

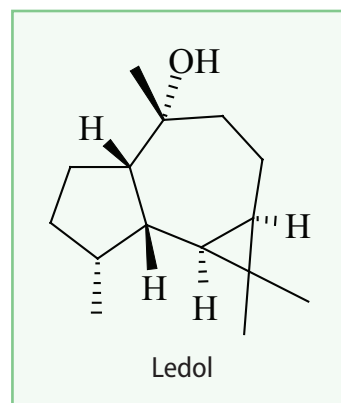
Habitat: Cedar and cedar-pine forests in high mountains [1–5].

Parts used: Herb

Traditional Uses: The taste is bitter and astringent, and the potency is warm and light. It is used for the following: treatment of inflammation, bring up phlegm, heal white worm and candidiasis. It is an ingredient of the following traditional prescription: Dydzi-5 [5–8].

Microscopic characteristics: Leaf is dorsoventral. Palisade and spongy parenchyma are visible. Parenchyma thick-walled and contains chloroplastids. Vascular bundle collateral. Epidermis covering unicellular, glandular and non-glandular trichome [9].

Chemical constituents: The aerial part contains essential oil: paracilline, α -pinene, *trans*-thujone, dihydroaromadendrene, tricyclene, pinene hydrate, β -phellandrene, *cis*-cinocarveol, sabine hydrate, terpinen-4-ol, *cis*-acraridol, campholenol, carvacrol, *trans*-acraridol [9], ledol, palustrol, myrtenal [10], phenolic compounds: 2.6% tannins [11]. The main compounds are ledol, palustrol, and myrtenal [10]. The leaves contain essential oil [11–15], 3.8% arbutin [11], phenolcarboxylic acids [16], 1.1–10.1% tannins, flavonoids: hyperin, 7,4'-dimethoxy-5-hydroxy-6-methylflavone, 5,4'-dihydroxy-3,7,3',5'-tetramethoxyflavone, quercetin, avicularin, 6''-acetylhyperin and others [11].



Qualitative and quantitative assay: Essential oil is determined by distillation method [17].

Qualitative and quantitative standards: Loss on drying, not more than 14%. Organic matter, not more than 1.0% and mineral matter, not more than 0.5%. Old branch 10.0%. Essential oil content, 0.25–2.0% [17].

Bioactivities: Antitussive, antibacterial, antihypertensive, decrease cardiac rate [11].