

Expert Herbal Reality Resource

Calendula

Names

Botanical Name *Calendula officinalis* L

Family: Asteraceae

Common names: marigold, pot marigold, mary bud (Eng), Ringelblume (Ger), fleur de souci (Fr), zergul (Sanskrit), genda (Hindi)



Description

Calendula is native to Southern Europe, but is now widely cultivated around the world, and in many different varieties. It is an herbaceous perennial plant that can grow up to a metre in height. The leaves are a dark green, hairy and toothed and its flowers are a characteristic bright yellow or orange forming a thick flower head that can reach 7cm in diameter. It grows very easily in many different habitats but prefers constant sunshine.

Constituents

- **triterpene saponins**, mainly oleanolic acid glycosides
- **triterpene alcohols**, especially faradiol 3-monoesters
- **carotenoids**
- **flavonoids** such as quercetin and isorhamnetin
- polysaccharides including a rhamnoarabinogalactan
- sterols
- sesquiterpenoids
- bitter constituent loliolide or calendin
- essential oil

The benefits of calendula are linked to many of its constituents. The main compounds are the triterpenoids, which are claimed to be the most important anti-inflammatory and antioedematous components within the plant, particularly faradiol and the faradiol monoester, exerting a dose-dependent effect in the laboratory comparable to indomethacin. In aqueous extracts there are polysaccharides with observable topical healing properties, carotenoids and flavonoids.¹ In alcoholic solutions the triptenoid fractions assume almost resinous properties.

Traditional use

The strongest reputation of this remedy was in its healing and astringent action: sufficient to make it an effective stauncher of bleeding. It thus found use in earlier times where there were infected or slow-healing wounds or lesions, or ones discharging or bleeding too extensively. Its effectiveness (as a compress) in healing bullet wounds was reported enthusiastically by a Dr Reynolds in the American West in 1886.

Calendula was useful wherever there was infection or erosion in the upper digestive system, including reflux oesophagitis and gastritis. Benefits here are augmented by the bitter quality of the plant, as evidenced by its use for jaundice and liver disease in some traditions.

Calendula tincture makes an effective addition to local applications to combat fungal and other infections of the skin and other exposed surfaces. It makes a powerful mouthwash to check gum disease, sore throat, and mouth problems and in infusion form only, as an eyewash. In ointment form it is an excellent cosmetic remedy for repairing minor damage to the skin such as subdermal broken capillaries or sunburn.

Traditional actions

Traditional Ayurvedic characteristics are

Rasa (taste): Bitter, pungent.

Virya (energy): Cooling.

Vipak (post-digestive): Pungent.

Guna (quality): Light, sharp/penetrating.

Dosha: strengthens *vata* and reduces excessive *pitta* and *kapha*

Dhatu (tissue): Rasa/plasma, rakta/ blood, mamsa/muscle, artava/female reproductive.

Srotas (channel): Anna/digestive, artava/reproductive, rakta/circulatory, mutra/urinary.

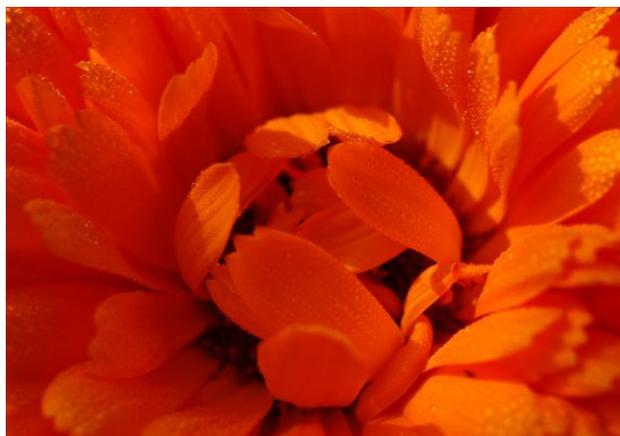
What practitioners say

Skin: Calendula is used in bruising, abrasions, slow-healing wounds, burns, insect bites and generalised skin inflammations. It will help clear the site of infection whilst also supporting wound-healing. It is also indicated where there is broken skin and itching in more chronic skin conditions such as eczema and dermatitis.

External Uses: A good first aid remedy for minor burns, bleeding cuts and abrasions, sores, ulcers, acne, eczema, varicose veins, haemorrhoids, skin infections such as athlete's foot and ringworm, shingles, sunburn, nappy rash, bruises, sprains and strains. Apply infusion or dilute tincture to reduce swelling and pain. The crushed flower can be rubbed on to insect bites, wasp or bee stings. The tincture (preferably involving high alcohol content) is an excellent mouthwash for inflamed gums, mouth ulcers, and throat inflammations. An infusion in hot water can be used as a douche for vaginal infections, eyewash for tired eyes, and inflammatory eye conditions such as styes.

Digestive tract: Used for any inflammation within the upper reaches of the gut, including ulcerations. Calendula will also encourage bile production, which can help relieve painful indigestion, digestive insufficiency and conditions such as jaundice and liver inefficiencies. The high alcohol extracts have been a feature of regimes for dysbiosis and Candidiasis.

Circulation: Calendula improves the circulation, reducing congestion and toning the blood vessels, especially the veins. It can be used in poor circulation, varicose veins, haemorrhoids and internal bleeding associated with injury.



Evidence

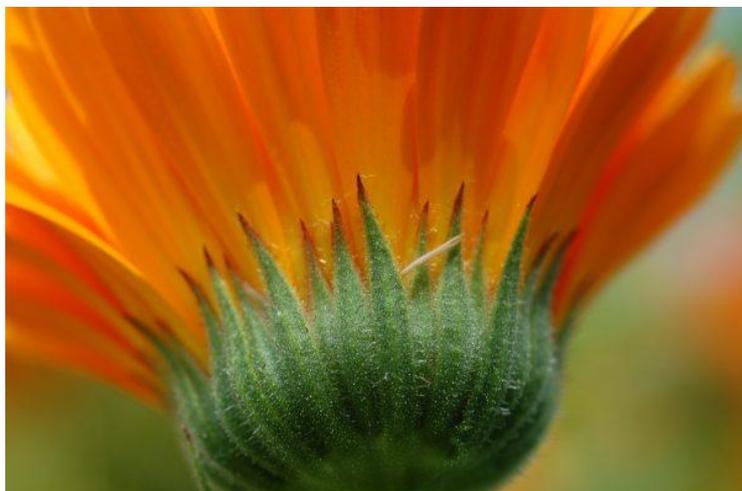
Compared to a base, calendula-enriched cream significantly improved measures of hydration and firmness in the skin of healthy volunteers over a period of 8 weeks.ⁱⁱ

Healing benefits have been observed in randomised controlled trials, in reducing nappy rashⁱⁱⁱ and dermatitis following radiotherapy.^{iv,v} and although not in controlled clinical trial conditions, in the case of diabetic foot ulcers.^{vi}

In one controlled study of the treatment of people with 2nd or 3rd degree burns, three ointments were given to around 50 patients each for 17 days.

Compared with vaseline only, an ointment including calendula had marginally superior benefits.^{vii}

In women with Candida infections. calendula-enriched vaginal applications used daily for a week led to fewer cases a month later compared with clotrimazole.^{viii}



Safety

Calendula is safe to take in the vast majority of cases. People with known sensitivity to other Compositae (such as chrysanthemums or daisies) may get allergic reactions to calendula but this is rare. There have been suggestions that calendula taken internally is a risk to pregnancy: there is no substantiation for this.

Dosage

1 - 4 grams three times per day

References

- ⁱ Butnariu, M. and Coradini, CZ. (2012). Evaluation of Biologically Active Compounds from Calendula officinalis Flowers using Spectrophotometry. *Chemistry Central Journal*, 6, 35
- ⁱⁱ Akhtar N, Zaman SU, Khan BA, et al. (2011) Calendula extract: effects on mechanical parameters of human skin. *Acta Pol Pharm*. 68(5): 693-701
- ⁱⁱⁱ Panahi Y, Sharif MR, Sharif A, et al. (2012) A randomized comparative trial on the therapeutic efficacy of topical aloe vera and Calendula officinalis on diaper dermatitis in children. *Scientific World Journal*.:810234
- ^{iv} Schneider F, Danski MT, Vayego SA. (2015) Uso da Calendula officinalis na prevenção e tratamento de radiodermatite: ensaio clínico randomizado duplo cego. *Rev Esc Enferm USP*. 49(2): 221-228
- ^v Pommier P, Gomez F, Sunyach MP, et al.(2004) Phase III randomized trial of Calendula officinalis compared with trolamine for the prevention of acute dermatitis during irradiation for breast cancer. *J Clin Oncol*. 22(8): 1447-1453
- ^{vi} Buzzi M, de Freitas F, Winter M. (2016) A Prospective, Descriptive Study to Assess the Clinical Benefits of Using Calendula officinalis Hydroglycolic Extract for the Topical Treatment of Diabetic Foot Ulcers. *Ostomy Wound Manage*. 62(3): 8-24
- ^{vii} Lievre M, Marichy J, Baux S, et al. (1992) Controlled study of three ointments for the local management of 2nd and 3rd degree burns. *Clinical Trials and Meta-Analysis* 28: 9-12
- ^{viii} Safari E, Mohammad-Alizadeh-Charandabi S, Adibpour M, et al. (2017) Comparing the effects of Calendula officinalis and clotrimazole on vaginal Candidiasis: A randomized controlled trial. *Women Health*. 57(10): 1145-1160