

length, protruding, dentate, glabrous, sometimes lower surface hairy, hastate, lateral lobes acute. Head 5 mm wide, 10–13 mm thick, cylindrical or narrow-bell shaped, united in raceme or panicle. Achene 5–7 mm long, digitate, smooth, with pappus 1.5–2 times longer than the seed.

Distribution: Khovs., Khent., Khang., Mong-Dag., Khyang., Dor. Mong.

Habitat: Larch and birch in forest-steppe belt [2–5].

Parts used: Flowers, leaves

Traditional Uses: The taste is bitter and the potency is cool and sharp. It is used for the following: treating inflammation and wounds, as an anti-bacterial agent, and for joint pain.

It is an ingredient of the following traditional prescriptions: Yanjina-18, Chivdag yuljal-21, Seru-15, Rodman-16, and Khonilon-6 [5–8].

Microscopic characteristics:

Leaf: Leaf is dorsiventral. Palisade single-layered; spongy parenchyma four- to five-layered, oblong. Epidermal cells little thick, wavy-walled. On both sides anomocytic stomata present. Vascular bundle is closed collateral [9].

Chemical constituents: The aerial parts contain tannins [10], and pyrrolizidine alkaloids: platyphylline, hastacine [11].

Qualitative and quantitative assays: Tannins are identified by reaction with dilute sulfuric acid titrated with potassium permanganate [9].

Qualitative and quantitative standards: Loss on drying, not more than 12.0%. Ash, not more than 12.0%. Organic matter, not more than 2.0% and mineral matter, not more than 2.0%. Tannins, not less than 3% [9].

Bioactivities: Antibacterial [10], anti-inflammatory [11].

