



Navelli's Saffron

**ALFONSO PAPAOLI FARM-HOUSE
PURE SAFFRON PRODUCTION**



Alfonso Papaoli says:

“Since 1800, my grandfather, than my father till the Navelli land using the strength of their hands.

Their lives were entirely dedicated to the care of the land: the water and the climate to check, the rain and the plants to protect.

Nowadays this great care and the tradition are still the same.

Flowers have to be picked one by one, than on a large table the pistils are separated from the flowers by expert hands. This manual and fruitful work result is the Navelli saffron world known for its good quality”

Alfonso Papaoli



**ABOUT 15 DAYS ARE REQUIRED
FOR THE FLOWERS PICKING**

**TO PRODUCE 1 KG OF SAFFRON,
200.000 FLOWERS
AND 500 HOURS OF MANUAL WORK
ARE REQUIRED**



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OUR PROCESS

The *Crocus Sativus* grow starts with bulbs which are hosted in flower-beds formed by 2 or 3 lines, at a distance of 20 cm the one from the other.

By the middle of October, flowers are picked the morning before the rising of the sun. Then in the laboratory the flower fading takes place (the flower is opened and the stemmas are removed).

The stigmas are dried by putting them above a wooden fire (made with oak or almond tree) and this is the most delicate operation as if the stigmas stay too long above the fire they burn, if they stay shortly they can go bad.

When fingers can break the stigmas into small pieces, the drying process is ended.

The saffron has a pistil form to maintain all its properties and a deep colour.

The land where the family grow saffron rests (without any grows) the year before the picking.

Also the bulbs grow in the same piece of land once in 10 years, to preserve the product quality and to follow the ancient farmer tradition.

NOTES ON THE SAFFRON "THE RED GOLD"

The history of saffron cultivation reaches back more than 3,000 years. The wild precursor of domesticated saffron crocus was *Crocus cartwrightianus*. Human cultivators bred wild specimens by selecting for unusually long stigmas. Thus, a sterile mutant form of *C. cartwrightianus*, *C. sativus*, emerged in late Bronze Age Crete. Experts believe saffron was first documented in a 7th century BC Assyrian botanical reference compiled under Ashurbanipal. Since then, documentation of saffron's use over the span of 4,000 years in the treatment of some 90 illnesses has been uncovered. Saffron has been used as a spice and medicine in the Mediterranean region since then, with usage and cultivation slowly spreading to other parts of Eurasia as well as North Africa and North America. In the last several decades, saffron cultivation has spread to Oceania.

The domesticated saffron crocus *C. sativus* is an autumn-flowering perennial plant unknown in the wild, and is a sterile triploid mutant of the eastern Mediterranean autumn-flowering *Crocus cartwrightianus*. According to botanical research, *C. cartwrightianus* originated in Crete, not—as was once generally believed in Central Asia. The saffron crocus resulted when *C. cartwrightianus* was subjected to extensive artificial selection by growers who desired elongated stigmas. Being sterile, the saffron crocus's purple flowers fail to produce viable seeds—thus, reproduction is dependent on human assistance: the [corms](#) (underground bulb-like starch-storing organs) must be manually dug up, broken apart, and replanted. A corm survives for only one season, reproducing via division into up to ten "cormlets" that eventually give rise to new plants. The corms are small brown globules up to 4.5 [cm](#) in diameter and are shrouded in a dense mat of parallel fibers.

After a period of aestivation in summer, five to eleven narrow and nearly vertical green leaves growing up to 40 cm in length emerge from the ground. In autumn, purple buds appear. Only in October, after most other flowering plants have released their seeds, does it develop its brilliantly hued flowers, ranging from a light pastel shade of lilac to a darker and more striated mauve. Upon flowering, it averages less than 30 cm in height. Inside each flower is a three-pronged style; in turn, each prong terminates with a crimson stigma 25–30 mm in length.



The saffron crocus thrives in climates similar to that of the Mediterranean maquis or the North American chaparral, where hot, dry summer breezes blow across arid and semi-arid lands. Nevertheless, the plant can tolerate cold winters, surviving frosts as cold as $-10\text{ }^{\circ}\text{C}$ and short periods of snow cover. However, if not grown in wet environments like Kashmir (where rainfall averages 1000–1500 mm annually), irrigation is needed—this is true in the saffron-growing regions of Greece (500 mm of rainfall annually) and Spain (400 mm). Rainfall timing is also key: generous spring rains followed by relatively dry summers are optimal. In addition, rainfall occurring immediately prior to flowering also boosts saffron yields; nevertheless, rainy or cold weather occurring *during* flowering promotes disease, thereby reducing yields. Persistently damp and hot conditions also harm yields, as do the digging actions of rabbits, rats, and birds. Parasites such as nematodes, leaf rusts, and corm rot also pose significant threats.

Saffron plants grow best in strong and direct sunlight and fare poorly in shady conditions. Thus, planting is best done in fields that slope towards the sunlight (i.e. south-sloping in the Northern Hemisphere), maximizing the crocuses' sun exposure. In the Northern Hemisphere, planting is mostly done in June, with corms planted some 7–15 cm deep. Planting depth and corm spacing—along with climate are both critical factors impacting plant yields. Thus, mother corms planted more deeply yield higher-quality saffron, although they produce fewer flower buds and daughter corms. With such knowledge, Italian growers have found that planting corms 15 centimetres (5.9 in) deep and in rows spaced 2–3 cm apart optimizes threads yields, whereas planting depths of 8–10 cm optimizes flower and corm production. Meanwhile, Greek, Moroccan, and Spanish growers have devised different depths and spacing to suit their own climates.

Saffron crocuses grow best in friable, loose, low-density, well-watered, and well-drained clay-calcareous soils with high organic content. Raised beds are traditionally used to promote good drainage. Historically, soil organic content was boosted via application of some 20–30 tonnes of manure per hectare. Afterwards and with no further manure application



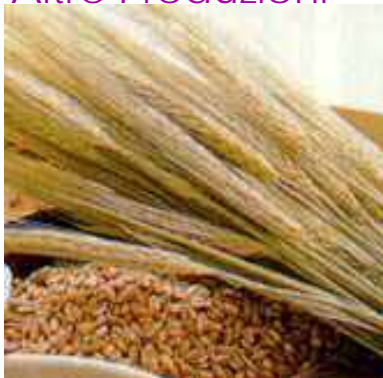
corms were planted. After a period of dormancy through the summer, the corms send up their narrow leaves and begin to bud in early autumn. Only in mid-autumn do the plants begin to flower. Harvesting of flowers is by necessity a speedy affair: after their flowering at dawn, flowers quickly wilt as the day passes. Furthermore, saffron crocuses bloom within a narrow window spanning one or two weeks. Approximately 150 flowers yield 1 g of dry saffron threads; to produce 12 g of dried saffron (72 g freshly harvested), 1 kg of flowers are needed (1 lb for 0.2 oz of dried saffron). On average, one freshly picked flower yields 0.03 g of fresh saffron, or 0.007 g of dried saffron.

Several saffron cultivars are grown worldwide. Spain's varieties, including the trade names 'Spanish Superior' and 'Creme', are generally mellow in color, flavor, and aroma; they are graded by government-imposed standards. Italian varieties are more potent, while the most intense varieties tend to be Macedonian Greek, Iranian, and Indian in origin. Westerners may face significant obstacles in obtaining saffron from

India. For example, India has banned the export of high-grade saffron abroad. Aside from these, various "boutique" crops are available from New Zealand, France, Switzerland, England, the United States, and other countries, some organically grown. In the U.S., Pennsylvania Dutch saffron known for its earthy notes are marketed in small quantities. Consumers regards certain cultivars as "premium" quality. The "Aquila" saffron (*zafferano dell'Aquila*) defined by high safranal and crocin content, shape, unusually pungent aroma, and intense color is grown exclusively on eight hectares in the Navelli Valley of Italy's Abruzzo region, near L'Aquila. It was first introduced to Italy by a Dominican monk from Inquisition-era Spain. But in Italy the biggest saffron cultivation, for quality and quantity, is in San Gavino Monreale, Sardinia. There, saffron is grown on 40 hectares (60% of Italian production); it also has very high crocin, picrocrocin, and safranal content. Another is the Kashmiri "Mongra" or "Lacha" saffron (*Crocus sativus* 'Cashmirianus'), which is among the most difficult for consumers to obtain. Repeated droughts, blights, and crop failures in Kashmir, combined with an Indian export ban, contribute to its high prices. Kashmiri saffron is recognisable by its extremely dark maroon-purple hue, among the world's darkest, which suggests the saffron's strong flavour, aroma, and colourative effect.

Saffron's aroma is often described by connoisseurs as reminiscent of metallic honey with grassy or hay-like notes, while its taste has been noted also as hay-like and somewhat bitter. Saffron also contributes a luminous yellow-orange colouring to foods. Saffron is widely used in Persian, Arab, Central Asian, European, Indian, Iranian, Moroccan and Cornish cuisines. Confectionaries and liquors also often include saffron. Common saffron substitutes include safflower (*Carthamus tinctorius*, which is often sold as "Portuguese saffron" or "assafoea") and turmeric (*Curcuma longa*). Medicinally, saffron has a long history as part of traditional healing; modern medicine has also discovered saffron as having anticarcinogenic (cancer-suppressing), anti-mutagenic (mutation-preventing), immunomodulating, and antioxidant-like properties. Saffron has also been used as a fabric dye, particularly in China and India, and in perfumery.

Altre Produzioni



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Ceci di Navelli



LEGUMI

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Farro - Orzo

OTHER PRODUCTS

FLOUR, LEGUMES, CEREALS

Navelli chick-pea, is a typical local legume with a good and spicy taste. The receipt recommends to put them into water all night-long, then to cook them into a potterry and separately prepare a sauce with oil, onion, rosemary, salt and pepper. Usually served with fried croutons.

SALE

We produce and sell: 1 or 0.50 gram of Saffron in bag or in a pot. Flour, cereals and chick-peas.

