

Ground cherries are in the genus *Physalis* in the nightshade family, Solanaceae. This family also includes tomatoes, petunias, peppers, eggplant, Irish potato, tobacco, Jimson weed, horse nettles, belladonna, and many other plants. All members of this family contain poisonous chemicals grouped as solanine glycoalkaloids. Although the foliage and the green fruits of ground cherries contain these alkaloids, the mature fruits of all the known species are considered edible. The immature fruits of some species are used to make sauces in Mexican cooking and it is thought that all the alkaloids are destroyed by cooking. Green foliage or immature fruits of tomatoes, tobacco, potato, as well as most members of this family (except peppers and eggplant) contain alkaloids concentrated enough to make them so bitter and “foul-tasting” that they are not of much danger of being eaten except perhaps by young children. *Physalis* has been suspected but not confirmed in the poisoning of various livestock. Deer regularly browse *P. angulata* in Louisiana.

*Physalis* has its berry enclosed in a papery inflated calyx that looks somewhat like a Chinese lantern. One species (*P. alkekengi*) is cultivated for its large orange to red lantern-like calyces. It is a beautiful perennial for a flower bed and it makes an excellent plant for cut dried arrangements. Ground cherries are delicious raw or made into pies or preserves. Elias and Dykeman (*Edible Wild Plants: A North American Field Guide*, 1990) describe the fruits as excellent for a trail snack or a desert. They suggest harvesting the fruits in mid to late summer and ripening them in their husks for a few weeks until yellow and sweet. Connie and Arnold Krochmal (*A Naturalist’s Guide to Cooking with Wild Plants*, 1974) give recipes for pickled ground cherries, ground cherry desert sauce, ground cherry pie, and ground cherry preserves. Tomatillos, *P. philadelphica*, previously called *P. ixocarpa*, are a necessary part of Mexican cuisine. It grows well in Louisiana and can be cultivated like peppers. The fruits are used in making green sauces used on eggs, meat, or rice and are an essential part of enchiladas verde. According to Heiser, (*Of Plants and People*, 1985), the sauce is made by mashing the fruits and adding onion or garlic, chili pepper, usually serano, but milder kinds can be used, coriander, salt, and pepper, and then cooking the mixture. The sauce is available commercially usually under the name of green taco sauce (as opposed to the tomato based red sauce). The taste of a raw tomatillo has been described as “mawkish” or like that of a really green tomato.

Ground cherries have also been used in medicine. The Chinese Lantern Plant’s fruits are also known as bladder cherry. Old time herbalists, because of the doctrine of signatures, reasoned that since the fruit was bladder-like, it had to be useful to treat bladder diseases. It was used to treat kidney and bladder stones. The genus name comes from a Greek word that means bladder. The herbals of the 16th and 17th centuries praised the fruit’s virtues as a diuretic, both to expel bladder stones and promote urine flow. Angier (*Field Guide to Medicinal Wild Plants*, 1993) calls *P. pruinosa* the strawberry tomato and says its fruit is pleasantly rich in vitamins A and C and in sodium, phosphorous, calcium, iron, potassium, thiamine, riboflavin, and niacin when raw. He says a tea made from the simmered root was used by the Indians and pioneers for stomach trouble, and in stronger potions, used in efforts to treat and heal open wounds. Foster and Duke (*Peterson Field Guides, Eastern/Central Medicinal Plants*, 1990) report that the American Indians made a tea of the leaves and roots of Clammy Ground Cherry, *P. heterophylla*, for headaches, wash for burns, scalds; in herbal compounds to induce vomiting for bad stomach aches; root and leaves poulticed for wounds. Seeds of this and other species were considered useful for difficult urination, fevers, inflammation, and various urinary disorders.

Since the seeds of ground cherry are long-lasting, they usually will continue to come up for years in the same area. I would suggest collecting mature fruit of the hairy annual species most common in

Louisiana, *P. pubescens*, and planting it in the edge of a flower bed or on a lawn border. If one does not want to have the plant around the house then all “outdoor-types” should learn to identify this genus so that he or she can partake of the delicious fruits at a time of the year when all the blueberries and blackberries are no longer available. Encourage the survival of our wild food plants. Illus. on this page and p.3 from Intermountain Flora Arthur Cronquist, et al., Vol. 4., NY Botanical Garden. 1984.