

Importance of Coriander (*Coriandrum Sativum* L.) Between the Medicinal and Aromatic Plants

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ABSTRACT

Today, public desire for community has increased the use of medicinal plants are the reasons become more wealthy societies, changes in the culture of nutrition, to show the destructive effects of chemical drugs, increased use of trust in communities and industrial plants and environmental pollution; so that the use of plants is important in most developed countries as a norm for health. The medicinal and aromatic plants have been an integral part of our daily life for thousands of years. There are cave paintings in which medicinal and aromatic herbs are depicted. To this day, modern research continues to discover health benefits of plants while illustrating the importance of preserving our ecosystem. The medicinal and aromatic plants are an accessible, affordable and culturally appropriate source of primary health care for more than 80% of world's population. Coriander is important among the plants due to the essential oil is used in the pharmaceutical industry, cosmetics and health and food productions. Therefore the objective of this article is to show the use of coriander in daily life people that it has been used centuries ago in the human nutrition.

Key words: Human nutrition, coriander, medicinal plants.

Introduction

Coriander (*Coriandrum sativum* L.) has been used in Chinese cooking and medicine for millennia. It belongs to the parsley family, as does anise, caraway, dill and fennel. The fruits and leaves of coriander possess very different flavors and hence are used in different ways to flavor food. Coriander is an annual herb native to the Mediterranean and Western Asia regions. However, commercial supplies now come from Turkey, India, Bulgaria, Russia, and Morocco [6]. This plant is a very ancient herb. It is mentioned in ancient Egyptian, Sanskrit, Greek and Latin writings. The ancient records reveal that coriander was used for both culinary and medicinal purposes. It was one of the substances utilized by Hippocrates, and other Greek physicians, for medicinal purposes [3]. The Romans made coriander

a popular spice, and introduced it to Great Britain. It was later brought to America, and was one of the first spices grown in New England and grows wild in Palestine. Hence, it's no surprise that it is mentioned in the Bible. The manna that was provided for the Israelites in the wilderness of the Sinai Peninsula during the Exodus was described as being "like coriander seed" and tasting like wafers made with honey (see Exodus 16:31) [3]. Therefore, the objective of this article was to evaluate the importance of coriander (*Coriandrum sativum* L.) between the medicinal and aromatic plants.

Botany:

Coriander (*Coriandrum sativum* L.) is an annual herb in the family *Apiaceae*. It is also known as Chinese parsley or, particularly in the Americas, cilantro. Coriander is native to southern Europe and

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North Africa to southwestern Asia [6]. Coriander is both an annual and a perennial herb. It is erect, sweet smelling and grows up to 20 cm in length with many, branches. The stem is feeble, smooth and light green in color. The leaves are compound, thin, alternate and easily breakable and fruits are spherical-about one centimeter in diameter with some longitudinal ridges. They are green when tender and brownish yellow when ripe and have a sweet fragrance [3]. Coriander is a native of the Mediterranean region, where it has been grown since ancient times. It is extensively cultivated in Europe, North Africa, India, South America, Malaysia, Thailand and China. It thrives in black soil and arid and semi-arid regions. It is a soft, hairless plant growing to 50 cm [20 in.] tall. The leaves are variable in shape, broadly lobed at the base of the plant, and slender and feathery higher on the flowering stems. The flowers are borne in small umbels, white or very pale pink, asymmetrical, with the petals pointing away from the centre of the umbel longer (5–6 mm) than those pointing towards it (only 1–3 mm long). The fruit is a globular dry schizocarp 3–5 mm diameter [2].

Coriander uses:
The use of medicine:

Coriander is primarily used in modern medicine as a flavoring agent in medicines and as a stomach soothing addition to more irritating compounds. For upset stomach and flatulence relief, chew on coriander seeds or drink a tea made from the seeds. For relief from the pain of rheumatism, pound the seeds and combine with hot water or tea to make a paste then apply to the affected area. Oatmeal may be added to this mixture to produce the desired consistency. Coriander seeds reduce fever and promote a feeling of coolness. Coriander juice is highly beneficial in deficiencies of vitamin A, B1, B2, C and Fe. One or two teaspoons of coriander juice, added to fresh buttermilk, is highly beneficial in treating digestive disorders such as indigestion, nausea, dysentery, hepatitis and ulcerative colitis and it is also helpful in typhoid fever. Dry coriander treats diarrhea and chronic dysentery, as well as being useful in acidity. Chutney made from dry coriander, green chilies, grated coconut, ginger and black grapes without seeds are a remedy for abdominal pain due to indigestion [5].



Fig. 1: The use of coriander in drugs produce



Fig. 2: The use of coriander in cosmetics and health produce



Fig. 3: The use of coriander in foods produce

Table 1: Coriander oil compounds

(%)	Main compounds
68.8	Petroselinic acid
16.6	Linoleic acid
7.5	Oleic acid
3.8	Palmitic acid

Table 2: Coriander essential oil compounds

(%)	Main compounds
67.7	Linalol
10.5	α -pinene
9	γ -terpinene
4	Geranyl acetate
3	Camphor
1.9	Geraniol

One teaspoon fresh coriander juice, mixed with 1 or 2 seeds of banana, given once daily regularly, for a week is a very effective preventive measure against small pox. It is believed that putting fresh leaf juice in the eyes, during an attack of small pox, prevents eye damage. A teaspoon of coriander juice, mixed with a pinch of turmeric powder, is an effective remedy for pimples, blackheads and dry skin. The mixture should be applied to the face, after washing it thoroughly, every night before retiring[4].

The use of cosmetics and health:

Known human effects of medicinal plants cosmetics and health from distant past and few side effects is increased in recent decade's consumption of herbal products. The essential oils are important materials in the plants that are used in many cosmetic and health industries. Also, coriander essential oil composition decydenyde is used in perfumery industry [8]. The figure 2 shown the number of health cosmetic productions produced by oil coriander.

The use of industrial and food

The essential oil in coriander is used to flavor the soup manufacturing and also, used to flavor the liqueur industry, chocolate, chocolate making and pharmaceuticals. Farmers can use the remaining coriander seed after oil extraction for livestock

feeding. The bees can generate 500 kg of honey from one hectare farm coriander [1].

In India the fruits of coriander are used in the preparation too much spices, sauces and flavors alcoholic drinks. In Germany is used to flavor beer and reduce the effect of beer drunk in the building industry. Green coriander has a lot of vitamins A, C and B, which is abundant use of coriander in preparing soups, salads, dessert and spice[7].

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