

Holy Basil

The Story of *Ocimum sanctum*

Article by FX Medicine

Ocimum sanctum (Holy Basil or Tulsi) is an aromatic herb belonging to the family *Lamiaceae*.¹ It is native to India and south-east Asia where it has been used medicinally for centuries and is now cultivated all over the world, including in Australia.² *Ocimum sanctum* has warming and astringent properties,¹ and is slightly bitter. In Ayurvedic medicine, *Ocimum sanctum* is believed to normalise an imbalance of both the kapha and vata doshas.³ While the whole plant (flowers, leaves, and seeds) has medicinal properties, it is mostly the leaves, rich in volatile oils, that are used.

There are two main varieties of Tulsi: a green-leaved variety known as Rama Tulsi and a purple-leaved variety known as Krishna-Tulsi. Both Rama and Krishna Tulsi appear to have similar biochemical and therapeutic properties.² To date there has been only a small number of published clinical trials examining the effects of *Ocimum sanctum* in humans, however, those conducted show great promise, confirming the valuable insights of its traditional use.

Adaptogen and mood enhancing

In Ayurvedic medicine, *Ocimum sanctum* was traditionally renowned for being a 'rasayna', a concept that describes the rejuvenating and tonic effects a specific herbal medicine may have on the body.

Like many of the other rasayna herbs, *Ocimum sanctum* is considered an adaptogen⁴ and may be used to assist with increasing resilience in times of perceived physical and mental stress.

Intake of OciBest®, an extract of *Ocimum tenuiflorum* (1200 mg/day) for 6 weeks in individuals with perceived high stress resulted in reduced symptoms of overall fatigue and less daytime sleepiness compared to those in the placebo group.⁴ These findings highlight the adaptive and tonic properties of Holy basil.

Similarly, in a small randomised controlled trial involving 35 participants with generalised anxiety disorder, *Ocimum sanctum* extract 500 mg consumed twice a day over 60 days improved mood and assisted with stress adaptation. Individuals were assessed clinically as well as via a self-reported questionnaire at three points over 60 days. As well as less depression and anxiety, participants reported better attention to detail, highlighting the cognitive enhancing properties of *Ocimum sanctum*, with researchers hypothesising that *Ocimum sanctum* may exert these effects via regulation of the hypothalamus-pituitary-adrenal (HPA) axis. A later study by Sampath et al. (2015)⁵ examining the effects of *Ocimum sanctum* on cognitive parameters in healthy volunteers over 30 days, noted that while there was a significant reduction in salivary cortisol concentrations, the results, while clinically significant, were not statistically significant when compared to the placebo group, suggesting a more complex mechanism of action at play.

Immune enhancing

A literature review examining the safety and efficacy of *Ocimum sanctum* in humans observed the ability of *Ocimum sanctum* to enhance immunity in five of the studies reviewed.⁶ One paper included in the review demonstrated that *Ocimum sanctum* reduced viral load in the saliva of individuals with herpes virus,⁶ highlighting its immune-enhancing properties.

Similar immune-enhancing effects were observed in a small randomised controlled trial in healthy adult participants after four weeks of consuming 300 mg/day of *Ocimum sanctum* leaf extract.⁷ Increased Natural Killer (NK) and T-helper cells were observed, reflecting an enhanced immune response. Chronic stress reduces the activity of NK cells, subsequently increasing vulnerability to infection.⁷

It can be hypothesised that prophylactic use of an herbal medicine like *Ocimum sanctum* may be helpful to assist with the increased psychological and immunological stress many individuals face in modern day life.⁷

While more rigorous studies with larger sample sizes and longer durations are required, *Ocimum sanctum* appears to be a safe herbal medicine with a long history of traditional use. Its multifaceted properties as tonic, adaptogenic and immune enhancement make it an ideal choice for the modern-day dispensary to support clients needing assistance with immunity and resilience.

References

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