

**Habitat:** Boggy meadows in alpine belt [2–5].

**Part used:** Herb

**Traditional Uses:** The taste is bitter and the potency is cool. It is used for the following: treating throat illness caused by fever, lung disorders, liver disorders, and bile disorder. It is an ingredient of the following traditional prescriptions: Tsulhir-4, Bontag-25, Zovu-25, Lish-6, Banjingarav-15, Arur-12, Banjin-12, Braivu-6, Garbo-6, Lish-6, Santal-25, and Yajima-18 [5–9].

**Microscopic characteristics:** Leaf is gomogen. Mesophyll 5–6 layers of cells with many intercellular spaces. Epidermis large, with thickened outer walls. Anomocytic stomata occur on the lower and upper surface of the leaf. Vascular bundle is collateral [10].

**Chemical constituents:** Acids: anofinic, fomannoxin, and oleanolic acid [11], steroids: sitosterol, daucosterol, stigmasterol, flavonoids: isoorientin, 5,7,3'-trihydroxyflavone-6-*O*- $\beta$ -D-glucopyranoside [12,13], 6-*O*- $\beta$ -D-glucopyranosyl-5,7,3',4'-tetrahydroxyflavone, 6-*O*- $\beta$ -D-glucopyranosyl-5,7,4'-trihydroxyflavone, secoiridoids: amaropanin,6'-(2,3-dihydroxybenzoyl)sweroside,6'-(2,3-dihydroxybenzoyl)swertiamarin[14],[2'-(2,3-dihydroxybenzyl)sweroside [13], xanthones: isobellidifolin, swerchirin, 3,4-dimethoxy-1,5,8-trihydroxyxanthone [15].

**Qualitative and quantitative assays:** Flavonoids in the plant are identified by cyanidin reaction. Total flavonoid content is determined by spectrophotometry at 349 nm and calculated as isoorientin [10].

**Qualitative and quantitative standards:** Loss on drying, not more than 8.0%. Ash, not more than 2.0%. Organic matter, not more than 2.0% and mineral matter, not more than 0.5%. Total flavonoid content, not less than 2.0% [10].

**Bioactivities:** Antithrichomonas, hemostatic [16]. Anofinic and fomannoxin acids have antifungal activity [11].