Background and Culinary Uses

Roselle (also commonly called sorrel, hibiscus, or Florida cranberry) is native to the tropics of West Africa, is widely consumed in Asia, Africa, and the Caribbean, and has a diversity of uses. The most familiar form of edible roselle in the United States is hibiscus tea. Tea is typically made from calyces, which are the sepals at the base of the flower that grow into the outer cover of the seed pod. The leaves and flowers are also edible and are often dried and consumed as tea. Each edible part of the plant is quite versatile and they are incorporated into a variety of dishes globally. For example, leaves can be dried and cooked in oil and spices to make chutney, or added to stew. They can also be eaten raw to add a zesty tart flavor to salad. Calyces can be used to make syrup, tea, wine, jam, or food coloring. In some places, such as Barbados, calyces are mixed with alcohol such as rum. Calyces are the main ingredient in sorrel drink, a popular drink throughout the Caribbean during the Christmas season. Calyces can also be used in most ways that cranberries would be used in cooking and baking or in place of rhubarb in pies.

Health Benefits

Roselle is a particularly good source of vitamin C, calcium, and magnesium and has a lot of other vitamins and minerals in lower quantities. It is used as a folk remedy to treat a variety of health problems, such as abscesses, bilious conditions, cancer, cough, physical weakness, stomach ailments, painful urination, fever, hangover, heart ailments, high blood pressure, neurosis, scurvy, and bladder ailments. There is emerging scientific evidence that consuming roselle can help alleviate metabolic syndrome, which is a cluster of health conditions including increased blood pressure, high blood sugar, excess body fat around the waist, and abnormal cholesterol or triglyceride levels. These conditions increase a person’s risk of diabetes, stroke, and heart disease.

Cultivation

The main variety available through retailers is “Thai red.” Roselle is tolerant of a wide range of environmental conditions, and can be grown on rooftops (in soilless media that is over 12” deep), in large planters, high tunnels, greenhouses, field rows (use black plastic mulch), raised beds, or in yards. Leaf production will likely be highest when planted in soil at ground-level. High tunnel production is encouraged, especially in fall, because it will extend the growing season. Extending the growing season allows for a higher yield of flowers and calyces, although it may reduce yield of leaves as compared to open field production. Approximately six months of growing is needed to maximize calyx production. Additionally, to extend the growing season, roselle can be started from seed in a greenhouse or other warm, indoor location six weeks before planting it outside. The plant will grow well from direct seeding outdoors in early to mid-May in southern regions of the mid-Atlantic and from the middle to late May in more northern regions of the mid-Atlantic, but season extension in the fall should be considered with this method if flower and calyx production are the main goal.

Plant roselle outdoors in areas that get full sun once the danger of frost has passed. This is a very shrubby plant, so plants should be spaced at least 3-4 feet apart and watered regularly. Roselle thrives in well-drained soils with high organic matter, but can tolerate clay soils. Plants may need to be staked for support if they are grown in shallow media (such as on rooftops), windy locations, loose soils, or if leaves are not regularly harvested.
Harvesting

Leaves are usually sold in bunches while attached to short branches, so cut 6-12 inches from branches, starting approximately 6 weeks after planting outdoors. The branches can also remain attached to the plant, and individual mature leaves harvested, if only small quantities are needed. Roselle is a prolific producer of leaves and will quickly grow new leaves after a harvest.

Calyces should be harvested after flowers have wilted and they are plump, fleshy, and red. They can be cut from the plant using sharp scissors or pruners and should be used within a week unless they will be used dried. The seed capsule should be removed from calyxes before consumption.

Pests and Diseases

Roselle attracts a great diversity of arthropods, can become infected with fungus and other diseases, and becomes easily discolored from stress, including wind and sun damage. Most of these are not major issues in the Mid-Atlantic. The primary pest that will cause significant damage to leaves is the Japanese beetle. This beetle will quickly skeletonize leaves. The major damage from this pest occurs for a few weeks in early summer and the plant will recover. Most methods of control for the Japanese beetle are ineffective. Japanese beetles can be knocked off the plant into a bucket of soapy water, but regular scouting and removal is necessary. If a fungal disease is suspected, roselle can be treated with a fungicide spray.

Saving Seeds

Calyces should be allowed to mature and dry on the branch until they open slightly. This is a sign that the seeds are ready for harvest. Mature seeds are typically dark in color. Seeds should be dried and then stored in a dry place over the winter to seed the next season’s crop. We highly recommend saving seeds each year from the most robust, highest-yielding plants. Over time, this will ensure that the plants you grow are the ones best adapted to your local growing conditions.

Further Information

Rutgers University, New Jersey Agricultural Experiment Station. https://njaes.rutgers.edu/ultra-niche-crops/roselle/

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