

Expert Herbal Reality Resource

St. John's Wort

Names

Botanical Name *Hypericum perforatum* L

Family: Hypericaceae

Common names: Klamath weed, goatweed (Eng) Johanniskraut (Ger), millepertuis (Fr), erba di San Giovanni (Ital), hierba de San Juan (Sp).

Description

St John's wort is an erect perennial about 30-60cm high with cylindrical or oval smooth stems, branching in their upper parts and bearing opposite sessile oblong leaves with entire margins. A key distinguishing mark against the many other *Hypericum* species is that on inspection against a light source they are seen to be marked with tiny translucent pinpricks (hence "perforatum"), and also with a few black spots on the underside: the veins are opaque. The bright yellow 5-petalled flowers are borne in a terminal corymb, the long lanceolate petals and shorter sepals both marked with black dots the numerous stamens are bunched into three bundles, and there are three styles.

It is found throughout Britain and the whole of Europe well into Asia, and introduced into many other parts of the world, for example North America, on roadsides, banks, woods and hedgerows, preferring open situations and relatively dry and ideally calcereous soils.



Constituents

- **Naphthodianthrones (0.05 to 0.6%), including** hypericin and pseudohypericin (=‘total hypericin’)
- **Phenolics** including hyperforin and adhyperforin
- **Flavonoids**
- **Tannins**
- **Procyanidins**
- **Xanthones**
- **Essential oil**

Hypericin is a red pigment and has generally been understood to be the most active principle. Hyperforin has become implicated particularly in the effects on depression: however it is unstable in aqueous solutions and liquid forms of St John's wort will lose this element within a few months. The tannins may have been the predominant factor in its earliest use as a wound remedy.

Traditional use

St John's wort has been used as a remedy since ancient times externally to treat ulcers, burns, wounds, abdominal pains and bacterial infections.

Traditional actions

Traditional Ayurvedic characteristics are

Rasa (taste) Bitter pungent and astringent.

Virya (action) Cooling.

Vipaka (post-digestive effect) Pungent.

Guna (quality) Light, sharp, drying.

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

Dhatu (tissue) Rasa/plasma, rakta/blood, mamsa/muscle, majja/nerve.

Srotas (channel) Rasa/lymphatic, rakta/circulatory, anna/digestion, majja/nervous.

What practitioners say

Convalescence: St John's wort is one of the classic tonics, medicines used to help recovery from illness, injury, exhaustion and fatigue. It combines well with Asian tonic medicines in a coordinated approach to chronic fatigue.

Nervous system: Traditional practice has emphasised the effect of St John's wort in reducing symptoms of anxiety and restlessness, with its antidepressant benefits more recently confirmed. Anxiety and depression very often come together and it is this combination that is the best application for the remedy.

Anti-viral: St John's wort is sometimes included in prescriptions where the body is fighting a chronic viral infection. However the evidence would suggest that this is likely to be helpful only with high doses.

Women's health: St John's wort is an old favourite for supporting women through the menopause. This may be associated with low energy, anxiety and depression as above and these are particularly strong indications.



Evidence

Systematic reviews have confirmed, subject to inconsistent trial qualities, that for mild and moderate depression St John's wort is superior to placebo in improving symptoms, and not significantly different from antidepressant medication. Adverse events reported in RCTs were comparable to placebo and fewer than with antidepressants.ⁱ Although this has been disputed there is evidence that benefits may even be found in major depression.ⁱⁱ

Reflecting older applications of St John's wort, significant benefit in managing symptoms of the menopause,ⁱⁱⁱ including hot flushes,^{iv} has also been supported by a meta-analysis and systematic review.^v

There is also evidence for the topical effects of St John's wort on atopic eczema.^{vi}

The antiviral activity of constituent hypericin has been amply demonstrated in the laboratory although the clinical relevance to the activity of St John's wort has not yet been confirmed.^{vii}

Safety

Adverse effects are rare from the use of St John's wort at recommended dosages.^{viii}

The main concern with St John's wort is its ability to induce key liver enzymes (cytochrome P450s or 'CYP450s') that break down complex non-food materials that get into the body. It may be that hyperforin is more active in this.^{ix} This effect applies to many medicines, so that St John's wort could reduce their effectiveness and length of action. It becomes a particular issue when the dose of that medicine is critical. So it is not wise to take St John's wort if you are taking any critical-dose prescription, particularly for a serious condition, including immunosuppressive medication, blood thinning agents, and medicines for severe depression, epilepsy, or heart disease.^x There is also some limited evidence that St John's wort may interfere with the effects of oral contraceptives.^{xi}



Constituent hypericin is a powerful photosensitizer, and although the clinical evidence is mixed and even points to a gender difference,^{xii,xiii} if taking relatively high doses of St John's wort, excessive exposure to sunlight or artificial UVA light is not advisable, and it should be used cautiously in people with known sensitivity to light.

Dosage

2- 5 grams three times per day

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