Tomatillos
by Eldon Everhart, Cindy Haynes, and Richard Jauron

Tomatillos (Physalis ixocarpa) also are known as husk tomatoes, miltomates, Mexican green tomatoes, jamberberries, and strawberry tomatoes. They are members of the nightshade (Solanaceae) family, as are tomato, potato, eggplant, and pepper.

The tomatillo (tohm-ah-TEE-oh) is native to Mexico where it has been grown as a food crop for hundreds of years. As a traditional part of Mexican cooking, tomatillos are found in stews, moles (mo-lehs), and salsas. In Mexico, the tomatillo is known as tomate verde.

Tomatillos are bushy, spreading plants that may grow to a height of 3 to 4 feet with a similar spread. Plants are indeterminate—they keep flowering and bearing fruit until killed by frost. The plant is usually sprawling and needs support.

The fruiting structures resemble Chinese lanterns. They consist of rounded, 1- to 2-inch tomato-like fruit enclosed in thin, papery husks. At maturity, the fruit are yellowish-green, smooth, and sticky. Tomatillos are firmer than tomatoes. Their flavor is similar to a tangy lemon.

Planting
In Iowa and surrounding states, the tomatillo is an annual and has the same cultural requirements as the tomato. Tomatillos grow best in full sunlight and moist, fertile soils. They are somewhat drought tolerant once established.

Tomatillos are usually started indoors and then transplanted outdoors after the danger of frost is past. They can be direct seeded outdoors, but because of their long growing season, they will not be as productive. Start seedlings indoors 6 to 8 weeks before the intended outdoor planting date. Before planting, harden off the transplants outdoors for a few days. Initially place the plants in a shady, protected location and then gradually expose them to longer periods of sun. Bring the plants inside or put in a cold frame if frost is forecast.

Spacing
Transplants should be planted 3 feet apart with rows 3 to 6 feet apart.

Cultivars

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>Pineapple</td>
<td>¾-inch round fruit has sweet, fruity taste like pineapple; short, spreading plants; high yield</td>
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<tr>
<td>Purple</td>
<td>small purple fruit has a sweet, tart flavor; vigorous and productive plants</td>
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<tr>
<td>Purple De Milpa</td>
<td>purple stripes on husks; strong-flavored 2-inch fruit</td>
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<tr>
<td>Toma Verde</td>
<td>green 2-inch fruit has sweet, tart flavor; vining plants; easily grown and prolific</td>
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<tr>
<td>Verde Puebla</td>
<td>1- to 2-ounce green fruit has sweet, tart flavor; continuous production</td>
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<tr>
<td>Zuni</td>
<td>from the Zuni Indians of northern New Mexico; cherry-sized fruits are green and flavorful</td>
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Fertilization
Apply 1 to 2 pounds of an all-purpose garden fertilizer such as 10-10-10 per 100 square feet of garden area. Spread the fertilizer evenly over the area then till or dig it into the top 4 to 6 inches of soil before planting.

Care during the growing season
Adequate moisture and weed control are essential for maximum crop production. Tomatillos require 1 to 1½ inches of water per week, either from rainfall or irrigation. During dry weather, water plants once a week. Weeds compete with tomatillos for moisture, nutrients, and sunlight. Control weeds with frequent, shallow hoeing. Mulches are an excellent way to reduce the time spent watering and hoeing. The application of a mulch, such as straw or dry clippings, helps conserve soil moisture and control weeds.

Potential problems
Diseases
Blights and foliar diseases are often favored by rainy weather and humid conditions. Good cultural practices, however, can reduce disease problems. Air movement and drying of plant foliage can be promoted by proper planting, spacing, and staking or caging tomatillo plants. When watering, avoid wetting plant foliage. Fungicides also can be used to control foliar diseases. To be effective, fungicides must be applied when symptoms first occur.

Insects
Insect infestations are uncommon. The most notable pests are cutworms, snails, and slugs. Pests that chew on the foliage or suck the plant sap are occasional problems. Staking the plants to keep the fruit off the ground also helps decrease snail and slug damage.

Harvest and storage
Tomatillos are ready to harvest in 75 to 100 days after transplanting. For best flavor, harvest the fruit when the husk changes from green to tan while the berry is still green. The size of husk and fruit, as well as the fruit color and flavor, varies depending on the cultivar. Fully ripe fruit turns yellow or purple and loses its tangy flavor.

Before use, remove the husk and wash the sticky residue from the tomatillo's surface. Remove skins if desired. Raw tomatillos have a zesty, tart flavor that develops an herbal lemon flavor when cooked. Tomatillos are used in making fresh and cooked salsas and in many popular Latin American dishes. They also can be frozen or canned for later use.

For more information
Additional information also is available from these Web sites:

ISU Extension publications
http://www.extension.iastate.edu/pubs

ISU Food Safety (home food preservation)
http://www.extension.iastate.edu/foodsafety

ISU Horticulture
http://www.hort.iastate.edu/

Questions also may be directed to ISU Extension Hortline by calling 515-294-3108 during business hours (10 a.m.–12 noon, 1 p.m.–4:30 p.m. Monday–Friday).

This publication also is available in Spanish as Tomatillo, PM 1895(S).

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