

# Marigold: Beyond Beauty and Decor

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## ABSTRACT

Marigolds were well known and valued by ancient people in South Asia. The bright orange and red colours of marigolds are seen everywhere in daily life of the Indian sub-continent. They are mainly decorative plants and the flowers are used in all kinds of ceremonies including weddings. Marigold has been occasionally used in South Asian medicine. Marigold leaves and flowers in particular have been used for various disorders. Marigold species are being investigated for their potential benefits to health. Now a days, they are being used for treatment of various diseases.

**Keywords:** Marigold, tagetes, calendula, traditional-western medicines.

## INTRODUCTION

The golden colour of marigolds was considered to resemble the colour of the Arya, or honourable people<sup>18</sup>. They are made into garlands and are offered to the gods and honoured guests, or used to decorate the biers of the dead. They stud cowdung balls which are used to decorate rice-powder drawings. In folk-art of eastern India they are dried and powdered to produce a yellow colour used to decorate village homes. Essential oils are also extracted from marigolds for perfumery.

## HISTORY

Marigolds were first discovered by the Portuguese in Central America in the 16th century. They introduced these flowers to Europe and India<sup>18</sup>.

## ORIGIN AND DISTRIBUTION

Marigolds are now widely cultivated in the sub-continent. In Delhi, which is one of the centres of the flower trade in India, flowers are brought in from all over the country. A major centre of marigold production is the Calcutta region<sup>18</sup>.

## SPIRITUAL

Marigold is one of the traditional flowers used in garlands and offerings in South Asia. Marigolds are widely used in all kinds of rites and rituals<sup>18</sup>.

## DESCRIPTION

Two separate species of plant are known as marigolds, both edible, but we will get different results with the two. One is medicinal and not very palatable, the other makes a nice salad ingredient, but it won't cure what ails us. The National Institutes of Health explains that the marigold found in most home gardens is of the *tagetes* variety, which is purely ornamental. The marigold variety that delivers health benefits is *calendula*. The flowers of the *calendula* marigold have been used for centuries for their health benefits.

### Calendula

The most commonly cultivated and used member of the genus is *Calendula officinalis*. *Calendula* marigolds look more like a daisy with an obvious open center. They lack the closely clustered petals of the decorative marigold and are sometimes referred to as pot marigolds. *Calendula* should not be confused with other plants that are also known as marigolds, such as corn marigold, desert marigold, marsh marigold, or plants of the genus *Tagetes*. The name *Calendula* stems from the Latin *kalendae*, meaning first day of the month, presumably because pot marigolds are in bloom at the start of most months of the year. The common name marigold probably refers to the 'Virgin Mary' or its Old Saxon name 'ymbglidegold', which means 'it turns with the sun'. Medicinal use of *calendula* dates back at least to the 12th century, according to the University of Maryland Medical Center<sup>2</sup>.

### Botanical name

*Calendula officinalis* reflects the fact that the plant seems to be in bloom the first day of each calendar month.

### Family

Calenduleae



### Tagetes

The *Tagetes* marigolds, or the common decorative type, are indeed edible, although they do not possess medicinal properties. The fresh flowers may be added to salads or used as an edible garnish; they provide a bitter taste, which can be helpful to balance out an overly sweet dish. The Tangerine Gem and the Lemon Gem varieties are the best-tasting of the *Tagetes*.

### Botanical names

*Tagetes erecta* (African marigold) and *Tagetes patula* (French marigold) and *Tagetes minuta*.

### Family

Compositae, the daisy family (also sometimes known as Asteraceae)



## OTHER NAMES<sup>25</sup>

Marigold, French marigold, African marigold (English)  
Sthulapushpa, sandu, ganduga (Sanskrit)

Genda, gultera (Hindi)  
 Genda (Bengal)  
 Guljharo, makhanala (Gujarat)  
 Tangla, mentok, genda (Punjab).

## CHEMICAL CONSTITUENTS<sup>21</sup>

### Flavanoids

Have strong anti-inflammatory properties, the University of Michigan Health System reports.

### Triterpenoids

May suppress cell fusion and inhibit viral replication, says the Memorial Sloan-Kettering Cancer Center.

### Carotenoids

Which prevent the body from free radicals. These are lutein and zeaxanthin, often paired together, and lycopene & Beta-carotene. The Linus Pauling Institute reports that lutein and zeaxanthin are the only antioxidants that are found in the retina of the eye, where they protect the eye from the development of cataracts and macular degeneration. Lycopene is reported to reduce the risk of prostate cancer and heart disease. High iodine, carotene and manganese, which promotes skin cell regeneration, has also been found in the plant.

## MARIGOLD - TRADITIONAL MEDICINE<sup>25</sup>

- Blood purification and to reduce blood flow.
- Abdominal cramps and constipation.
- Spasmolytic and spasmogenic effects
- Culinary and medicinal herb.
- Petals are used fresh in salads
- Used to color cheese or as a replacement for saffron.
- Menstrual discomfort
- Ulcers
- Varicose veins
- Cancer

## MARIGOLD - WESTERN MEDICINE<sup>25</sup>

### Skin care

Controlling bleeding, and soothing irritated tissue, Bedsores, Skin inflammation, sprains and wounds, acne, burns, radiation-induced dermatitis, eczema, sunburn, varicose veins, rashes and scars.

### Calendula Products

Topically as an ointment, lotion, cream, oil, cooled calendula tea applied as a poultice, or orally as a tincture, extract or infusion<sup>11,12</sup>.

### Herpes treatment

Calendula Oil and calendula tea is used for herpes infections<sup>27</sup>.

### Cancer treatment

Calendula shows some potential for fighting cancer. A study published in the 2006 issue of BMC Cancer found that an extract of calendula killed cancerous melanoma cells and stimulated lymphocytes, the white blood cells of the immune system. Another 2006 study, published in the Journal of Natural Products, found that two triterpene glycosides in calendula flowers had a toxic effect against colon cancer, leukemia and melanoma<sup>1-13</sup>.

### Ear infections

Calendula has been used for generations to treat ear infections in children. The herb relieves the pain an ear infection.

### Calendula Products

Tincture, Ear drops<sup>15,16</sup>.

### Insect sting

It has been asserted that a marigold flower, rubbed on the affected part, is an admirable remedy for the pain and swelling caused by the sting of a wasp or bee<sup>20</sup>.

### Joint pains (arthrosis)

Joint pains (arthrosis) are alleviated if the place is greased with Marigold ointment<sup>17</sup>.

### Psoriasis

A tea from marigold flowers associated with a mixture of oak, willow, meadowsweet, celandine, walnutt rind, white deadnettle, common speedwell and yarrow is effective in many cases of psoriasis as well as in case of doubtful origin eczema.

### Antiviral Activity

According to a 1997 article in Biomedicine and Pharmacotherapy, calendula extracts exhibit antiviral activity against the human immunodeficiency virus, or HIV, and a 2006 study published in BMC Cancer attributes calendula with immune-stimulating properties.

### Calendula Products

Calendula extracts<sup>14</sup>.

### Menstrual pain

Marigold tea relieves menstrual pain, especially in anaemic individuals<sup>26</sup>.

### Trichomonas vaginalis

Vaginal douche helps to destroy *Trichomonas vaginalis* protozoan.

### Antibacterial

Calendula is effective against bacteria and is useful as an antiseptic lotion for minor cuts. Calendula is also active against bacteria that cause gastrointestinal infections. A study reported in the 2009 issue of Phytotherapy Research found that calendula was one of the most effective herbs for inhibiting the growth of *Campylobacter jejuni*, a common bacterial cause of severe diarrhoea in children<sup>29</sup>.

### Digestion

Calendula can relieve some gallbladder problems, since it stimulates the

release of bile from the gallbladder, thus relieving congestion. This action also aids digestion and elimination, since bile is a natural laxative<sup>18</sup>.

### Food colouring and decoration

Marigold flowers contain the yellow carotenoid pigments and are used to produce a yellow dye, which is sometimes used in place of saffron to color rice. Calendula petals are also added to salads and soups to give color and flavor. They have been used to colour pet and livestock foods<sup>1-18</sup>.

### Crafts

Marigold flowers are used at many religious ceremonies and festivals. Strung together they make colourful garlands and are used as offerings and to decorate religious buildings and statues. Plant dyes have always been important during the Hindu festival Holi, although now synthetic dyes are generally used instead. But Dyes prepared from plants like marigold are safer<sup>18</sup>.

### Cosmetics

Toners and astringents, lip balms, shampoos and baby oil<sup>5</sup>.

### Insect repellent

Calendula also acts as an insect repellent. Skin creams with calendula can deter mosquitoes and pests from the skin<sup>18</sup>.

## HOMEOPATHIC USES

Homeopathic form of calendula is primarily used internally for infections resulting from bacterial skin conditions and blood poisoning and fever<sup>28</sup>.

### Homeopathic Products

Topical calendula products include herbal and homeopathic ointments, gels, lotions and creams. Homeopathic calendula remedies also include sprays, oils and sugar-based pellets. Calendula is not typically

ingested, with the exception of homeopathic pellets and calendula tea. Cosmetic products such as soaps, moisturizers and lip balms may also contain calendula.

### Other Uses

Anaemia, diabetes, edema, liver dysfunctions, tuberculosis, ulcerative colitis, and muscle wasting, inflamed and sore eyes and Leucorrhoea.

### ADVERSE EFFECTS

Herb should be avoided by those who are pregnant or trying to become pregnant, or who are breastfeeding; calendula can cause changes in the menstrual cycle. People who have an allergy to other members of the daisy family should also avoid treatment with calendula remedies. 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.

### CONCLUSION

No scientific study or research has yet proven calendula as an effective remedy for various disorders. But the use of marigold has shown success in curing different diseases. So Marigold can be the most effective remedy of choice for various diseases and this new research will definitely help mankind to lead a disease free and healthy life.

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