

# The East London Garden Society

## Plant Facts

### Saffron



The domesticated saffron crocus is an autumn flowering perennial plant unknown in the wild. Its origins are possibly the eastern Mediterranean autumn flowering *Crocus* which is also known as 'wild saffron' and originated in Greece. It is a sterile plant so must be planted annually from bulbs which must be dug up, divided and then replanted. A corm survives for one season producing via this vegetative division up to ten 'cormlets' that can grow into new plants in the next season.

In the autumn purple buds appear. Its brilliantly hued flowers develop in October after most other flowering plants have released their seeds; they range from a light pastel shade of lilac to a darker and more striated mauve. The flowers possess a sweet honey-like fragrance upon flowering and plants average less than 12" in height. A three-pronged style emerges from each flower and each prong terminates with a vivid crimson stigma 25 to 30mm in length.

Saffron thrives in the Mediterranean and similar climates where hot and dry summer breezes sweep semi-arid lands. It can nonetheless survive cold winters, tolerating frosts as low as  $-10\text{ }^{\circ}\text{C}$  and short periods of snow cover. Irrigation is required if grown outside of moist environments where annual rainfall averages 1,000 to 1,500 mm (39" to 59").

Rain immediately preceding flowering boosts saffron yields but rainy or cold weather during flowering promotes disease and reduces yields. Persistently damp and hot conditions will harm the crops. Nematodes, leaf rusts and corm rot also pose threats.

The plants fare poorly in shady conditions; they grow best in full sunlight. Mother corms planted deeper yield higher quality saffron, though form fewer flower buds and daughter corms. Saffron contains more than 150 volatile and aroma-yielding compounds.

When saffron is dried after its harvest, the heat, combined with enzymatic action, produces a volatile oil which gives saffron much of its distinctive aroma. Therefore, it must be stored in airtight containers to minimise contact with atmospheric oxygen. Saffron is somewhat more resistant to heat.

Despite attempts at quality control and standardisation, an extensive history of saffron adulteration, particularly among the cheapest grades, continues into modern times. Adulteration was first documented in Europe's middle ages when those found selling adulterated saffron were executed.

Documentation shows that saffron has been used in the treatment of ninety or more illnesses for 4,000 years. Saffron based pigments have indeed been found in 50,000-year-old depictions of prehistoric places in northwest Iran. The Sumerians later used wild growing saffron in their remedies and magical potions. Ancient Persians cultivated saffron in Derbena, Isfahan and Khorasan by the 10th century BC. At such sites, saffron threads were woven into textiles ritually offered to divinities, and used in dyes, perfumes, medicines and body washes.

Saffron threads would be scattered across beds and mixed into hot teas as a curative for bouts of melancholy. Phoenicians marketed Kashmiri saffron as a dye and a treatment for melancholy. Its use in foods and dyes subsequently spread throughout South Asia. The flower withers after a few days then the saffron is obtained and is valued for its uniform yellow colour also used to aromatise wine.

Saffron cultivation was introduced into England in around 1350, the story being that corms were smuggled from the Levant in a special hollow compartment of a pilgrim's staff. The crop seems to have been initially grown in monastic gardens for medicinal use, only being planted in the less kind conditions of open fields many decades later. Soil and climatic conditions meant that by the sixteenth century, saffron cultivation had centred on eastern England.

The Essex town of Saffron Walden, named for its new speciality crop, emerged as a prime saffron growing and trading centre. However, an influx of more exotic spices, chocolate, coffee, tea and vanilla caused European cultivation and usage of saffron to decline. It was nearly two centuries before saffron was commercially grown in England again.