**Habitat:** Forest and riverbank meadows, forest fringes, birch forests and pine forests, river and brook banks, near roads, inhabited places [2,3].

## Parts used: Root

**Traditional Uses:** The taste is bitter and the potency is cool. It is used for the following: treating diseases of bile, stomach diseases, poisoning, chronic liver, kidney and respiratory system diseases, inflammation, eliminating bile, detoxification, cystolithiasis, and lung tuberculosis. It is an ingredient of the following traditional prescriptions: Yajima-13, Tagjod-25, Oo-tan-13, Rejag-15, and bor-7 [3–6].

## **Microscopic characteristics:**

**Root:** Periderm thin-walled and 5–7 layered. Cortex is composed of many layers of large, ovate-shaped parenchymatous cells. The parenchyma contains inulin. Laticifers visible in root [7].

**Chemical constituents:** Root contains sugars: fructose, saccharose, oligosaccharide [8], sesquiterpenes:  $4\alpha$ ,15,11 $\beta$ ,13-tetrahydroridentin B, 1'-*O*- $\beta$ -D-glucopyranoside taraxaloside, triterpenoids: taraxasterin,  $\psi$ -taraxasterin acetate, steroids: stigmasterol,  $\beta$ -sitosterol [9], phenol carboxylic acids, flavonoids [10], lactones [11].

**Bioactivities:** Antiatherosclerotic, hypoglycemic [10], bile-expelling [12], hemostatic, antitumor, antifungal, and antibacterial [10,13], and diuretic [14].

## **References:**

- 1. Olziikhutag, N. (Ed). (1983). Latin-Mongolian-Russian Dictionary of Vascular Plants of Mongolia (p. 284). Ulaanbaatar: Press of Mongolian Academy of Sciences.
- 2. Malishev, L.I., and Peshkova, G.A. (1979). Flora of Central Siberia (Vol. 2, p. 907). Novosibirsk: Science Printing.
- 3. Ligaa, U., Davaasuren, B., and Ninjil, N. (2005). Medicinal Plants of Mongolia Used in Western and Eastern Medicine. (p. 67). Ulaanbaatar: JCK Printing.
- 4. Yuthok Yonten Gonpo., Four Medical Tantras, VIII-IXth century.
- 5. Danzanpuntsag., Crystal rosary. XVIIIth century.
- 6. Boldsaikhan, B. (2004). Encyclopedia of Mongolian Medicinal Plants (p. 17). Ulaanbaatar: Mongolian University of Science and Technology.
- 7. Enkhjargal, D., Bayasgalan, B., and Purevsuren, S. (2004). Pharmacognosy. (p. 284). Ulaanbaatar: Erkhes Printing.
- 8. Vitez, L., Sluga, H., Golc, W.A., and Mihelic, E. (1986). Contribution to the composition of dandelion. Nova Proizv. 37, 193.
- 9. Hänsel, R., Kartarahardja, M., Huang, J.T., and Bohlmann, F. (1980). Sesquiterpene lacton- $\beta$ -D-glucopyranoside sowie ein neues Eudesmanolid aus *Taraxacum officinale*. *Phytochemistry* 19, 857.
- 10. Sokolov, P.D. et al. (1993). Plants Review of USSR: Family Asteraceae. (p. 192). Leningrad: Science Printing.
- 11. Rauwald, H.W., and Huang, J.T. (1985). Taraxacoside, a type of acylated *γ*-butyrolactone glycoside from *Taraxacum* officinale. *Phytochemistry* 24, 1557.
- 12. Faber, K. (1958). Der Löwenzahn: Taraxacum officinale Weber. Pharmazie 13, 423.
- 13. Schönbeck, F. (1968). Untersuchungen zur Verbreitung antimikrobieller Stoffe in höheren Pflanzen. Angew. Bot. 42, 129.
- 14. Rácz, K.E., Rácz, G., and Solomon, A. (1971). The action of *Taraxacum officinale* extracts on the body weight and diuresis of laboratory animals. *Planta Med.* 26, 212.