Gewai saag: A folk medicine used by the tribal people of Central Himalayan region

Kirtika Padalia
Department of Botany, DSB Campus, Kumaun University, Nainital- 263001, Uttarakhand, India
E mail: kirtika.padalia89@gmail.com

Received 03 November 2013; revised 22 December 2014

Gewai saag is a folk medicine prepared by the leaves and the young stem of the Solanum nigrum L. This medicine is frequently used by the tribal and the local community of Uttarakhand state to relief of various sort of body pain. The medicine is highly effective in the joint pain and rheumatism. This article describes the method of preparation of the medicine and its applications along with an objective to conserve the practices of traditional knowledge of plant and plant’s products.

Keywords: Solanum nigrum, Traditional knowledge, Folk medicine, Uttarakhand, Tribal people

IPC Int. Cl.: A61K 36/00

Gewai saag is a folk ointment prepared by the leaves and the young stem of Solanum nigrum. Solanum nigrum L. (Eng. Black nightshade, wonder berry locally called Makoy, Gewai) is an annual dicotyledon herbaceous weed belongs to Solanaceae family, having 10-60 cm high with a green, smooth and semi climbing stem (Fig. 1). It is very common in wet, waste lands, old fields, home gardens, roadside and agricultural cultivated lands. Traditionally the local and the tribal peoples of the Uttarakhand areas used this ointment as the pain relieving agent. Other than this the plant has other medicinal values and can be use both the dermal or orally. Plant is very useful in the ethanobotanical perspectives. Various ethanobotanical studies were conducted by many authors to explore its therapeutic properties such as the plant is very useful in the treatment of heart problem, blood coagulation, indigestion, skin diseases1, jaundice and diabetes2, pounded leaves applied topically to treat the ringworm and dressing of warts3. Fruits are useful in the treatment of the heart disease, jaundice, liver problem and stomachache, diluted infusion of berries useful in the treatment of blindness, conjunctivitis, glaucoma, trachoma and cataract4. Seeds used against the treatment of inflammation6. Root is useful in hiccups, urinary problem, for easy child delivery5. Roots boiled with a less amount of sugar increase fertility in women6 while pure juice of roots extracted useful in the treatment of asthma and whooping cough5. Sap of the plant is useful in the treatment of Erysipelas (acute Streptococcus bacterial infection)7. Maceration of whole plant is useful in snake bite/sting by a venomous animal8 while decoction of the plant is useful in the Burns and dermal affections1. Certain authors have also reported the therapeutic importance of the plant as anti-inflammatory9, invitro antiviral activity against hepatitis C virus10, anticancer properties, immunomodulatory effect, antimicrobial, antioxidant properties, anticonvulsant-activity, hepatoprotective-properties, anti ulcerogenic effect, hypolideamic, antihyperglymic and hypotensive potential11.

The report on the preparation of the Gewai saag and its traditional uses were collected during 2013-2014 while conducting the ethnostructural survey in Bhabhar belt (level surface zone at the foothills of the Himalayas where the Himalayan torrents rush down from the steep slopes and disappear under boulders and gravels) of Kumaun Himalaya particularly in foothills region of Nainital district of Uttarakhand with an aim to assess the ethnostructural uses of the plant occurring in agroforestry system in this region. Local and the tribal people (Gujjar) lives within this area were contacted and the information on the preparation of Gewai saag and its uses were documented. It is frequently use by them as a traditional medicine. The voucher specimen of the plant used has been deposited in the Herbarium of the
DSB Campus, Nainital. The tradition method of preparation of Gewai saag and its uses as followed by local people has been described in this article.

**Traditional method of preparation**

For the preparation of Gewai saag fresh leaves, soft stem and branches of the *S. nigrum* collected from the well grown mature plant. The collected stem and leaves must be free from the diseases and insects attack, were cleaned and washed thoroughly in tap water to remove soil particles and surface microbes. The collected leaves separated from the twig and fried in an iron utensil with mustered oil or pure ghee (Figs. 2, 3) under low temperature because the oil/ghee is inflammable and got the fire easily. Care should be taken to fry the leaves over low temperature with continuous stirring to avoid the burning of leaves. Ointment would prepare and ready to apply when the leaves change their colour from grass green to blackish green. The leaves should not be overcooked or burned (Fig. 4). After this process, immediately these gently warm leaves put on the painful parts of the body and tied it with the cotton cloth (Fig. 5). The Ointment should be applied warm, freshly prepared and twice a day for the quick relief and better results.

**Traditional uses**

Gewai saag is a very effective household remedy for the various body pain including the bone fracture, muscles pain and ligament rapture at almost free of cost, highly effective, having no side effects. Normally the ointment is skin friendly, useful in various skin diseases¹ and not causes any skin allergy.

---

Figs—. Fig 1 *Solanum nigrum* plant; Fig. 2 Leaves, young stem and mustered oil; Fig. 3 Drops of oil spread over the leaves; Fig. 4 Cooked leaves at low temperature; Fig. 5 Tie the cooked leaves on the affected part
and other side effects. Gewai saag is also useful in the treatment of joint pain and rheumatism. It is very effective in the swelling caused by the injured ligament or muscle’s cramp. An interesting fact is also emerged from the present study that all the persons from different age group including infants to old one can use this herbal remedy without having the side effects. The old age persons used it to get rid of joint pain. The Local people used it as a folk medicine even they have strongly believes that hair line crack in the bone can easily recover by external application of this traditional ointment.

**Threats and conservation**

Although the plant *S. nigrum* is not facing any threats or chance of extinction in the study area but the traditional uses of the plants and plant products are really facing the threats of extinction in study area as well as worldwide in near future. However, traditional healers have strong faith on ethnomedicines but they were less aware about the documentation and preservation of ethno medicinal legends and traditional heritage of ethno botanical knowledge. This study is therefore is an attempt to conserve the traditional practice of ethnobotanical knowledge in this era of modernization. Other than this the governments and various agencies should come up with the policies to conserve this precious heritage of knowledge belongs to the plant and plant products, globally.

**Acknowledgment**

The author is thankful to Tribal people (*Gujjar*) and villagers for their support to undertaking this research. She is also thankful to University Grant Commission (Basic Science and Research) fellowship for the financial support.

**References**