

# Expert Herbal Reality Resource

## Rehmannia

### Names

**Botanical Name:** *Rehmannia glutinosa*

**Family:** Orobanchaceae

**Common names:** Chinese Foxglove, Di Huang

### Description

Rehmannia, is a rhizomatous, basal-leaved, rosette-forming, herbaceous perennial that flowers in late spring to early summer with pendant, tubular, foxglove-like, reddish-brown to yellowish-brown flowers with dark purple veins.



Flowers (each to approx 2" long) bloom in few-flowered spike-like terminal racemes or singly from leaf axils on purplish stems rising to 1' tall from a basal rosette of coarsely toothed, obovate to oblong, rosulate leaves (to 3 - 5" long).

Seeded capsules for the fruits in mid to late summer. Rehmannia has a thick tuberous orange root approximately 3 - 6cm in diameter. This species is native to mountainous slopes and open woodland areas of China.

### Constituents

- Saccharides - polysaccharides, oligosaccharides, stachyose and monosaccharide.
- Irodooid glycosides- catalpol, dihydrocatalpol, phenol glycoside, catalpol, ajugol, rehmanniosides, rhemaglutins
- Ionone
- Mannitol
- Flavonoids
- Amino acids

### Traditional use

In 7th Century China rehmannia was said to be among the most highly valued medicinal plants, having the ability to remove excess heat throughout the body (heat translating as metabolic activity and inflammation). In the TCM understanding of excess heat, *yin* deficiency (*yin* loosely in this case, referring to coolness and substance) is thought to be the primary cause.

*Yin* deficiency presents itself as hot inflammations such as skin conditions, joint pain, aversion to heat, feverishness, hot flushes, thirst and other diseases of a hot and inflammatory nature.

Rehmannia is also used to support those with adrenal fatigue. This occurs when an individual has been exposed to prolonged high levels of stress hormones, possibly from trauma, over working or challenging personal circumstances.

The presenting symptoms of adrenal fatigue are often physical and mental fatigue, but beneath that are classic *yin* deficiency symptoms, such as insomnia, night sweats, premature grey hair, lower back pain, joint pain, loss of libido, dry skin and hair.

In TCM, rehmannia is also traditionally used often in combination with astragalus as a tonic to slow ageing, both improving memory, longevity and overall health.

*Please note: In TCM the concept of yin and yang serve as the foundation for understanding health and disease. The energetic or elemental characteristics of both translate to a TCM practitioner by the nature of their balance (or imbalance). In disease either one or the other may be in excess or deficiency.*

*Yin means the more substantial energies, coolness, feminine, darkness, rest and right, yang meaning light energies, warmth, masculine, activity and left. Yin deficiency is a deficiency of coolness (which leaves yang in excess - causing heat and inflammation).*

## Traditional actions

- Antipyretic (reducing heat)
- Adrenal Trophorestorative
- Antihæmorrhagic
- Anti-inflammatory
- Immunomodulator
- Neuroprotective

## What practitioners say

**Endocrine system:** A plant with a long standing reputation as an adrenal tonic. The adrenal hormones deal with many important coping functions in the body, and are essential for wider health. However with prolonged periods of stress, these hormones can lead to chronic problems.



To support its reputation as an adaptogenic medicine, studies have found that rehmannia affects the metabolism of cortisol (a stress hormone which is released by the adrenal cortex), making it less likely to disrupt the stress response (2).

**Digestive system:** Rehmannia has been found to be effective in reducing blood sugar levels (11). With a strong thread of reference in traditional written herbals for use as a supportive medicine for diabetics (2).

**Immune system:** The immune system is directly affected by excess stress hormones, therefore it is common to see symptoms of a compromised immune system where adrenal fatigue and prolonged stress is concerned.

Supporting the adrenal glands and lowering stress hormones in the body allows the immune system to function in natural balance, reducing inflammation and increasing overall resilience to illness.



Rehmannia is also indicated in autoimmune diseases to reduce inflammations and can be used in cases of rheumatoid arthritis, urticaria, asthma and other autoimmune conditions (2).

In conjunction with astragalus, rehmannia has been shown to demonstrate anti-allergy effects, both promoting balanced immune function and reducing inflammation (2).

**Nervous system:** Rehmannia has a neuroprotective effect, it is sometimes used in cases of memory loss, particularly when associated with ageing.

With its anti-inflammatory and antioxidant effects rehmannia is both protective against neurotoxicity and is also trophorestorative (restoring nutrient balance in the cells of the nervous system) (3, 4).

In the same context there is some support for the use of Rehmannia in treatment of inner ear diseases such as tinnitus and hearing loss (5).

**Eliminatory system:** A preparation of astragalus and rehmannia is used to support those with chronic nephritis and for increasing kidney function for those with kidney failure (2).

## Evidence

An *in vivo* study showed that several constituents of Rehmannia exhibited renoprotective effects (9).

In TCM rehmannia and astragalus are commonly prepared together in tonics and formulas to increase longevity and enhance immune function. In 2018 an *in vivo* study found that this combination prolonged cellular survival and other measures of health (6).

In a systematic review of the activity of catalpol, the most abundant iridoid glycoside in rehmanna there was evidence for this phytochemical of neuroprotective activities against Alzheimer's disease, Parkinson's disease, stroke, and depression (10).

In a data analysis carried out in 2014, four of the active compounds isolated from the air-dried roots of Rehmannia (ionones and ionone glycosides) were shown to exhibit moderate hepatoprotective activities (7).

As with much of the current research into herbal medicine, there is a large majority of *in vivo* (animal) studies available to back up what we know about these plants. However, on both ethical accounts and relevance to practice, it is clear that more human studies are required.



## Safety

- Anti-diabetes medications - As Rehmannia can affect blood sugar levels it is recommended if taking medications that lower blood sugar levels that you consult your health professional or a medical herbalist before taking Rehmannia. Blood sugar levels should be monitored closely and medications may need to be reduced.
- Antihypertensive Medications - As Rehmannia can affect blood pressure it is recommended if taking medications that lower blood pressure that you consult your health professional or a medical herbalist before taking Rehmannia

## Dosage

**Decoction:** Add 10 - 30g dried plant to 300 - 400ml water, decoction (simmer) for one hour. Strain and take two to three cups a day.

**Tincture:** 4 - 12ml in a little water, per day

## References

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