

CALÊNDULA

Scientific name: *Calendula officinalis* Linné. ^(1,2)

Family: Compositae ^(2,4).

Popular names: Calendula, Holligold, Goldbloom, Golds, Mary Bud, Ruddes, Mary Gowles, Holigold, Marybud ⁽¹⁾.

Used parts: Leaves and flower ⁽²⁾.

Botanical characteristics: The plant is usually an annual, seldom biennial. It grows to between 30 and 50 cm high and has a 20 cm long tap root and numerous thin, secondary roots. The stem is erect, angular, downy and branched from the base up or higher. The alternate leaves are almost spatulate at the base, oblong to lanceolate above and are all tomentose. On the tip of each stem there is a 5 to 7 cm composite flower head consisting of an epicalyx of numerous narrow-lanceolate sepals, which are densely covered on both sides with glandular hairs. The inner section of the flower head is made up of orange-yellow tubular florets. The disc florets are pseudohermaphrodites; the female sterile. The zygomorphic ray florets at the edge are female, their stamens are completely absent, and their inferior ovaries much more developed than those of the tubular florets. Fruit forms only in the female ray flowers. The heterocarp achenes are sickle-shaped, curved and ringed ⁽¹⁾.

Habitat: Central and southern Europe, western Asia and the U.S ⁽¹⁾.

Chemical composition: triterpene saponins, triterpene alcohols, flavonoids (isorhamnetin, quercetin glycosides), hydroxycoumarins, carotinoids, volatile oil 0,2% (alpha-cadinol, T-cadinol, fatty acids), polyynes and water-soluble polysaccharides ⁽¹⁾.

Indications: Inflammation of the oral and pharyngeal mucosa, poorly healing wounds, leg ulcers, to clean wounds, and for acute and chronic skin inflammation. In folk medicine Marigold is used for varicosis, vascular disease wounds, inflammatory skin disease, anal eczema, proctitis and conjunctivitis ⁽¹⁾.

Homeopathic uses: for frostbite, burns to the skin and

poorly healing wounds. The efficacy of the homeopathic uses has not been proven ⁽¹⁾.

Dose:

•Internal use:

dry flowers: 1 to 4 g three times a day

infusion: three cup for day

decoction: five cup for day ⁽²⁾.

•External use:

Tincture: em compressas

Ungentos and ointment: 8 to 15% ⁽²⁾ and 10 to 20% ⁽¹⁾.

•Phycosmetic: glycolic extract 5 to 10% (shampoo, cream, lotions, postbeard and postwax products) ⁽²⁾.

•Homeopathic dosage:

5 to 10 drops, 1 tablet or 5 to 10 globules 1 to 3 times daily or 1 ml injection solution sc twice weekly ⁽¹⁾.

Others informations:

- The organic extract from *Calendula officinalis* flowers, possesses significant *in vitro* anti-HIV-1 activity ⁽³⁾.
- The extracts of *Calendula officinalis* have highly molluscicidal activities ⁽⁴⁾.

References:

1. MEDICAL ECONOMICS COMPANY. **PDR for herbal medicines**. 2. ed. Montvale: Copyright, 2000.
2. TESKE, M.; TRENTINI, A. M. M. **Herbarium compêndio de fitoterapia**. 3. ed. Curitiba: Herbarium, 1997.
3. KALVATCHEV, Z.; WALDER, R.; GARZARO, D. Anti-HIV activity of extracts from *Calendula officinalis* flowers. **Biomed & Pharmacother**, v. 51, p. 176-180, 1997.
4. RAWI, S. M.; EL-GINDY, H.; ABD-EL-KADER, A. New Possible Molluscicides from *Calendula micrantha officinalis* and *Ammi majus*. **Ecotoxicology and Environmental safety**, v. 35, p. 261-267, 1996.