

PubMed

Display Settings:  Abstract



Phytother Res. 2007 Jan;21(1):37-43.

Adaptogenic and central nervous system effects of single doses of 3% rosavin and 1% salidroside *Rhodiola rosea* L. extract in mice.

Perfumi M, Mattioli L.

Department of Experimental Medicine and Public Health, University of Camerino, Via Scalzino 3, 62032 Camerino (MC), Italy. marina.perfumi@unicam.it

Abstract

Rhodiola rosea L., or 'golden root', is a popular plant in traditional medicine in Eastern Europe and Asia, with a reputation for improving depression, enhancing work performance, eliminating fatigue and treating symptoms of asthenia subsequent to intense physical and psychological stress. Due to these therapeutic properties, *R. rosea* is considered to be one of the most active adaptogenic drugs. To confirm and extend results obtained in the few preclinical and clinical studies available in English language journals, the purpose of the present study was to re-investigate the effects produced by a single oral administration of an *R. rosea* hydroalcohol extract (containing 3% rosavin and 1% salidroside) on the central nervous system in mice. The extract was tested on antidepressant, adaptogenic, anxiolytic, nociceptive and locomotor activities at doses of 10, 15 and 20 mg/kg, using predictive behavioural tests and animal models. The results show that this *R. rosea* extract significantly, but not dose-dependently, induced antidepressant-like, adaptogenic, anxiolytic-like and stimulating effects in mice. This study thus provides evidence of the efficacy of *R. rosea* extracts after a single administration, and confirms many preclinical and clinical studies indicating the adaptogenic and stimulating effects of such *R. rosea* extracts. Moreover, antidepressant-like and anxiolytic-like activities of *R. rosea* were shown in mice for the first time.

PMID: 17072830 [PubMed - indexed for MEDLINE]

MeSH Terms, Substances

LinkOut - more resources