

OREGANO CULTIVATION IS A PROFITABLE MODEL FOR INDIA'S LOWER HIMALAYAN REGIONS.

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Oregano (*Origanum vulgare*) is an important medicinal, aromatic and culinary herb. The main chemical compound of the essential oil of the plant is carvacrol, thymol, terpinene, cymene and pinene. Oregano has been traditionally used for different medical purposes as antimicrobial action, anti oxidant properties, anti cancerous properties, antibacterial property, blood glucose regulation and digestive enhancer. Apart from this, oregano acts as a very useful medicine in many other diseases. Oregano is also known as Pizza herb. Oregano leaves are used in fresh or dried form to enhance the taste of dishes. The leaves have a very good fragrance which gives good taste when used in dishes. It is used to enhance the taste of Italian, Greek, Mexican and Spanish cuisines. Oregano leaves are used as seasonings mainly to enhance the taste of pizza, pasta, chicken, mutton and sauces etc. This article discusses the various uses of oregano, descriptions of products and advanced agricultural management in detail. The present review is an effort to give the detailed survey of literature on its medicinal properties, uses and cultivation practices of the plant under study.

Oregano is a culinary and medicinal herb, its botanical name is *Origanum vulgare* and it is related to Lamiaceae family. Oregano is a Greek word formed from the words "Oros" and Ganos. The literal meaning of "Oros" is "mountain" and "Ganos" literally means "beauty". This means the joy of the mountain. It is a temperate climate plant, Oregano is found in the Mediterranean region and tropical regions of Asia. Oregano is cultivated in many areas of tropical to temperate climates of Europe, Asia, North Africa and America.

Our nature has given us countless virtuous plants; one of them is Oregano which is known as Suthra in Hindi language. Our country is poised to grow continuously. It is constantly expanding in every field. Our living and eating habits are constantly changing. On the one hand, people are using new spices and herbs in their dishes, on the other hand, health-conscious people are also using beneficial medicinal plants as herbal tea. Oregano is a unique herb in these medicinal plants. This herb is becoming popular all over the world

due to its taste and beneficial properties. Fresh or dried leaves of oregano are used in Thai, Italian and Greek cuisine as spices, flavoring and seasonings. Oregano in medicinal form is being used as herbal tea due to its beneficial properties. At the present time, its demand is increasing continuously due to the large use of oregano in India, but production is less than consumption. For this reason, products made from this plant have a higher market value. In view of the situation, it has become necessary to promote the cultivation of oregano so that the growing demand can be met and at the same time the cost of the products made from it can be reduced by producing more quantity.

It is a perennial plant; the length of the plant is 30–90 cm, the leaves are 1–4 cm (0.39–1.57) in length. The good growth of the oregano plant is between 6.0 to 4.0 pH. The flowers of oregano are purple in color, which are 3–4 mm (0.12– 0.16 in) long, formed in erect spikes. It does not grow much larger in size. Its leaves are broad and elliptical in shape. The flowers are blue or pink. Fruits are small in size and smooth, brown in color. The branches of the plant are woody. The leaves have small-sized dotted glands that contain volatile oil, which gives aroma and color to the plant.



Oregano plant is found naturally growing at an altitude of 1500 to 3000 meters above sea level. Oregano is being cultivated in the world in America, Australia, England and Turkey. In India, oregano is mainly found in Jammu and Kashmir, Assam, Karnataka, Tamil Nadu, Meghalaya, Uttar Pradesh, Uttarakhand and hilly parts of Madhya Pradesh. Oregano cultivation can also be successfully carried out in the plains. Oregano contains 0.15 to 0.40 percent oil. Up to 63 percent of the phenols are found in oil such as Carvacrol, thymol and borneol; apart from this it contains 7 to 10 percent monoterpenes.

DIVERSE USES OF OREGANO:

•MEDICINAL PROPERTIES:

Oregano is a very effective medicinal plant. This is used to treat many human diseases and disorders of the body. This plant is very useful in diseases like sore throat, cough & cold, muscle aches, acne, dandruff, bronchitis, toothache, swelling, headache, heart disease, allergies, earache, sore throat and physical fatigue etc. It works as a medicine. The medicinal properties of oregano are described below.

•ANTIMICROBIAL ACTION:

Oregano and some of its components are reported to suppress microbes that cause food spoilage and which contribute to human and animal disease. Both essential oils and other extracts of oregano can suppress the growth of gram-positive and gram-negative bacteria, yeast, and some fungi.

•ANTIOXIDANT PROPERTIES:

The antioxidant properties of the volatile oils are not as strong as that of water-soluble constituents. However, because of variability in the composition and origin of different *Origanum* species, the antioxidant capacity reported can vary. Some study found that the oregano had the highest total antioxidant capacity and phenolic content compared with five other Labiatae herbs such as thyme, sage, rosemary, mint, and sweet basil.

•NERVOUS SYSTEM BENEFITS:

It is reported that the chemical compound found in oregano such as carvacrol, thymol and terpinene are influenced the nervous system chemistry and diverse functions, including responses to olfactory stimulation. Intriguing evidence from animal studies suggests that rosmarinic acid produces anti depressive activity and may inhibit an emotional abnormality produced by stress.

•BLOOD GLUCOSE REGULATOR:

There is limited evidence that extracts of



oregano have the potential to reduce diabetes and cardiovascular disease. For example, oregano extract and rosmarinic acid exhibited glucosidase inhibitory activity in vitro. Extracts of oregano containing rosmarinic acid Y also inhibited porcine pancreatic amylase activity. In a study of diabetic rats, water extracts of *Origanum vulgare* given orally at a weight of 20 mg/kg showed hyperglycemic activity.

•ANTI CANCEROUS PROPERTIES:

Oregano leaves have anti proliferative, anti genotoxic and anti mutagenic properties. In cell culture studies, oregano protects against oxidative stress Y, mitogen- and radiation-induced DNA damage. Similarly, carvacrol and rosmarinic acid have each been reported to protect DNA from harmful agents and prevent the growth of cancer cells.

•ANTIBACTERIAL PROPERTY:

After much research, it has been known that due to a chemical compound called carvacrol found in the oil of oregano, it works as an antibacterial. Oregano oil exhibits antibacterial properties against many pathogenic bacteria.

•ANTI FUNGAL PROPERTIES:

Usually, the skin becomes infected due to sweat or excess moisture. Due to which ringworm and itching occur on the skin, it is a fungal infection. Oregano oil is very useful to get rid of the infection. If oregano oil is mixed with any other carrier oil at the affected area, the infection is completely cured. To avoid infection due to perspiration or excess moisture on the skin, some drops of oregano oil should be put in the water while bathing.



REMARKABLE HEALTH BENEFITS OF OREGANO:

- Oregano contains a good amount of fiber, which helps in strengthening digestive power. Fiber is an essential element for a healthy digestive system. It completely eradicates the problem of constipation. This encourages the excreta to move out at a gradual pace. Also, it keeps the intestines and anus clean, it is also a good medicine to keep the intestines healthy. It provides the maximum amount of nutrients in the body from the food taken.
- Omega-3 fatty acids are found naturally in oregano. It is beneficial cholesterol which helps to keep the heart healthy. Omega-3 fatty acids regenerate cholesterol levels. And to keep the heart healthy, the chances of heart attack and heart attack are reduced to a great extent.
- Oregano contains a wide range of manganese, calcium, iron, vitamin-k, fiber and other organic compounds. Therefore, oregano is considered an ideal herb for body detoxification. After research, it has been known that Oregano helps the liver to function smoothly and at the same time, the process of detoxification in the body takes place at a fast rate.

BUSINESS APPLICATIONS OF OREGANO

OREGANO HERBAL TEA: Oregano tea is made from fresh or dried leaves. By putting the leaves of the oregano in the boiling water, the pan of the fugitive should be stopped for some time. After filtering the water, tea, sugar, honey, lemon juice or according to your taste can be taken for health benefits.

OREGANO TEA BAG: After drying the leaves of the oregano, small pieces are kept in a tea bag. Tea bags should be stored in air tight pouches or containers to avoid exposure of air to protect the aroma and nutrients of oregano. To consume tea, a tea bag should be put in a cup of hot water and taken with sugar or honey.