

**Traditional Uses:** The taste is sweet and the potency is hot. It is used for the following: treating light swelling, water swelling and phlegm, and improving physical energy and strength. It is also used to soothe a purulent inflammation, for wound-healing, to treat lung fever, oliguria and hemorrhoids. It is an ingredient of the following traditional prescription: Jurur-6 [5,6]

### Microscopic characteristics:

**Root:** The transverse section is rounded. The cork consists of many rows of cells. Phelloderm, 3–5 rows of collenchymatous cells. Endodermis developed under the cork. In the inner part of endodermis pericycle fibres are developed. Vascular bundles in the pith region. Parenchymatous cells contain starch granules [7].

**Chemical constituents:** Root contains flavonoids: formononetin, 3-hydroxy-formononetin, 2,3-dihydroxy-7,4-dimethoxyflavone, 7,3-dihydroxy-4-methoxyflavone 7-O-glucoside, 7,3-dihydroxy-4-dimethoxyflavone, saponins: astragaloside I-X, isoastragaloside I-IV, polysaccharides, Above-ground parts contain astragaloside quercetin, isorhamnetin, rhamnocetin, isorhamnetin 3- $\beta$ -D-glucopyranoside, propingoside, coumarin, tannins, and saponins [5,8].

**Qualitative and quantitative assays:** Flavonoids in the plant are identified by cyanidin reaction and reaction with lead tetraacetate. Total flavonoid content is determined by spectrophotometry at 430 nm and calculated as quercetin [7].

**Qualitative and quantitative standards:** Loss on drying, 8.0%. Organic matter, not more than 0.5% and mineral matter, not more than 1.0%. Total flavonoid content, not less than 3.0% [7].

### References:

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