

Ethnobotany of Indian horse chestnut (*Aesculus indica*) in Mandi district, Himachal Pradesh

A Rajasekaran* & Joginder Singh

Himalayan Forest Research Institute, Panthaghati, Shimla 171 009, Himachal Pradesh

Email: rajsekaran@yahoo.com

Received 26 September 2007; revised 21 April 2008

Aesculus indica Coleb. ex Wall. (Hippocastanaceae), known as Himalayan chest nut or Indian horse chestnut is a large tree, distributed in the Himalayas from Kashmir to Nepal. The tree is locally known as *Khanor* in Himachal Pradesh and its parts are used in day-to-day activities as fodder, medicine and timber. A flour, locally known as *Tattwakhar* is prepared from the seeds of the tree. In the paper, detailed ethnobotanical information on the tree collected from Chuwar valley of Mandi district of Himachal Pradesh along with traditional method of preparation of *Tattwakhar* flour is presented.

Keywords: *Aesculus indica*, *Tattwakhar*, *Khanor*, Bitterness, *Halwa*

IPC Int. Cl.⁸: A01K61/00, A61P1/04, A61P29/00

Aesculus indica Coleb. ex Wall. (Hippocastanaceae) known as Himalayan chest nut or Indian horse chestnut is a large, deciduous tree, with a short, straight, cylindrical bole and spreading crown, distributed in the Himalayas from Kashmir to west Nepal, at altitudes of 900-3,600 m in forest, shady ravines and along water courses^{1,2}. There are numerous wild trees of this species scattered in the forests of Himachal Pradesh. The plant is locally known as *Khanor* in Himachal Pradesh and its parts are used in day-to-day activities as fodder, medicine and timber. The tree yields huge quantities of seeds every year. The seeds after drying are used to make flour (*Tattwakhar*), which is bitter in taste is used for making *Halwa* (porridge). Detailed ethnobotanical information on the tree along with traditional method of preparation of *Tattwakhar* collected from Chuwar valley of Mandi district of Himachal Pradesh is presented.

Ethnobotanical uses

Shoots and leaves are lopped and used as fodder for cattle. The crushed fruits are also fed to cattle after steeping them in water and also sometimes after mixing them with wheat flour to improve the quality

and quantity of milk. The crushed seeds are used for washing clothes. For this seed coat is removed by striking with a stone; after removing seed coat, seeds are boiled in the water for 15-30 minutes and cakes are made from it. These cakes are used as washing soaps. The seeds are rich in saponin (aescin) and also contain oil, which is used in rheumatism and also applied to wounds. The wood is used for making water-troughs, packing-cases, tea boxes and decoration articles.

In Chuwar valley of Mandi district, the seeds are dried and ground into flour, which is called *Tattwakhar*. To prepare the flour, ripened fruits of *Aesculus indica* are collected during October. Seeds are separated from the fruits and crushed to get smaller pieces in order to facilitate quick removal of bitter content. The crushed seeds are kept in big bamboo baskets, which are placed under running water in a stream or under tap water. The crushed seeds kept in baskets are stirred daily to enhance cleaning process and to prevent rotting of seeds. Stirring process is continued for five to seven days and then the crushed seeds are dried, cleaned and stored in gunny bags for making flour. The flour, *Tattwakhar* is usually prepared in local water flour mills known as *Gharaat*. This flour, which is bitter, is used for making *Halwa* (porridge)

*Corresponding author

especially during marriages and also mixed with wheat flour to prepare *Chappatis*. The *Tattwakhar* flour is available in local market in Chawar valley and Sundernagar tehsil of Mandi district. Bitterness is one of the major characteristics of seeds, hence cleaning process is extensively followed, and even flour prepared from the seed is washed two to three times before making *Halwa* or mixing it with wheat flour. The bitter component

gets dissolved in water and is removed when the water is decanted.

References

- 1 Anonymous, *The Wealth of India: a Dictionary of Raw Materials and Industrial Products*, Raw Materials, Vol 1, (Publications and Information Directorate, New Delhi), 1985, 95-97.
- 2 Chowdhery HJ & Wadhwa BM, *Flora of Himachal Pradesh; Analysis*, (Botanical Survey of India, Howrah), 1984.