Valeriana officinalis, commonly called valerian, is a perennial herb of the Valerianaceae. Its habitats include marshy thickets, and borders of ditches and rivers of Europe and North America. Valerian can be identified by its unpleasant odor and pinkish-colored flowers that grow from a rhizome (Kalyn 1999). Historically called the wild nard, valenan was originally used as a stimulant, and valued for its odor and food flavoring characteristics (Tyler 1995). During the 200-year period from 1733-1936, valerian was one of the six most prescribed medicines in European and American medicine (Hobbs 1996). It was used as a antispasmodic to treat hysteria and nervous afflictions, an emmenagogue, a carminative, and a diuretic, among other uses (Hobbs 1996). Mention of valerian can be found in drug books from the late 1600s to the 20th century (Hobbs 1996).

In the 20th century, valerian is well known for its sedative and restorative affects on the nervous system, and is widely used in herbal and allopathic medicines (Hobbs 1996, Hoffman 1998b). The root of the Valeriana officinalis has been used safely and effectively as a sedative and sleep aid for several thousand years, and is widely supported by modern research as a mild sedative for the central nervous system (Anon. 1995, Hobbs 1996, Hoffman, 1998b). On June 7, 1994, the European-American Phytomedicines Coalition (EAPC) filed a citizen's petition with the U.S. Food and Drug Administration (FDA) for valerian to be sold as a over-the-counter (OTC) drug for use as a nighttime sleeping aid (Anon. 1995). The petition argues that unlike prescription drugs that reduce REM sleep and cause drowsiness, valerian is not a hypnotic agent or psychotropic tranquilizer and has been proven to be effective as a mild sedative and sleep-aid without side effects and limitations (Anon. 1995). Included in the petition is reference to the marketing of valerian in Europe for many centuries and in the U.S. as an prescription drug until 1985 (Anon. 1995).

The rhizome of valerian contains a variety of compounds including valepotriates, valeric acid, and volatile oils (Kalyn 1999, Hoffman 1998b). These compounds affect brain receptors for the neurotransmitter gamma-aminobutyric acid (GABA) (Kalyn 1999, Hoffman 1998b). Extracts from the rhizome of valerian have been found to inhibit the uptake and stimulate the release of GABA using the [3H] muscimol binding technique on synaptic membranes isolated from rat brain cortices (Carvalho, et al. 1994; Amaral, et al. 1995). The release of [3H] GABA is caused by the reversal of the GABA carrier, independent of Na(+)–K(+)–ATPase activity and the membrane potential of the brain cortex (Carvalho, et al. 1994, Amaral, et al. 1995). The use of Valeriana officinalis on the central nervous system of mice has been shown to produce sedative activity at high dosage, anxiolytic activity at low dosage, and weak anticonvulsive properties (Dela Loggia, et al., 1981: Leuschner, 1993).

Valerian has many useful properties including being a hypotensive, a carminative, a emmenagogue, an anti-spasmodic, and a nerve relaxant (Hoffman 1998a). Valerian influences the cerebro-spinal system and has a sedative effect for conditions such as St. Vitus's dance, neuralgic pains, and insomnia by allaying pain and promoting sleep without the aftereffects of narcotics (Grieve 1995).

Tests on the physiological effects of valerian as a mild sedative have confirmed through superficial and deep electro-encephalograms (EEG) that those who took valerian fell asleep more quickly, woke up less often, and experienced relatively no drowsiness (Chauffard & Leathwood 1982-83, De Romanis 1988, Kalyn 1999).
Subjective evaluations on valerian have reported significant decreases in the time it takes to fall asleep, improvement in the quality of sleep, and unaffected night awakenings, dream recall, and somnolence (Chauffard, et al. 1982, Hoffman, 1998b).

Valerian has been shown to have no detected developmental effects on offspring, after treatment of mothers during pregnancy (Fujita, et al. 1994). In addition, the effects of valepotriates did not change the average estral cycle length or phases during the administration period, nor did it effect the fertility index (Fujita, et al., 1994). Clinical studies of valerian have included studies utilizing the Semliki Forest virus (SFV) expression system, which concluded that Valeriana officinalis does not inhibit in vitro [3H]naloxone binding to the mu-opioid receptors, which may be a possible mechanism for its anti-anxiety effects (Burkard, et al. 1998). The neurotropic activity of valerian has been confirmed through pharmacological assessment during central nervous system ischemia in frogs, without ethanol driving-off, which is associated with volatilization of ethanol oil, the active factor in tincture of valerian (Galushkina 1987). Other studies have shown that valerian may possess some level of antifungal properties (Armed, 1987). In addition, a variety of valerian known as Valeriana officinalis var latifolia (VOL), which relieves smooth muscle spasms and vasodilatation, has been indicated to be effective in the remission of angina symptoms, decreasing frequency of attacks and shortening duration of angina, restoring blood supply to ischemic myocardium, and lowering plasma lipids without toxic action (Yang 1994).

Commonly sold in drug stores, markets, and apothecaries throughout Europe, valerian has become highly recommended by herbalists, naturopathic doctors, and chiropracters for mild tension and insomnia even in the U.S. (Hobbs, 1996). Although valerian has not yet become an over-the-counter drug in the U.S., its usefulness as a sleep-aid has been well documented and its popularity is growing. As more research is conducted on the many beneficial properties of valerian, it may soon find its way into the mainstream of U.S. medications as a safe and effective alternative to treating many ailments including insomnia and angina.

**LITERATURE CITED**


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