Distribution: Khovs., Khent., Khang., Mong-Dag., Khovd, Mong. Alt., Gobi-Alt., Dor. Mong., Dund. Khalkh, Olon n., Ikh n., Alash.

Habitat: River banks, bottom of creek valleys, sandy steppes, stony steppe slopes [1–5].

Part used: Herb

Traditional Uses: The taste is bitter and astringent, and the potency is cool and light. It is used for the following: treating stomach and liver disorders, as a hemostatic, for healing wounds, as an antibacterial, and for stomatitis. It is an ingredient of the following traditional prescriptions: Tsarvon-4, Bragshun-9, Elegnii gurgum-7, Anar-8, Bavu-7, Chun-9, Chagdar, Sarichun, Jonsh-21, Zandan-8, Ar ur-8, Briyagu-9, Gavar-13, Yanjima-25, and Dumazi-25 [5–9].

Microscopic characteristics:

Leaf: Leaf is dorsiventral. Palisade single layered, spongy parenchyma tree to six-layered. Vascular bundle collateral. Epidermis of the leaf numerous glandular and non-glandular trichomes are visible. Epidermal cells wavy. Both epidermis have anomocytic stomata [10].

Chemical constituents: 0.46–1% essential oil: α -pinene, β -pinene, α -thujone, camphene, Δ ³-carene, myrcene, β -phellandrene, γ -terpinene, n-cymol, limonol, limonene, neral, geranial, geraniol, linalool, and geranyl acetate [11,12], flavonoids: diosmetin, acacetin, and its glycoside [13], triterpene glycosides [10].

Qualitative and quantitative assays: The following is a suitable TLC procedure to identify triterpene glycosides: silica gel, chloroform-methanol (9:1) solvent system, detection reagent: 20% sulfuric acid; observed as a pink spot. Triterpene glycoside content is determined gravimetrically [10].

Qualitative and quantitative standards: Loss on drying, not more than 10.0%. Ash, not more than 22.0%. Organic matter, not more than 0.5%, and mineral matter, not more than 0.5%. Triterpene glycoside content, not less than 0.8% [10].

Bioactivities: Essential oil shows antibacterial [12] and antifungal [13] activity.