

Apples

HORT-PU-282

08/23

Julia Minter, Jayla Fry, and Dr. Larry Stein

In Texas, commercial apple production is limited by poor fruit color resulting from warm summer nights and cotton root rot. However, with proper maintenance and the right varieties, apples with outstanding flavor can be successfully grown in home gardens throughout the state.

🌱 Grow it

Varieties

- Apples require a certain number of chilling hours, or hours between 32 and 45 degrees Fahrenheit. Select varieties with a chilling requirement within 150 hours of the average number of chilling hours your site receives.
- Plant two or more varieties with similar chilling requirements for cross pollination.
- Chill hours needed:
 - 350 to 400: Anna, Dorsett Golden
 - 600: Fuji, Gala, Mutsu (Crispin)*
 - 450 to 500: Mollie's Delicious
 - 500 to 600: Pink Lady*Cannot be used as a pollinizer.
- Trees are grafted onto a rootstock of a different variety to reduce fruiting time and tree size. The best semi-dwarfing rootstocks are M7 and MM11.

Soil Preparation

- Prepare the planting area by removing weeds and loosening the soil.
- Avoid poorly drained areas. To improve drainage, plant on a 12- to 18-inch-high mound.

Planting

- Purchase healthy, bare-root trees from a reliable nursery and keep roots moist. Container trees could also be used.
- Space trees 15 feet apart.
- In early winter, plant the tree to the same depth it grew in the nursery with the root system spread in a natural position. Fill the hole with the original soil and water well.

Training and Pruning

- At planting, cut the tree to 24 to 30 inches tall.
- Each year in late winter, prune back new growth and remove upright stems and broken or diseased limbs.
- In the first 2 years, train the tree to resemble a Christmas tree, having a trunk with two sets of four to five primary branches spaced equally around the tree. Leave 24 to 36 inches between the sets.

Fertilizing

- If newly planted trees grow 8 to 10 inches by May, fertilize with 1 cup of 21-0-0 fertilizer. Spread the fertilizer 18 inches from the trunk.
- In the second year, provide 1 cup of fertilizer at the beginning of March, April, May, and June. In year three, increase the applications to 2 cups.
- In subsequent years, fertilize at bud break with half a pound of 21-0-0 per inch of trunk diameter. In May, if the tree has a fruit crop, apply an additional half pound of fertilizer.

Watering

- During active growth, provide 1 inch of water once a week.
- During the dormant season, water deeply once every 6 weeks if it has not rained.
- In the first year, water 12 inches from the trunk and gradually move farther out each year.

Care During the Season

- Apply 6 inches of mulch to reduce weeds and conserve soil moisture. Apply mulch no closer than 6 inches from the trunk.

Insects and Diseases

- In warm areas with alkaline soil, apples are prone to infection by the cotton root rot fungus if it is present in the soil. Avoid planting in areas with a history of plant death due to this organism.
- To reduce pest problems, maintain healthy trees, minimize tree damage, disinfect pruning tools, and collect and destroy diseased branches and fruit and fallen litter.
- Contact your county Extension agent for more information.

Harvesting

- Ripe apples will taste sweet, and the background color will be yellow or pink on colored varieties.
- Remove apples by pulling upward and outward while rotating the fruit slightly. Keep the stem attached to the fruit.



Sun:
Full



Soil:
Deep,
Well-drained



Planting:
Early Winter



Harvest:
July-Oct.



Life Cycle:
Perennial

Buy it

- Select apples that are firm and have shiny, smooth skin. Avoid apples with shriveled, bruised, or broken skin.¹

Store it

- Apples will remain fresh for 1 to 2 months if refrigerated. They can also be stored at room temperature for 1 to 2 weeks, but the texture may change.²
- For canning and preservation instructions, visit nchfp.uga.edu.

Use it

Pecan Apple Spice Cookies

Course: Dessert

Serves: 24

Ingredients:

- 1½ cups all-purpose flour
- 1 cup oats
- 2 tsp. cinnamon
- ½ tsp. baking soda
- ¼ tsp. salt
- ½ cup unsalted butter
- ¼ cup granulated sugar
- ¼ cup brown sugar, packed
- 1 large egg
- 1½ tsp. vanilla extract
- 1½ cup apple, chopped
- ½ cup pecans, chopped

Instructions:

Preheat the oven to 350°F.

Wash and chop apples.

In a small bowl, combine flour, oats, cinnamon, baking soda, and salt. Set aside.

In a large bowl, mix butter, sugar, brown sugar, egg, and vanilla until smooth.

Slowly mix in the flour mixture until smooth.

Fold in apples and pecans.

Form the dough into 1-inch balls, place on a cookie sheet, and flatten them down.

Bake for 6 to 8 minutes.

Kale Winter Salad

Course: Side

Serves: 4

Ingredients:

- 4 cups kale, de-stemmed and chopped
- 1 large apple, chopped
- ½ cup dried cranberries
- ½ cup walnuts, chopped
- ½ cup goat cheese, crumbled
- 3 Tbsp. balsamic vinegar
- 1 Tbsp. olive oil
- ⅓ tsp. salt

Instructions:

Wash your hands and clean your preparation area.

Place the kale, apple pieces, cranberries, walnuts, and goat cheese in a bowl.

In a separate bowl, combine the balsamic vinegar, olive oil, and salt. Pour over salad, toss, and serve.



Learn about it

Apples are high in fiber, found mainly in the skin, and vitamin C. They also contain quercetin, a phytochemical with antioxidant and anti-inflammatory properties, pectin, potassium, and copper. While pectin is primarily known as the gelling agent used for jams and jellies, it also aids digestion.^{2,3}

¹Nebraska Extension. (n.d.) *Apples*. University of Nebraska–Lincoln. <https://food.unl.edu/article/apples>

²The Nutrition Source (n.d.) *Apples*. Harvard School of Public Health. <https://www.hsph.harvard.edu/nutritionsource/food-features/apples/>

³FoodData Central. (2020). *Apples, fuji, with skin, raw* [Data set]. United States Department of Agriculture. <https://fdc.nal.usda.gov/fdc-app.html#/food-details/1750340/nutrients>