

Origanum vulgare (Oregano): A Wonder Herb

Geeta Mohan*, O. P. Sharma, Manjeet Kaur and Sanjeev Kumar

Department of Agriculture, Jagan Nath University, Jaipur, Rajasthan, India

ARTICLE ID: 102

Abstract:

Oregano is an herb that is a member of the mint family. It is closely related to marjoram, even though the flavors differ widely. The common variety of oregano bears the scientific name of *Origanum vulgare*. Although it is a common ingredient in foods around the world, more is used in perfumes than is consumed. Oregano is a powerful antimicrobial property because it contains an essential compound called “carvacol”. It has also got anti-inflammatory properties with an active ingredient known as beta- caryophyllin which is used against disorders like osteoporosis. It is also a rich source of vitamin K (promotes bone growth, maintenance of bone density and production of blood clotting proteins and a dietary antioxidant contains very high concentrations of antioxidants). It also protects our cells against free radicals. Oregano is a culinary herb, used for the flavor of its leaves, which can be more flavorful when dried than fresh. It has an aromatic, warm, and slightly bitter taste, which can vary in intensity.

Keywords: Aromatic, Culinary herb, Flavorful, Perfumes.

Introduction:

Oregano-it is a niche crop in Yuma country, along with the other herbs grown in that area. The fresh herb is grown and packed here in Yuma and this is flown to various US locales and later used in a variety of culinary tests and it is also grown for use by specialty restaurants. Although oregano is heavily associated with Italian cuisine it is that it originated in Greece. The word oregano in Greek means, “JOY OF THE MOUNTAIN”. The people believed that the cows that grazed in oregano fields produce a tastier meat. It is a particular herb flavour, than a particular herb. In different families there are several species that impart this particular flavour and they are all known as oregano. OREGANO’S HINT OF SWEETNESS, when combines with some spices adds warmth to any dish. Oregano which is fresh can be difficult in marketplace. Dried oregano has a stronger flavour than the fresh and so we must use it sparingly. Distinctive aroma oregano has a slightly bitter taste due to a high

concentration of phenolic acids and it can vary greatly in potency- strains are sometimes uniquely delicate or mild but some are quite strong. The oregano in Greek tends to be most pungent. Oregano is a pale yellow liquid, browning with age and with a warm, spicy-herbaceous, camphoraceous odour.



Figure 1 Oregano Leaves

Health Benefits of Oregano:

Oregano is an herb which is used widely in cooking and folk remedies. It helps to settle flatulence. It also stimulates the flow of bile. As a role of stimulating diaphoretic, it is often used in the treatments of cold and flu. Its use is similar to that of hyssop. It also gives a use in mouth conditioning, as a mouth wash for the inflammations of mouth and throat. It is a useful promoter of menstruation. It can externally be used for infected cuts and wounds. Infusion of this is used in coughs and whooping cough, and in headaches, especially when due to tension. It may be relieved by a tea of marjoram or may be done by rubbing the forehead and temples with oil. For rubbing into areas of muscular and rheumatic pain and for toothache, the diluted oil may also be used. To soothe stings and bites a lotion may be used. It's stated that eating a lot of oregano can help repel mosquitoes. Oregano has many of medical attributes but it contains further essential oils. These oils make it very much more antiseptic in action, which both externally and internally. Oregano is a temperate or subtropical plant. It will grow best in ample sunlight, where the plant grows best in light and in dry soil with a PH of 4.5–8.7. Oregano will tolerate some cold but they would grow best where the annual temperature will not fall below 15°C (59°F). While direct seeding, seeds

should be sown in row which is spaced in 50–60 cm (19–24 in) apart with seedlings when thinned to allow 20 cm (8 in) between plants. The genus *Origanum* comprises of 44 species, 6 subspecies, 3 botanical varieties and 18 naturally occurring hybrids, and this includes different types of oregano and sweet marjoram. Plants that are known and used as oregano doesn't belong necessarily to the genus *Origanum*, Caracole, which is a creosote-scented phenol, is chemically responsible for the sharp, pungent flavor of the culinary oreganos and this can be found in plants from various other genera, including *Lippia graveolens* (Mexican oregano), *Lippia micromere* (Jamaican oregano), *Plectra thus amboinicus* (Cuban oregano), and *Poliomintha Bustamante* (Mexican oregano).



Figure 2 Oregano in dried form

1. Rich in Antioxidants

Oregano is rich in antioxidants, which are compounds that help fight damage from harmful free radicals in the body. The buildup of free radicals has been linked to chronic diseases like cancer and heart disease. Several test-tube studies have found that oregano and oregano oil are high in antioxidants. Oregano essential oil is especially high in carvacrol and thymol, two antioxidants that can help prevent damage to cells caused by free radicals. In combination with other high-antioxidant foods like fruits and vegetables, oregano could provide a hearty dose of antioxidants that may help to improve the health.

2. Helpful in fighting with Bacteria

Oregano contains certain compounds that have potent antibacterial properties. One test-tube study showed that oregano essential oil helped block the growth of *Escherichia*

coli and *Pseudomonas aeruginosa*, two strains of bacteria that can cause infection. Another test-tube study found that oregano was effective against 23 species of bacteria. Furthermore, a test-tube study compared the antimicrobial activity of oregano, sage and thyme essential oils. Oregano was one of the most efficient essential oils against bacteria, second to thyme. Current research is limited to test-tube studies that have used concentrated amounts of this herb. Thus, further research is needed to determine how these results could affect humans.

3. Have Anti-Cancer Properties

Oregano is high in antioxidants. These compounds can not only neutralize free radical damage, but they may also aid in cancer prevention. Some test-tube studies have shown that oregano and its components may help kill cancer cells. One test-tube study treated human colon cancer cells with oregano extract and found that it stopped the growth of cancer cells and helped kill them off. Another test-tube study showed that carvacrol, one of the components in oregano, also helped suppress the growth and spread of colon cancer cells. However, keep in mind that these were test-tube studies using high amounts of the herb and its compounds. Human studies using typical doses are needed to determine its effects.

4. Helpful in Reducing Viral Infection

In addition to fighting off bacteria, some test-tube studies have found that oregano and its components may also protect against some viruses. In particular, carvacrol and thymol are two compounds in oregano that have been associated with antiviral properties. In one test-tube study, carvacrol inactivated norovirus, a viral infection that causes diarrhea, nausea and stomach pain, within one hour of treatment.



Figure 3 Oregano Tea

Another test-tube study found that thymol and carvacrol inactivated 90% of the herpes simplex virus within just one hour. While these results are promising, additional research on how oregano may impact viral infections in humans is needed.

5. Decrease Inflammation

Inflammation is a normal immune response that occurs as a result of illness or injury. However, chronic inflammation is believed to contribute to the development of diseases like heart disease, diabetes and autoimmune conditions. Oregano is rich in antioxidants, which can help neutralize free radicals and reduce inflammation. It also contains compounds like carvacrol that have been shown to have anti-inflammatory properties. In one animal study, carvacrol reduced swelling in the paws of mice by up to 57%. Another animal study showed that a mixture of thyme and oregano essential oils reduced the number of inflammatory markers in mice with colitis, or an inflamed colon. Remember that these studies looked at the effects of oregano and its components in highly concentrated amounts. Studies are needed to determine how a normal dose could affect inflammation in humans.



Figure 4 Different Types of Oregano

6. Easy to Add in Diet

Though thinking of oregano as a topping reserved solely for pizzas and pasta dishes, this versatile herb can be used in many ways. Try mixing whole oregano leaves into other greens for a nutrient-packed salad or sprinkling the leaves into chili, soups or stews. It can

also be used to make fresh pesto or salad dressing, season meat dishes or kick up the flavor of homemade sauces. Oregano is available fresh, dried or as an oil, making it super easy to add to the diet.

7. Relieves Depression

In 2018, treatment with oregano oil and other substances affected rats with depression due to chronic unpredictable stress. After 14 days, stress-related behavior improved in rats that received the oregano treatment. The study authors concluded that oregano might relieve stress-related behavior.

Oil of Oregano:

During the season, the oil of oregano is being used as a natural way to stay healthy. Celebrities have promoted it as an immune system booster. Oregano oil is sold at pharmacies and often promoted as “therapeutic grade.” It’s advertised as a cure for acne and lice, as a pain reliever, and as a way to boost the immune system and beat colds. There has only been one study on oregano oil in human beings. It had subjects with intestinal parasites take 200 mg of oil of oregano three times a day for six weeks, and it found that the oil was effective at getting rid of the parasites. But that study was very small—with only 14 patients—and didn’t have a control group.



Figure 5 Oregano Oil

Conclusion:

For the treatment of many diseases particularly the liver diseases instead of synthetic drugs the natural products extracted from the medical plants which was found in Egypt is considered as an alternative solution. Natural Products found in marjoram affects the physiological and genetics status of the body. The favourable environment in the high tunnel allowed an earlier harvest than the field plot in Horticulture Station. High tunnels at both these locations hastened growth to allow harvests as compared to two and three from the field plots at the Horticulture Station and Armstrong, respectively.

