

Review on Economic Importance of *Coriandrum Sativum*

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Abstract

Coriandrum sativum L. is an economically and medicinally very important spice as well as oil yielding plant. Different parts of the plant are extensively utilized in the preparation of food and medicine. The oil extracts of the plant contains antioxidants, antibacterial and antifungal properties, hence maintains the shelf-life of food stuff by avoiding the decay. The plant is used as pharmaceuticals, food and preservative agent. The current review is based on the constituents and different uses of coriander.

Introduction

Coriandrum sativum L commonly known as Coriander is an aromatic, herbaceous annual plant which belongs to the family Umbelliferae. They are aromatic herbs and considered as important yielding crop which are used as spices and medicinal plants. The extracts and essential oils obtained from *Coriandrum sativum* bears promising activities such as antifungal, antibacterial and anti-oxidative properties [1]. The various compounds present in the plant play a great role in different ways, such as maintaining the shelf-life of foods and prevents from spoilage, food flavouring, preservatives, pharmaceutical products and also used as perfumes [2]. Plants undergo stress upon exposure to heavy metals which ultimately damages cellular activities of the plants. People consume coriander plant as a whole but mostly fresh leaf and dried powdered seeds are favored. Coriander plant has many therapeutic and pharmaceutical values. They have been used as a flavouring agent in perfumes, cosmetics and food products [3]. The essential oils are present in all the parts of the plant such as leaf, flower, stem, seeds, though the composition of essential oil in each plant parts are not the same [4]. Its centre of origin is Eastern Mediterranean and later cultivated as spice plant in India, China, Central Europe, Russia, Morocco and to some European countries such as UK, Poland, Austria, Belgium. The largest coriander producing country is India. They are largely grown in the states of Rajasthan, Andhra Pradesh, Madhya Pradesh and Gujarat and other states such as Tamil Nadu, Odisha, Karnataka, Haryana, Uttar Pradesh and Bihar [5].

Bioactive constituents present in coriander:

Coriandrum sativum contained several important essential oil, terpenoids, alkaloids, tannins, reducing sugars, phenolics, fatty acids, glycosides, flavonoids and sterols. They also

have many nutritional values such as proteins, carbohydrates, fibres, oils, minerals, and vitamins [6].

Table 1: Composition of essential oil in ripe fruits of *Coriandrum sativum* [7].

Main components	% of total essential oil	Minor components (all with less than 2%)
Linalool	67.7	β -pinene
α -pinene	10.5	Camphene
γ -terpine	9.0	Myrcene
Geranylacetate	4.0	Limonene
Camphor	3.0	p-cymol
Graniol	1.9	Dipentene

Uses of coriander:

Coriander have many pharmaceutical properties, some of them are discussed in the table. The whole plant of coriander is edible and each part of the plant has distinct flavors and uses. They have medicinal values, such as for treating cough, stomach complaints, jaundice, disorders of digestive, respiratory and urinary systems. They are used widely to enhance appetite [8]. *Coriandrum sativum* contains pharmaceutical properties which are used for the treatment of antidepressant, anticonvulsant, sedative-hypnotic, improvement of orofacial dyskinesia, neuroprotective, memory enhancement, antibacterial, anthelmintic, antifungal, insecticidal, cardiovascular, hypolipidemic, analgesic, anti-inflammatory, hepatoprotective, mutagenic, antidiabetic, antimutagenic, gastrointestinal, anticancer, dermatological, deodorizing, reproductive, diuretic and detoxification [9]. *Coriandrum sativum* constitute a large amount of antioxidants that can be used as natural antioxidant as they can inhibit oxidation of lipids or delay damage of other biomolecules which ultimately repair damage and protect against oxygen species [10].

Conclusion

Coriander has much therapeutic and pharmaceutical importance. This plant contains alkaloids, sugars, carbohydrates, fatty acids, steroids etc. Apart from edible uses, this can be used in cosmetics, medicines and perfumes. Moreover, this plant has many health benefits and economic uses.

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