

Globe Artichokes

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Prized by French, Italian and Spanish cooks, these mysterious edible thistles are less well known in other cultures. They thrive in mild Mediterranean climates, but culture is possible elsewhere. Once you become a devotee of this delectable vegetable you will find yourself going to great lengths to grow your own.



Even if you have never eaten a globe artichoke or live in a climate that is less than ideal for their production, the striking silver-green foliage makes such a bold statement you'll be tempted to grow them for their ornamental appeal. Growth climaxes with the production of a 1.5 metre high flower stalk. Adorned with intriguing armadillo-like scales, the giant flower buds give rise to stunning mauve thistle-like flowers.

FACT FILE

Botanical name: *Cynara scolymus*

Family: Asteraceae

Origin: Mediterranean region and the Canary Islands

Climatic Range: Optimum conditions occur in mild climates where daytime temperatures during the growing season average 24 degrees Celsius and nights remain above 13 degrees Celsius. Artichokes tolerate lower temperatures during winter when plants are relatively inactive, but must be mulched or covered to protect them from heavy frost. Conversely, overly warm winters limit flower production.

Plants tolerate higher temperatures during summer providing this occurs during the post harvest period. Excessively high temperatures during bud formation and in the lead up to harvest results in artichokes that are bitter, distorted and tough.

In elevated areas in subtropical regions passable crops can be produced by elevating beds to provide optimum drainage, spacing plants well apart to increase air circulation and growing plants in shade.

Ancient Fare

Artichokes are an ancient crop. *Cynara* is the Latin name for the weedy cardoon (*Cynara cardunculus*) to which globe artichokes are related. *Scolymus* comes from the Greek word *skolos* or thorny and refers to the spines commonly found on seed grown plants. The original thorny varieties are so uninviting to harvest that it is amazing that anyone ever viewed them as edible. In fact, plants were prized as food and medicine. Of course, varieties grown today are selected to be largely thornless. Plants are harvested when the buds approach maturity, but before the flower opens.



Varieties

- **Emerald** - This popular late harvest variety produces plants that reproduce true to type from seed.
- **Green Globe** – This quick maturing variety is popular with both commercial producers and home gardeners.
- **Purple Globe** – This commercial and home garden variety takes slightly longer to mature.
- **Romanesco** – Seed of this purple variety can be obtained through seed saver networks and non-hybrid seed companies.

- **Grand Beurre** – This variety that produces very large heads, but can tend to be spiny.
- **Purple de Jesi** – While the flower heads of this variety are small, they are typically sweet and tender.

Other commercial varieties include **Camus de Bretagne** a green variety popular in France, **Violetta di Provinca** a purple variety popular in France and Italy and the Spanish selection known as **Blanca de Tudula**. **Imperial Star** is a relative newcomer bred in California to produce heads during winter. Access to these commercial varieties is largely restricted to growers importing seed or tissue cultured material from sources outside of Australia and New Zealand.

The Seed Savers Network at Byron Bay recommends several lesser-known types. Look out for **Dwarf Perpetual** a popular variety within the Italian community. Buds are so tender that they can be eaten raw and are produced over an extended period. **Purple of Tuscany** and **Green of Florence** are also recommended and can be eaten whole when young.

Not Just Edible

Florists have long recognised the appeal of artichoke buds and flowers. Look closely next time you admire one of those enormous arrangements in a hotel foyer or restaurant entrance. Some artichokes never make it to the dinner table!

Annual or Perennial

Artichokes may be grown as an annual crop that is replanted each year or left in the ground as a perennial plant to provide a successive harvest over a three to five year period. Like most crops they thrive in deep, fertile soil with a pH around 6.5. Fortunately they are extremely adaptable, tolerating rocky and slightly salt affected soil providing drainage is good.

Room To Move

If intending to grow artichokes as a long-term perennial crop be sure to allow 1- 2 metres between each plant. Less generous spacing is required if grown as an annual crop. Excessively crowding plants produces smaller flower heads.

Seedy Issues

Propagating artichokes from seed offers the widest choice of varietal selection as it makes it possible to access lesser known types through seed saver networks. Unfortunately however there are some drawbacks.

Watch Out For Spines

Seed grown plants are typically quite variable in their growth habit and must be culled of rogue, spiny plants. The exception to this is the variety known as Emerald, which produces offspring that are true to type.

Growing crops as annual plants by resowing seeds each season does aid in pest and disease control as it allows the artichokes to be rotated with other vegetables. Unfortunately plants grown from seed will only produce an acceptable harvest in the first year if grown under optimum conditions.

Quarantine Care

Seed of globe artichokes can be legally imported into Australia. Commercial growers also often import tissue cultured material of selected overseas varieties. Imported crowns or suckers are subject to a quarantine period of several months to ensure they are free of pests and diseases that affect overseas crops, but are not present in Australia.

Get Sowing

Artichoke seeds are generally sown in spring. Soak the seeds in water overnight before planting into seed raising mixture or compost. Following germination seedlings can be potted up and grown on to a semi-advanced stage ready for planting out in early autumn.

Little Suckers

The other option is to obtain new plants by removing young suckers produced by the parent plant. These are occasionally available through mail order companies or sold as potted plants through nursery outlets.

Plants propagated from suckers are clones of the parent plant. When taken from plants known to produce a quality harvest, the same characteristics will be reproduced in any offspring grown under similar conditions.

Kindest Cut

If you have existing plants or know a gardener willing to oblige you with planting material, propagation is simple. Just use a sharp knife to cut away strong growing, healthy suckers, taking as many roots as possible without damaging the parent plant. This is not detrimental to the existing plant as all plants should have sucker numbers reduced back to 6-8 shoots. Failure to remove excess suckers can result in production of overcrowded, weak growth.

Feed Me

Plants respond well to slow release sources of nitrogen and other nutrients found in animal manure and compost. This should be incorporated into the soil prior to planting and supplied additionally throughout the growing season via nutrient rich mulch materials. Take care that mulch materials do not come in contact with the neck of the plant or crown rot can occur. Growth can also be enhanced through applications of liquid fertiliser. Seaweed and fish based solutions is popular with organic growers.

Water Wise

Plants are deep rooted and tolerate long periods without irrigation. The watering regime applied to artichokes corresponds to peak growth periods. Watering is reduced during winter, but increased during spring bud formation. Restrict water once again during the post harvest period when plants are cut back and increase in late summer and early autumn to stimulate new growth.

All in the Timing

Artichokes are harvested when the buds are fully formed, but before the bracts open to reveal the developing flower.

Artichokes typically produce heads in mid to late spring. Plants generally require five to seven months of growth after planting out before they are ready to harvest. Seed sown in spring can be grown in pots for planting out in autumn. Suckers divided from parent plants from early march onwards are ready for immediate replanting. Potted specimens are typically available spring, summer and autumn. Mail order suckers are obtained during autumn and winter.

Under ideal conditions plants established during early autumn have the potential to produce a spring harvest. In reality home gardeners often find they have to wait two seasons to achieve a productive result. Well established artichokes produce 10 -12 flower heads per plant.

Out of Season

By selecting specific varieties, manipulating planting times and taking advantage of mild summer growing conditions, some commercial growers are able to produce flower heads between autumn and early winter. To achieve this plants are set out during October and November.

Summer Dieback

Plants show reduced vigour after flowering and should be cut back hard to encourage reshooting in autumn. Maximum yield is achieved 2-3 years after planting. Plants should be divided after around 5 years, as production tends to decline. Where possible, select a new location, incorporate generous amounts of organic matter into the soil, before dividing and re-establishing plants during autumn.

Potential Pests

Root knot nematodes can seriously affect the growth and harvest potential of artichokes. Plants grown in sandy soil or situations where organic matter is low are prone to infestation. Affected plants show poor growth and when removed from the soil, the knotted distortion of the roots is obvious. Increasing levels of organic material in the soil and practicing crop rotation is the key to minimising infestations.

Aphids and mites occasionally attack plants, but soap based sprays or a hard jet of water will easily dislodge them. Snails, slugs, weevils, leaf miners and other chewing insects are typically of minor importance and can be controlled using conventional organic preparations or physical barriers.

Verticillium and fusarium wilt disease affect globe artichokes. Growth is poor and plants wilt in warm weather despite being well watered. These diseases are often introduced on infected planting material and made worse by poor drainage. Always select suckers from disease free stock, grow plants from seed to reduce the possibility of transferring disease and practice crop rotation.