

Kashmiri Saffron Got GI-Tag

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Introduction

Saffron is a spice obtained from the *Crocus sativus* flower, which is a cousin of the lily. The saffron derives from the stigma and styles called threads within the flower itself. Saffron is very expensive due to the difficulty faced in its harvesting. Farmers harvest the delicate threads from each flower manually by hand. Iran, Spain and Kashmir are the major saffron producing regions of the world. The Kashmir valley is well known for quality saffron across the globe. Saffron (*Crocus sativus kashmirianus*) was introduced to Kashmir before the reign of King Lalitaditya in 750 AD.

The Kashmiri saffron is grown at an average height of 1600 m to 1800 m above sea level, mainly produced in Pulwama, Budgam, Kishtwar, and Srinagar. Kashmiri saffron is considered to be of the highest quality in the whole world. The main three kinds of saffron available in Kashmir are: Lachha Saffron, Mongra Saffron, and Guchhi Saffron. Its cultivation is in progress since the first century BCE. Saffron has a very huge export value. Iran produces more than 65 percent of the world saffron and stands first in terms of production. Other regions like Uttar Pradesh, Himachal Pradesh and few parts of J & K state like Kargil have also been reported to grow saffron but the production of saffron is limited to Kashmir only. Saffron has traditionally been associated with the famous Kashmiri cuisine, its medicinal values and its rich cultural heritage of Kashmir. Saffron is valued for its colour, taste and aroma.

Saffron is of incalculable value in medicinal term and as a food product. The dried stigmas of the plant *Crocus sativus* (Iridaceae) are processed to produce saffron as a well-known spice which has some other importance in pharmaceuticals, cosmetics, perfumery, and textile dye-

producing industries. Recently, reports about the pharmacological activity of this plant increase its importance in the world. The estimated world's annual saffron production is around 300 tons per year (Iran produces 76% of total) and also saffron is considered to be the most expensive spice in the world; hence, there are efforts for its artificial production or defraud. Therefore, the quality conservation of saffron needs to certify in the international trade market following international ISO or the Food and Drug Administration (FDA) criteria and standards.

In terms of chemical constituents saffron constitutes of crocin, picrocrocin, crocetin and saffranal. It is also a rich source of proteins, vitamins (riboflavin and thiamine), potassium, iron, copper, zinc, sodium and manganese. The stigmas of *Crocus sativus* are known to contain carotenoids, α -crocetin and glycoside crocin (responsible for saffron yellow color) and picrocrocin, the aglyconesafranal (responsible for saffron aroma), the antioxidant carotenoids lycopene and zeaxanthin and vitamin B2.

In August 2010, National Mission on Saffron was sanctioned by Government of India, initially with a total cost of 372.18 crores, of which GoI Share was 288.06 crores and farmers' share was 84.12 crores. The mission was initially proposed to be completed within a period of 4 years so the saffron sector in the state shall be revived. It was extended to 2 more years but it has failed to yield the desired results. Over the years, saffron is suffering on several counts especially with productivity and post-harvest management which resulted in lower production and poor quality. Area under saffron cultivation in Kashmir has declined from 5707 ha in 1996 to 3674 ha in 2015 and productivity from 3.13 kg to 2.50 kg per ha in last few years.

Uses and Medicine value

Saffron has numerous uses. The advantages and medicinal properties of this huge priced spice, make it a valuable culinary ingredient globally. Neoteric research depicts that saffron can be used as an aphrodisiac, diaphoretic [to cause sweating], carminative and to bring on mensuration. Some other benefits are mentioned here under.

Protects against cancer:

Saffron contains a dark orange, water soluble carotene called crocin, which is responsible for much of saffron's golden color. Crocin has been found to trigger apoptosis (programmed cell death) in a number of different types of human cancer cells, leukemia, ovarian carcinoma, colon adenocarcinoma, and soft tissue sarcoma. Researchers in Mexico who have been studying saffron extract have discovered that saffron and its active components display an ability to inhibit human malignant cells. Not only does the spice inhibit cells that have become cancerous, but it has no such effect on normal cells and actually stimulates their formation and that of lymphocytes (immune cells that help destroy cancer cells).

Promotes learning and memory retention:

Recent studies have also depicted that saffron extract, specifically its crocin, is useful in the treatment of age-related mental impairment. In Japan, saffron is encapsulated and used in the treatment of Parkinson's disease, memory loss and inflammation.

In delayed puberty:

In under developed girls, saffron has an overall stimulant effect. A pinch of saffron crushed in a table spoon of milk is useful to stimulate hormones and bring about desired effect.

To increase vitality: In low libido saffron aids as a sexual stimulant and can be consumed in a dose of a pinch in a glass of milk at bed time.

In patchy baldness: Saffron mixed in liquorice and milk makes an effective topical application to induce hair growth in alopecia.

Protection against cold: Saffron is a stimulant tonic and very effective to treat cold and fever; saffron mixed in milk and applied over the forehead quickly relieves cold.

Food Additives: Saffron is an excellent replacement for synthetic food additives- for eg: instead of FD and C yellow no 5: a synthetic food colouring agent that is a very common allergy trigger, Saffron's glorious yellow could be an acceptable hypoallergenic choice.

GI TAG

A geographical indication is a name or mark that is given to, agricultural products' natural and manufactured products a particular region. The GI tag is a code given to a certain product that has a specific geographical location or origin. No one is allowed to use this name other than the region to which this tag is given. With the GI tag, Kashmir saffron will acquire more prominence in the export market and would help farmers get the best remunerative price. The GI certification would also stop adulteration prevalent in the trade of Kashmir saffron. Kashmir saffron faces stiff competition from Iranian saffron, which has captured over 90% share of the world market. So, the Kashmiri saffron will have a unique identity in the market which was possible only after getting the Unique tag i.e. GI recognition. The producers of Kashmiri Saffron can differentiate their saffron from the low-quality saffron of Iran and other countries. Producers can charge a bit higher prices to cover the loss. After the GI tag, the customers will not hesitate to pay higher prices for the good quality Kashmiri saffron. Hence GI tag will not only increase the benefits of the producers but also open the door in the international markets.