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he artichoke, a member of the thistle family, has been cultivated and enjoyed since the time of the Romans. Artichoke is both a nutritious vegetable and a beautiful landscape plant. Plants can reach 3 feet in height and width, and the flower, if allowed to bloom, can be 7 inches in diameter.

# Soil preparation

Globe artichoke produces best in deep, fertile, well-drained soil, but will grow in a wide range of soils. The plant's deep roots need relatively deep soils with adequate volume for root development. Sandy soils with excessive drainage should be avoided.

Although artichokes are moderately salt tolerant, soil with a high salt content will reduce their growth and yield.

### **Varieties**

Several varieties work well for Texas

gardeners, including:

- Green Globe (standard variety)
- Imperial Star (less vigorous than Green Globe)
- Harmony
- Madrigal
- Emerald
- Grand Beurre
- Talpiot
- Purple Sicilian (purple globe)

Emerald is about 2 weeks earlier than Imperial Star and appears to need little, if any, vernalization (chilling). Emerald, Grand Beurre, Talpiot and Purple Sicilian are all grown from seed. The Purple Sicilian variety is fairly tolerant of heat and cold.

### **Seed preparation**

Plan before fall planting because it can take up to 60 days before plants are of suitable size for planting outside. In Central Texas, artichoke is transplanted in mid-October, which means seeds must be started in mid-August. In North and West

Texas, start seeds a few weeks earlier.

Seeds can easily be started in a greenhouse, in a shady spot outside in late summer, or indoors under a grow light. Plant the seeds ¼ inch deep in potting mix when the temperature doesn't exceed 85 degrees F. Water seeds regularly and shade them from the hot afternoon sun.

## **Fertilizing**

Artichokes grow well when fertilized regularly. It is best to have your soil tested and amend the soil according to the test results and recommendations. If a soil test is not done, follow these general recommendations:

- If manure is available, mix 100 to 140 pounds of composted manure per 100 square feet into the soil before planting.
- Phosphorus and potash are best applied before planting and should also be worked in. Apply about 0.25 pound of P<sub>2</sub>O<sub>5</sub> and 0.25 pound of K<sub>2</sub>O per 100 square feet.
- Artichokes require about 0.1 pound of nitrogen (N) per 100 square feet.
   Work it into the soil before planting, and apply an additional 0.3 pound per 100 square feet 6 to 8 weeks later.
- Foliar applications of a liquid fertilizer containing calcium and zinc are recommended every 2 weeks during active growth in early spring.

## **Planting**

Transplant seedlings 2½ to 3 feet apart in rows 3 to 4 feet apart. Transplants

grow slowly in the fall and winter (October through January), but in early spring artichoke plants will rapidly increase in size. Artichoke should be planted in a well-drained soil and mulched well to help reduce weeds and conserve soil moisture.

### Care during the season

Do not expose artichokes to temperatures below 25 degrees F in the winter. If there is a threat of frost, cover plants with a 6-inch layer of straw mulch, leaves, a bucket or frost blanket, or some other form of frost protection.

A hot, dry climate causes artichoke buds to open quickly and destroys the tenderness of the edible parts. In the summer, irrigation will help keep temperatures down in the crop canopy to prevent bud opening.

## Watering

Artichokes are deep-rooted and require adequate moisture when growing and producing fruit. Moisture stress may result in black tip, which is only cosmetic damage because the edible portion of the bud is not affected. Black tip is most common when conditions are sunny, warm and windy.

#### **Diseases**

Powdery mildew, Verticillium wilt, and botrytis rot are common during rainy weather. Curly dwarf virus and bacterial crown rot are other artichoke diseases. Leave plenty of space between plants to reduce the chance of diseases becoming a problem. If you have trouble with diseases, ask your county Extension agent about disease control.

Artichokes are susceptible to root rot, so do not let the soil become too wet.

#### **Insects**

Name and description		Control
Plume moth	Larva: Pale yellow or green, 0.04 to 0.06 inch long. Adult: buff to brownish buff with a wingspan of 3/4 to 11/4 inches.	<ul><li>sanitation</li><li>Bt</li></ul>
Aphid	Soft-bodied; ¼ inch long; green, pink, red, brown or powdery blue; usually on undersides of leaves; suck plant juices; may be covered with a fine whitish wax.	<ul><li>malathion</li><li>garlic juice extract</li><li>neem oil</li><li>pyrethrins</li><li>azadirachtin</li></ul>
Cribrate weevil larvae	Adults are ½ inch long, brown to black, and may appear between June and September.	Prevent its intro- duction by using clean transplants.
Solder mites	Barely visible to the naked eye; spiderlike; suck juice from undersides of leaves; leaves lose color; may form tiny webs.	<ul> <li>beneficial insects</li> <li>strong blasts of water</li> <li>insecticidal soaps</li> <li>neem oil</li> </ul>
Spider mites		

The artichoke plume and cribrate weevil larvae photos are courtesy of Jack Kelly Clark, University of California Statewide IPM Program.

#### Weeds

Mulching artichokes will reduce weeds and conserve soil moisture. It is important to remove weeds when artichokes are small because the plants are most susceptible to weed competition at this stage. Large, fully developed artichoke plants compete well with weeds.

## Harvesting

A healthy plant should produce six to nine buds per plant. The main harvest usu-

ally occurs in April and May. Select buds for their size, compactness and age. All buds of suitable size should be harvested by cutting the stem 2 to 3 inches below the base of the bud. Old stems should be removed as soon as all buds have been harvested to allow new stems to grow.

## Serving

Artichoke is a great source of fiber and can be steamed, boiled or microwaved. The edible parts include the flesh of the base of the leaves and the heart of the flower. Rinse leaves and cut off the sharp tips, about ¼ inch, before cooking. Ask your county Extension agent for more information on preparing and serving artichoke.

### **Cleanup**

Artichoke is a perennial plant so once the harvest is done in June, cut the plant back to soil level. This will put the plant crown into a dormant stage during the summer. The plant will send out shoots in the fall. The new shoots can be dug out to be replanted into a new location in the garden or left in place to produce another year. Make sure you leave only the most vigorous shoot on the old plant for production next spring.

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