

# Expert Herbal Reality Resource

## Valerian

### Names

**Botanical Name** *Valeriana officinalis* L

**Family:** Valerianaceae

**Common names:** All heal, garden heliotrope (Eng), Baldrianwurzel, Katzenwurzel, Balderbrackenwurzel (Ger), racine de valériane, herbe aux chats (Fr), valeriana, amantilla (Ital), valeriana (Sp), tagar (Sanskrit)



**Alternate botanical names:** Other species of *Valeriana* have similar properties including Mexican valerian (*Valeriana edulis* Nutt. ex Torr & Gray, or *V. mexicana* DC) and Indian valerian (*Valeriana jatamansi* Jones and *V. wallichii* DC).

### Description

*Valeriana officinalis* is a herbaceous perennial, native to Europe and Asia and naturalized in the northeastern United States. It should not be confused with the common 'red valerian' *Centranthus ruber* often found in walls and coastal gardens. True valerian is a tall upright plant with hollow grooved stems, and finely cut or toothlike leaves. It has fragrant white to pink clusters of flowers from mid-late summer.

### Constituents

- Iridoids ("valepotriates (valeriana-epoxy-triesters)" – including valtrate, isovaltrate, didrovaltrate, and acevaltrate);
- essential oil (monoterpenes (borneol, bornyl acetate)
- sesquiterpenes (beta-bisabolene, valeranal (fresh root)
- non-volatile cyclopentane sesquiterpenes (valerenic acid and derivatives)
- amino acids including appreciable quantities of gamma-aminobutyric acid (GABA)
- lignans

### Traditional use

Valerian root has been used as a sedative in Europe since the 16th century and was a prescription medicine as such in the 19th and early 20th centuries across much of the world. In the Middle Ages it was valued in the treatment of epilepsy, which may be considered the origin of its further use as an antispasmodic. In the 20<sup>th</sup> century, valerian became known as a 'nervine', implying that it could calm, while also acting as a tonic to nourish and improve the function of the nervous system. Recommended uses included sleeplessness, nervous unrest, stress, and occasionally neuralgia and epilepsy.

Paradoxically, in early Graeco-Roman times the view was that valerian had "warming" or metabolic stimulating features, used as a diuretic, digestive remedy, menstrual stimulant and expectorant, and it was also used directly to cleanse and heal wounds and infections. Other species of valerian have been used similarly in native North American medicine and in Asia. Early European tradition combined valerian's reputation as a stimulant and tonic with its use in depression and despondency and low unresolved fever conditions.

## Traditional actions

### India

**Vishaghna:** poison – destroying.

**Tridosahara:** corrects the imbalance of Vata, Pita and Kapha.

**Raktadoshahar:** blood purifying.

**Manasadoshhara:** cure psychological disorder.

## What practitioners say

Although valerian is one of the obvious remedies that one considers in dealing with anxiety symptoms, sleep difficulties and visceral spasm, there may be advantages in seeing it as it was traditionally, as a restorative healing remedy, particularly suited to debility and fatigue, perhaps as an important part of a convalescent regime.

There have been occasions in which patients have reported stimulation of various forms after taking treatments that included valerian and relief after the valerian was discontinued. The practitioner may find assured-quality skullcap (*Scutellaria lateriflora*), hops (*Humulus lupulus*), motherwort (*Leonurus cardiaca*), and passionflower (*Passiflora incarnata*) useful substitutes or companions.

**Nerves:** Indicated for insomnia, panic attacks and lack of concentration. It can also be considered in the treatment of mild depression.

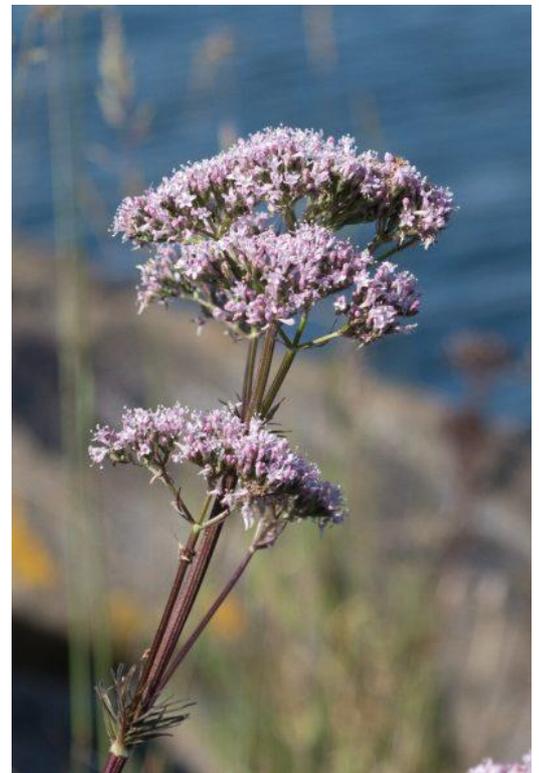
**Cardiovascular:** Its relaxing qualities may help palpitations, tightness in the chest and high blood pressure.

**Digestion:** As a warming carminative it is useful for erratic digestion, bloating and constipation. It soothes all spasms in the intestines and prevents the impact of stress on the gut, helping to reduce irritable bowel syndrome as well.

## Evidence

The evidence for the benefits of valerian in sleep is positive though not conclusive. One extensive literature search in 2006 identified 16 eligible studies involving a total of 1093 patients. Most studies had significant design problems, and the doses, preparations, and length of treatment varied considerably. Although the evidence suggested that valerian might improve sleep quality without producing side effects the authors called for future studies with more standardised doses and outcome measures.<sup>i</sup> There are similar conclusions in later reviews of the evidence.<sup>ii,iii,iv</sup> There is clinical trial evidence of benefits in other sleep-related disorders such as restless leg syndrome.<sup>v</sup>

At moderate doses valerian is not a sedative. No impairment of motor skills was seen in healthy subjects taking a single 1600mg dose.<sup>vi</sup> There is evidence among healthy subjects suffering anxiety that valerian root extract can affect EEG brain activity,<sup>vii</sup> and brain cortical excitation.<sup>viii</sup>





In patients cognitive functions tend to be disturbed. In a double-blind cross-over study cognitive performance among 39 patients on kidney haemodialysis, the accompanying often disturbed cognitive functions significantly improved while they were on valerian compared with placebo, although in this study there were no changes in EEG traces.<sup>ix</sup>

The mechanism of action of valerian has not been fully elucidated. Some laboratory studies suggest that valerenic acid may affect gamma-aminobutyric acid (GABA) in the brain.<sup>x</sup> However more than 150 constituents have been identified, and none appear to be solely responsible for valerian's effects, suggesting many of them may act synergistically.

There is a good clinical trial indicating benefit over two months for hot flushes ('flashes') post menopause.<sup>xi</sup>

## Safety

Most studies have suggested that valerian is well tolerated with fewer side-effects than conventional medications for insomnia or anxiety. For example there is very little evidence that valerian causes impairment of vigilance or hangover effects. Adverse effects have been occasionally been associated with products containing valerian but in all cases there were reasons to suspect other ingredients.

There is no evidence that valerian is harmful when used during pregnancy, although such evidence is limited. Valerian is probably compatible with breastfeeding. Nevertheless, use of this remedy during pregnancy and lactation should be undertaken only with expert advice.

Modern reports of high doses include blurred vision, change in heartbeat, excitability, headache, nausea, restlessness, uneasiness, and elevated liver enzymes.

## Dosage

3 gm a day of dried root or equivalent preparation.

## References

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