

By New Mexico Cooperative Extension Service

Cultivated garlic, *Allium sativum*, is a hardy, cool-season perennial, although in some areas of extreme cold it may not survive the winter. A relative of onions, chives, and leeks, garlic produces bulbs with flat, solid leaves. As the garlic bulb matures, it becomes segmented into a cluster of fleshy cloves (Figure 1) enclosed in a white or purplish parchment-like outer sheath. Bulbs may contain 5 to 16 cloves, depending on variety (Table 1).

Each clove is made of two modified mature leaves around an axis with a vegetative growing point. The outer leaf is a dry sheath, while the base of the inner leaf is thickened, making up the bulk of the clove.

Although garlic is propagated from cloves, "topsetting" varieties may be propagated from bulblets or bulbils that form on the terminal end of a hollow seedstalk (scape) that develops from the main bulb before harvest. Bulbils form in a globe-shaped pod called a spathe. The outer whitish sheath of the spathe will eventually split, exposing a cluster of 10 to 40 brown, yellow, or purplish bulbils that can vary from the size of a grain of wheat to a kernel of corn.

A cluster of tiny white or purplish flowers may also form among the bulbils. These flowers are sterile; garlic produces no true seed.

Garlic is of somewhat limited nutritional value since most people eat it in relatively small amounts (although it is more nutritious than onions on a fresh weight basis). A 2-g serving of garlic will provide 3 mg of potassium, 0.4 g of carbohydrate, and trace amounts of calcium, fiber, iron, and vitamin C (Hathaway, 1993).

Suggested Varieties For New Mexico

There are generally two types of garlic: those that send up a seed stalk (hardneck varieties) and those that don't (softneck varieties). Under certain conditions, softneck varieties can send up a seedstalk, especially if stressed for water or damaged by cold weather. Hardneck (subspecies *ophioscorodon*) types like Rocambole and Continental usually do better in colder climates and are larger and easier to peel. Softneck (subspecies *sativum*) types like Silverskin and Artichoke have been cultivated over a longer period of time and tend to be better adapted over a great range of climatic conditions. Softneck types also tend to hold up better in storage due to their tighter skins.

Soil And Fertilizers

Garlic grows best in a rich, deep, well-drained sandy loam to clay loam soil with a pH between 6 and 8. Heavier clay soils should be avoided because bulbs may become misshapen and are harder to dig. Garlic is a heavy feeder, and a soil analysis should therefore be taken before planting to determine soil fertility levels. In New Mexico, the main fertilizer needs are phosphorous and nitrogen.

All phosphorous fertilizer should be banded 2 to 3 inches directly below the cloves before or at planting time. Fertilizers containing any nitrogen should be banded below and to the side (2 to 3 inches) of the cloves. When the fertilizer is banded, 75 to 100 lb/ac of P_2O_5 (0.17 to 0.23 lb/100 sq ft) are adequate; when broadcast and incorporated, higher rates may be needed.

A light application of nitrogen fertilizer (25 lb/ac of elemental nitrogen) incorporated into the beds before planting is sufficient to get bulbs off to a good start in the fall. Additional nitrogen fertilizer should be applied in the spring at a rate of 100 to 150 lb/ac (0.23 to 0.34 lb/100 sq ft) of elemental nitrogen. Apply the nitrogen in split applications (30 to 50 lb increments) at 3 to 4 week intervals beginning when plants emerge in the spring. Lightly incorporate the fertilizer in a band 4 to 6 inches to the side of the developing plants and irrigate immediately after application. Nitrogen can also be applied in the irrigation water.

Planting

Garlic is generally planted in the fall in New Mexico, September to October in northern areas and October to November in southern areas. Select clean, dry bulbs, and carefully break them apart into individual cloves. Cloves should be planted the same day they are divided. When planting by hand, plant cloves with the scar (stem) end down. Approximately 200 to 2,000 lb of cloves will be needed to plant an acre (Table 1). The amount will vary depending on variety (number of cloves per pound), row width, and plant spacing.

Plant cloves by hand or with a garlic transplanter 1 to 3 inches deep and 3 to 6 inches apart. In colder areas of the state, cloves may be planted slightly deeper for winter protection. Mulching will help protect bulbs from severe cold and will help conserve moisture. Two rows are usually planted 12 to 14 inches apart on top of a flat vegetable bed 38 to 40 inches wide. Single rows may be used with narrower beds. Irrigate immediately after planting.

Plant Development

Garlic cloves require a period of 6 to 8 weeks of cool weather (below 40°F) after planting to vernalize the plants so they will form bulbs. During the fall and winter, cloves will develop their root systems and initiate some top growth.

By early spring, the clove will have swelled considerably, forming a globular bulb with many fine roots. A pair of intertwined leaves will emerge from the terminal end of the bulb and will eventually break through the soil between February and April, depending on the weather and location. Emergence may be uneven. As the weather warms, leaf development will accelerate with flat, dark green leaves reaching a height of 1 1/2 feet or more. Keep plants well watered.

As temperatures rise and day length increases, bulb formation begins. Do not apply any more fertilizer after bulb formation begins. In June to early July, leaves will begin to turn brown and tops will fall, indicating maturity. Irrigation should be terminated at this time to avoid bulb discoloration and bulb rots. To ensure bulbs are fully mature, remove the top layer of soil from the top of a few bulbs and check to make sure the bulbs are fully divided into distinct cloves (differentiated). Digging bulbs prematurely can result in spoilage during storage, while waiting too long can result in disease and/or discoloration of the bulbs.

Pest Control

Garlic is susceptible to most onion diseases, including Botrytis, pink root rot, powdery mildew, and purple blotch. Good sanitation and long-term crop rotation are important, as well as the application of appropriate fungicides when necessary.

Onion thrips can be a major problem on garlic. Garlic growers should also scout for damage from cutworms, cabbage loopers, and wireworms. Check with your local county Extension agent for appropriate control measures.

Garlic has a very shallow root system. Like onions, it cannot withstand weed competition. Cultivation should be very shallow to prevent root damage. Pre- and postemergence herbicides are also available for weed control.

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View the full story at sandovalsignpost.com

Selecting Ornamental Trees for New Mexico

By New Mexico Cooperative Extension Service

Trees provide many benefits to us and our environment. They cool our cities, cleanse the air, recycle oxygen and reduce noise levels. In addition, trees enhance our quality of life by providing habitat for desirable wildlife and creating a restful environment. However, with New Mexico's varied landscape, where less than one-third of the state covered with native forests, selecting trees that will thrive in this environment is challenging. Trees planted in our cities and around our homes grow under climatic and soil conditions that may not naturally support tree growth. Nevertheless, New Mexicans need trees that tolerate our soils and climate. The purpose of this publication is to provide a description of trees that are adapted to New Mexico. While, many of the trees recommended in this publication are not native to New Mexico, they will adapt and thrive with appropriate care.

Selecting a Tree

An important consideration when selecting a tree should be the planned function of the tree in the landscape. This planned function will determine which tree is chosen and where it is planted. Trees may be chosen for their shade, flowers, seasonal leaf color, fruit (presence or absence), wildlife habitat, size and architectural form. Growth rate also is a consideration, but often not be the primary reason for selecting a tree. Trees that grow rapidly tend to have a short life and create hazards, because they often have weak wood and increased disease and insect problems. Trees should be considered a long-term investment as a well-placed, attractive part of the landscape that can substantially enhance the property value.

When choosing a tree for the landscape, consider the location in which the tree will be planted. Mature tree height and spread should be considered when selecting a site. Distance from structures, roads, walkways, walls and other paved areas are factors that must be considered. For example, if planted under power lines, trees eventually will interfere with power line maintenance and create electrical hazards. Poor site selection eventually could lead to structural damage, necessitating removal of the tree or pruning that could decrease the tree's form, function and value. Potential problems can be avoided by matching the tree to the site. If you desire a specific tree, be sure to find a site appropriate for that tree. If your concern is a specific site, select a tree appropriate for that site. Many tree problems in New Mexico result from a failure to match trees and sites.

An unseen potential problem is the root system of an actively growing tree. As a tree grows, the root system expands beyond the tree's drip line. (The drip line is the area of soil beneath the ends of the tree's branches.) Trees planted close to walkways or other pavement can cause of the pavement to lift up due to root growth creating a hazard to foot traffic. Roots also can clog sewer or septic lines, resulting in costly repairs. Most of the tree's roots are in the first 18 inches of soil. However, the roots can spread a distance 1.5 or more times the height of the tree from the trunk. Thus, a 40-foot tree can have roots exploring soil 60 feet or more beyond the trunk. As a general rule, most of the large roots, which cause structural damage, will be found under the dripline of the tree at maturity. Smaller, less destructive roots extend much further. However, as these roots absorb water and nutrients, they may cause problems with septic systems.

To adequately care for trees, homeowners must irrigate and fertilize well beyond the drip line. The homeowner should anticipate the future size of the tree (above and below ground) in the landscape.

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The Albuquerque Bernalillo County Water Utility Authority offers rebates to customers who plant qualifying trees such as Desert Willows and Velvet Mesquites.

For more information about the 100+ qualifying species, visit: abcwua.org/conservation-rebates-outdoor/

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Call 811 Before You Start!

Spring is in the air, and it's time to bring your garden back to life! Whether you're planting a new flowerbed, adding a tree to your landscape, or installing a new irrigation system, there's one essential step before you start digging - Call 811.

Make sure your gardening projects are safe and successful this season. Know what's below - call 811 before you grow!

- Calling 811 is FREE and easy! One quick call connects you to your local one-call center.
- 811 notifies the appropriate utility companies to mark underground lines on your property.
- Hitting an underground utility line while digging can lead to costly damages, service disruptions, and even serious injuries.
- Protect yourself, your garden, and your community by calling at least a few days before your planned gardening project.
- Safe digging is no accident - calling 811 before you dig is the law in New Mexico.