

cold, flu, menoxenia, neurasthenia, numbness, polyps, rheumatism, sores, spasms, trauma, worms, and wounds.^{32 33} Culpepper prescribed it with aniseed, licorice, and raisins for coughs. Bruised valerian, applied to the forehead, was supposed to alleviate headache. Indochinese use the roots for dyspepsia, inflammation, and toothache.¹⁶

An oil in the subepidermal layers of the root contains acetic, formic and valeric acids, borneol, bornyl formate, bornyl acetate, bornyl butyrate, bornyl isovalerianate, camphene, pinene, and two alkaloids called chatinine and valerianine.¹⁶ The important active compounds are iridoid compounds called valepotriates (valtrate, valtrate isovaleroxyhydrin, acevaltrate, valechlorine, etc.), didrovaltrates (didrovaltrate, homodidrovaltrate, deoxydidrovaltrate, homodeoxydidrovaltrate, isovaleroxyhydroxydidrovaltrate, etc.), and isovaltrates (isovaltrate, 7-epideacetylisovaltrate, etc.); valtrate and didrovaltrate are the major valepotriates. Also, contains valerosidatum (an iridoid ester glycoside) and a volatile oil (0.5 to 2%) containing, e.g., bornyl acetate and isovalerate (major compounds), caryophyllene, alpha- and beta-pinenes, valeranone, beta-ionone, eugenyl isovalerate, isoeugenyl isovalerate, patchouli alcohol, valerianol, borneol, camphene, beta-bisabolene, ledol, isovaleric acid, terpinolene, etc. Valerian also contains the alkaloids actinidine, valerianine, valerine, chatinine, etc. Other constituents include choline (*circa* 3%), methyl 2-pyrrolyl ketone, chlorogenic acid, and caffeic acid; beta-sitosterol; tannins; gums; etc.²⁹ One anonymous writer describes valeric acid as a very potent tranquilizer.⁵¹ Dry seeds contain 19.4 to 19.9% protein and 30.0 to 34.4% fat.²¹

Toxicity — The compound α -methylpyrrol ketone is believed to be narcotic.¹⁶ Approved for food use by the FDA § 172.510.²⁹