

Calendula officinalis

TAXONOMICAL CLASSIFICATION:^[1]

Kingdom: Plantae

Phylum: Magnoliophyta

Class: Angiospermae

Category: Campanulids

Order: Asterales

Family: Asteraceae

Subfamily: Asteroideae

Genus: Calendula

Species: Calendula officinalis



<https://plants.ces.ncsu.edu/plants/calendula-officinalis/>

INTRODUCTION:^[2]

Crocus sativus Linn (family: Iridaceae) is a flowering plant in the crocus family and is commonly known as saffron. It is widely used as spice and as a coloring and flavoring agent in the preparation of various foods and cosmetics. It is native to Iran and Greece. It is now cultivated largely in Southern Europe, Tibet and other countries. In India, it is mainly cultivated in Kashmir and Uttranchal. The stigmas of the plant are mainly used for therapeutic purposes. The stigmas of Crocus sativus Linn. (Saffron) are used as coloring and flavoring agents in the preparation of food in different parts of the world. Apart from its use in preparation of food, the stigmas of the plant are used for the treatment of a variety of disorders traditionally. The medicinal properties attributed to saffron are extensive. Crocus sativus Linn is a grass like tuber plant with purple or lilac colored flowers. The flower stalk rises from a bulb, and is a long, white, slender tube; the flower itself being large, and of a beautiful lilac color. Leaves radical, linear, dark green above, pale green below, enclosed in a membranous sheath, sometimes remaining fresh nearly the whole winter. Corolla in two segments, between which the long styles hang out. Stigmas three, large, nearly an inch long, rolled at the edges, bright orange. The stigmas of saffron are the parts that have been used in medicine. They have a pleasantly bitter and somewhat warming taste. They contain a large portion of extractive matter, and a portion of volatile oil.

MEDICINAL PROPERTIES:^[2]

- Ear infections
- Skin inflammation due to radiation therapy
- Muscle spasms.
- Start menstrual periods
- Reduce fever
- Treating soar throat
- Menstrual cramps
- Cancer
- Stomach and duodenam ulcers
- Soothing
- Anti bacterial

SIDE EFFECTS OF EXCESS CONSUMPTION:^[3]

1. Skin rashes
2. Irritation
3. Itching
4. Trouble in breathing

DOSAGE:^[4]

A preparation can be made by steeping 5 to 10 mL of the herb in 1 cup of boiling water for 10 minutes and then gargled as a mouthwash for oral sores, consumed for its antispasmodic effects, or applied topically for skin conditions. Topical products typically contain 2 to 5 g of the herb per 100 g of the product.

RESEARCH:

1. *Calendula officinalis* Linn. (Asteraceae) is used in traditional medicine, especially for wound healing, jaundice, blood purification, and as an antispasmodic. Chemical studies have underlined the presence of various classes of compounds, the main being triterpenoids, flavonoids, coumarines, quinones, volatile oil, carotenoids and amino acids. The extract of this plant as well as pure compounds isolated from it, have been demonstrated to possess multiple pharmacological activities such as anti-HIV, cytotoxic, antiinflammatory, hepatoprotective, spasmolytic and spasmogenic, amongst others. In this review, we have explored the phytochemistry and pharmacological activities of *C. officinalis* in order to collate existing information on this plant as well as highlight its multi-activity properties as a medicinal agent. This is as a result of the worldwide cultivation of the plant and increasing published reports on it.^[5]
2. The results of the HPLC analysis indicated that marigold flowers extract contain nine different active compounds, including Vitexin 11.40%, Rutin 12.29%,

Quercetin-3-galactoside 12.64%, Luteolin-7-glucose 9.27%, Quercetin-3-glucoside 7.38%, Quercitrin 9.83%, Myricetin 10%, Luteolin 10.72%, Apigenin 7.08% and kampferol 9.37 %. The results of a clinical study showed the effect of marigold flowers extract cream as an antioxidant which protected the skin in particular from oxidative damage after sunburn and reduced the symptoms of skin aging. This effect was evident in both concentrations 10% and 15% when compared with control. Control response rate, 10% of marigold flowers cream and 15% of flowers extract cream were reached to 76%, 85% and 92% within two weeks of treatment respectively. The Conclusion of this study showed the importance of marigold flowers extract as a source of bioactive compounds such as rutin and quercetin derivatives, vitexin, luteoline, apigenin and kampferol which act as an antioxidant to restore skin health and aging resistance. This study approved that marigold flowers extract characteristics can make it the main ingredients in the preparation of topical agents for the treatment of various skin desases.^[6]

PRECAUTIONS & WARNINGS:^[7]

Pregnancy and breast-feeding: Don't take calendula by mouth if you are pregnant. It is **LIKELY UNSAFE**. There is a concern that it might cause a miscarriage. It's best to avoid topical use as well until more is known.

There isn't enough reliable information to know if calendula is safe to use when breast-feeding. Stay on the safe side and avoid use.

Allergy to ragweed and related plants: Calendula may cause an allergic reaction in people who are sensitive to the Asteraceae/Compositae family. Members of this family include ragweed, chrysanthemums, marigolds, daisies, and many others. If you have allergies, be sure to check with your healthcare provider before taking calendula.

Surgery: Calendula might cause too much drowsiness if combined with medications used during and after surgery. Stop taking calendula at least 2 weeks before a scheduled surgery.

INTERACTIONS WITH MEDICATIONS:^[7]

Moderate Interaction

Be cautious with this combination

- Sedative medications (CNS depressants) interacts with CALENDULA

Calendula might cause sleepiness and drowsiness. Medications that cause sleepiness are called sedatives. Taking calendula along with sedative medications might cause too much sleepiness.

Some sedative medications include clonazepam (Klonopin), lorazepam (Ativan), phenobarbital (Donnatal), zolpidem (Ambien), and others.

References:

1. <https://gd.eppo.int/taxon/CLDOF>
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3. https://www.medicinenet.com/marigold_calendula_officinalis-oral/article.htm#:~:text=SIDE%20EFFECTS%3A%20An%20allergic%20reaction,contact%20your%20doctor%20or%20pharmacist.
4. <https://www.drugs.com/npp/calendula.html>
5. Phytochemical Constituents and Pharmacological Activities of Calendula officinalis Linn (Asteraceae): A Review BP Muley*, SS Khadabadi and NB Banarase Govt. College of Pharmacy, Kathora Naka, Amaravati, Maharashtra State, India- 444 604.
6. Khulood M. Alsaraf *et al* 2019 *IOP Conf. Ser.: Mater. Sci. Eng.* **571** 012082
7. <https://www.webmd.com/vitamins/ai/ingredientmono-235/calendula>

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