Researched and Multifaceted Benefits of *Rhodiola rosea*

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Rhodiola has long had a reputation for being a tonic for longevity, the nervous system, the treatment of fatigue, decreasing symptoms of depression, enhancing physical performance and aiding in resisting high altitude sickness.\(^1\)

In vitro and in vivo investigation of rhodiola extract has shown antioxidant, anti-inflammatory, anti-bacterial, anti-fatigue, stress protective, neuroprotective, lifespan increasing, cardioprotective, hepaprotective and anticancer activity.\(^2\)

Over the past decade, clinical effects of rhodiola on physical or psychological performance in healthy subjects have been investigated in seven randomised placebo controlled trials (RCT’s)\(^3,4,5,6,7,8,9\)

Combined herbal preparations of adaptogenic plant extracts; including rhodiola and withania which are neuroprotective, antioxidant and normalise immunity and hormone parameters are showing exciting therapeutic efficacy in patients with Parkinson’s disease.\(^18\)

Effects of rhodiola on mental performance have also recently been evaluated in four clinical trials, which looked at outcome measures of short-term memory recall, testing reactions times and correcting texts for concentration ability.\(^5,6,10,11,12\)

The effect of rhodiola in patients with fatigue showed significant improvements in patients with stress-related fatigue (incorporating physical, emotional and mental exhaustion).\(^13\) Rhodiola significantly (p<0.0001) improved in terms of Hamilton Rating Scale for Depression (HAMD) and Beck Depression Inventory (BDI), compared with placebo.\(^14\) A recent meta-analysis by Sarris et al. provided preliminary positive evidence for rhodiola in treating depression and anxiety.\(^15\) Also a systematic review in 2011 by Dwyer et al., found rhodiola to significantly improve depressive symptoms when compared to placebo, and show promise in the management of mild-to-moderate depression.\(^16\)

Radioprotection for first responders to hot zones is another emerging area of study. The pro-oxidant/antioxidant activities of rhodiola are showing potential as a possible prophylactic radiation countermeasure for use in nuclear and radiological emergencies.\(^17\)

Current data suggests that Rhodiola is safe with only mild adverse events reported in randomised subjects, no interactions have been reported in these RCT’s or in case reports.\(^3,19\)

Selected References (full list available on request):