



WORLD EXPENSIVE SPICE – SAFFRON:

Srimathi K, Kabilan M and Vignesh S
SRF, Department of Agronomy, TNAU, Coimbatore
Ph.D Scholar, Department of Agronomy, TNAU, Coimbatore

INTRODUCTION

Saffron is also known as Kungumapoo in Tamil and Kesar in Hindi. It is obtained from the flower of *Crocus sativus* and is commonly known as saffron crocus. It is a perennial herb that grows 10-25 cm tall and produces purple-coloured flowers in the autumn. The saffron blooms once a year for two weeks. Each flower has three pistils that are vibrant red-coloured otherwise called as three filament 'stigma' which is dried to form the spice 'saffron'. The pistils must be delicately collected by hand in the morning, soon as the blooms open; otherwise the exquisite flavour would evaporate. Saffron spice is used as a food coloring agent as well as medicine. Saffron is one of the world's most primitive and precious spices.

ORIGIN AND DISTRIBUTION

Taxonomy of *Crocus sativus*

Kingdom	• Plantae
Order	• Asparagales
Family	• Iridaceae
Genus	• <i>Crocus</i>
Species	• <i>C. sativus</i>

Parts of saffron plant



SPECIAL FEATURES

- Saffron is a potent spice that is abundant in antioxidants.
- It has a strong, exotic aroma and a bitter taste and it is used to colour and flavour many Mediterranean and Asian meals, especially rice and seafood, as well as English, Scandinavian and Balkan breads. It is an important component of soup.
- Saffron contains 0.5-1% essential oil, with picrocrocin being the principal component. Crocin is the colouring agent.
- Saffron includes compounds that have the potential to alter mood, destroy cancer cells, reduce swelling and act like antioxidants.
- It is often used to treat depression, anxiety, alzheimer disease, menstrual cramps, premenstrual syndrome (PMS) and variety of other ailments.



WHY SAFFRON IS MOST EXPENSIVE?

One pound of saffron threads requires 70,000 saffron crocus flowers, which results in saffron the most expensive spice in the world. Saffron can only be harvested and processed by hand because the fragile saffron threads must be collected very gently from the petals.

NUTRITIONAL VALUE OF SAFFRON

Saffron is an excellent source of the nutritional components and vitamins.

Table 2: Nutritional value of saffron/ 100 g

Nutritional components	Value
Energy	310 kcal
Protein	11.4 g
Total lipid (fat)	5.85 g
Carbohydrate	65.4 g
Fibre (total dietary)	3.9 g
Calcium	111 mg
Iron	11.1 mg
Potassium	1720 mg
Sodium	148 mg
Zinc	1.09 mg
Copper	0.328 mg
Manganese	28.4 mg
Phosphorus	252 mg
Magnesium	264 mg
Selenium	5.6 µg
Total saturated fatty acids	1.59 g
Total monounsaturated fatty acids	0.429 g
Total polyunsaturated fatty acids	2.07 g



HEALTH BENEFITS OF SAFFRON

Uses of Saffron for Skin

Saffron has been used to treat skin issues antiquity. It may help to enhance complexion, reduce dark circles under the eyes, freshen the face and treat acne and infections of the skin's superficial layer (erysipelas). It may also help to absorb the skin-damaging UV radiation of the sun and can be used as a natural sunscreen. Saffron may help to prevent skin cancer. It may aid in skin whitening by reducing the formation of melanin pigment. It may also aid in the treatment of melanoma (a kind of skin cancer that affects melanin-producing cells). These effects have been demonstrated in laboratory studies, but additional study is needed to justify the use of saffron in human skin diseases.

Reduces depression

The stigma of saffron plant contains antidepressant qualities. Crocin and Safranal, two primary saffron components, are useful in stimulating neurochemicals such as serotonin, dopamine and norepinephrine. These ingredients can help with mild to severe depression and are commonly found in typical psychiatric drugs.

Induce sleep

Saffron's antidepressant components act as a sedative, which helps to relax the nerves and induce sleep. Safranal and crocin, both aid in the promotion of sleep by containing high levels of dopamine and serotonin.

Increases sexual vitality

Saffron has a natural ability to improve sexual vigour. It also aids in the treatment of age-related erectile dysfunction. It has powerful aphrodisiac effects, which can help females improve their androgen levels.

Reduces blood pressure

Saffron contains a lot of potassium, which dilates the blood and helps to clear blockage in the arteries. This lowers blood pressure even further and protect against heart attacks and strokes.

Uses of saffron for Digestion

Saffron may be beneficial to the digestive system. It may help to reduce appetite and gas buildup in the intestine. It may also aid in the treatment of amoebic dysentery.

Uses of Saffron for the Eyes

Saffron can be used to treat a variety of eye disorders, including cataracts, corneal infections, soreness of the eyes and age-related eye diseases. Females used it as 'Kohl' to line their eyes as a type of cosmetics, protecting them from eye infections. It may also assist to minimize the damage of photoreceptor cells in the eye caused by light exposure.

Interesting recipes with saffron

Saffron has been traditionally used in home remedies and numerous culinary ventures.

A single strand of saffron may enhance the flavour and fragrance of any food. Saffron is used in variety of cuisines including Indian, Mughlai and Oriental.

Other Potential Uses of Saffron

- Saffron may aid in the battle against cancer and cancer-causing substances while causing no harm to healthy cells.
- It may also aid in the prevention of insulin resistance by avoiding a compensatory spike in insulin levels in the blood.
- Saffron may aid in the treatment of respiratory disorders such as cold, cough, asthma, long-term bronchial inflammation and other lung illnesses.
- It may also aid in the treatment of rheumatism, a condition in which the joints become inflamed owing to autoimmunity.



CONCLUSION

Considering the tremendous health benefits of saffron, we may incorporate it into our diet, especially in drinks such as milk and soup at lower quantity for better health.

