Ethnomedicinal survey of Uri, Kashmir Himalaya

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In the contemporary global milieu, the documentation of the biological resources and the associated indigenous knowledge existing within a country has assumed highest priority. The present paper records ethnomedicinal value of 27 plant species belonging to 20 families, in vogue, from the study area. Each plant species included, contains information regarding crude drug preparation and its method of use. Such documentation would be helpful in terms of commercial production of drugs, readily accessible health care to larger population, sustainable use and above all, safeguard from bio-piracy.

Keywords: Indigenous knowledge, Medicinal plants, Ethnomedicine, Kashmir.


From the very earliest days of civilization, mankind has turned to plants for healing, a tradition that has survived the arrival of modern medicine and found new strength at the end of 20th century. Even today, 80% of the world’s population relies on traditional plant medicine. As elsewhere, in India too, the medicinal use of plants has been practiced from aeons by various rural and tribal communities through the systems of Ayurveda, Siddha and Unani. Need has been felt for the speedy documentation of the prized indigenous knowledge from the emerging threats of the destructive over-harvesting, habitat degradation and bio-piracy. About 70% of the identified medicinal plants of Indian Himalaya are exposed to destructive harvesting. Recently our country enacted a number of legislations, in compliance with CBD and WTO, in order to prevent the unfair exploitation of biological wealth of the nation. These legislations, inter alia, enjoin for immediate chronicling of the country’s biodiversity and the associated indigenous knowledge.

Kashmir Himalaya in our country harbours a treasure house of the medicinal plants. Many studies have been carried out from time to time to document ethno-botanical information from different areas of this region. Since no such study has been carried out in the present study area...
till now, an attempt has been made to
document the ethnomedicinal uses of
plants.

Uri tehsil in Baramulla district of
Jammu and Kashmir is about 100 km to
the north-west of Srinagar and lies at 34°
5’ N latitude and 74° 5’E longitude. Altitude
of the study area ranges from 1380
to 3300 masl. The areas at higher eleva-
tion being hilly, display an uneven topo-
graphy with interspersed side valleys
(Fig. 1). In comparison to rest of the
Kashmir valley, there are 4 well-defined
seasons a year; however the winters are
shorter and relatively milder. Summers
are longer, hot and dry. Most of the pre-
cipitation occurs during winter and in the
early spring.

Methodology
During the course of present study,
field trips were carried out to the study
area during 2001-2003 (Plate 1). Standard
methodology was used to elicit the eth-
nomedicinal knowledge of plants from
the local people. Mostly, local herbal-
ists called “Hakims” and other experi-
enced people were taken to the field for
identification of medicinal plants used in
folklore. All the relevant information, in
particular the method of use, of each me-
dicinal plant species was recorded in a
field notebook. To bring an element of
accuracy, the information was cross-
checked with elderly people. Specimens
of medicinal plants collected from each
locality were provided with a collection
number for future reference. The plant
specimens collected were processed at the
laboratory of COPT, and identified with
the help of available literature. The
identified plant species have been depo-
Plate 1

Plate 1
Medicinal plant species of the area have been enumerated below in an alphabetical order. Each plant species is provided with its scientific name, followed sequentially by author citation, synonyms (if any), family name, specimen examined, local name, crude drug preparation (wherever available) and its use.

1. **Achillea millefolium** Linn. (Asteraceae), Shahdad 200, "Bergeur"
   Fresh leaves are chewed for 5-10 minutes to palliate the toothache, and also as mouth-freshener.

2. **Aconitum heterophyllum** Wall. ex Royle (Ranunculaceae), Shahdad 307, "Patris"
   Roots are used for curing abdominal disorders. Extracts of roots are blended with water or milk. Two spoons of the decoction made are sipped at bed time daily for two weeks.

3. **Ajuga parviflora** Benth. (Lamiaceae), Shahdad 366, "Ratijadi"
   Administration of about 1-2 spoons of whole plant aqueous extract daily for a fortnight serves as diuretic and purgative.

4. **Allium sativum** Linn. (Liliaceae), Shahdad 505, "Rohun"
   Bulbs are used for curing skin diseases. Fresh bulbs are ground into a poultice, and rubbed along the affected part of the body for a month.

5. **Androsace rotundifolia** Hardw. (Primulaceae), Shahdad 105, ‘Uzm posh’
   Extract of rhizome added to a diluted solution of common salt is used as eye drops for curing a number of ophthalmic diseases such as cataract, etc.

6. **Arisaema jacquemontii** Blume, syn. **A. cornutum** Schott, (Araceae), Shahdad 506, “Happat-makai” (Plate 1).
   Rhizome ground with edible oil forms a paste, which is used for massage purposes in order to regain muscular strength and in skin problems such as blisters, pimples, etc.

7. **Arnebia benthamii** (Wall. ex G. Don) I. M. Johnston, syn. **Echium benthami** Wall., **Macrotomia benthami** (Wall. ex G. Don) DC., (Boraginaceae), Shahdad 502, “Kah-zaban” (Plate 1).
   Whole plant is used for increasing lactation. Lukewarm extract, obtained after boiling the whole plant in water is given to nursing mothers to enhance their milk production. Also the root extract stirred up with hair oil is useful in checking the hair fall.

8. **Asparagus filicinus** Buch.-Ham. ex D. Don (Liliaceae) Shahdad 259, "Haleon"
   Liquid extract derived by boiling the seeds in water is given to expecting women for ease in delivery.

9. **Cannabis sativa** Linn., syn. **C. indica** Lamk., (Cannabinaceae), Shahdad 367, ‘Bhang’
   Dried leaf powder is mixed with egg-yolk and then cooked to form an omlette. The latter is taken to regulate the erratic menstrual cycle in women, and also to check the night urination in children.

10. **Cichorium intybus** Linn. (Asteraceae), Shahdad 268, “Jugli-hand”
    Root extract combined with sugary water is given 2 spoons daily at bedtime for 15-20 days for curing typhoid.
Leaves and stem latex are used against ringworm infection.

Rhizomes are used to cure tonsillitis. Fresh rhizome ground to a fine powder and mixed with sugar (2-5 mg daily) for a month.

13. *Geranium wallichianum* D. Don ex Sweet (Geraniaceae), Shahdad 229, “Ratanjog”
Roots are used for general weakness. Roots ground to a powder with mixed with cooked rice, and/or maize bread, with two to three spoons, serve as an effective tonic. The practice is continued for 2-3 weeks, until normal health is regained.

14. *Hyoscyamus niger* Linn. (Solanaceae), Shahdad 144 “Bazar bang”
An earthen cup coated with mustard oil on the inner side is kept inverted on the burning seeds of the plant. After 2-5 minutes, the smoke is taken in and allowed to remain inside the mouth, without swallowing for half a minute and then expelled. The process is repeated 3-5 times for relieving toothache.

Dried roots are crushed to derive a black powder, which is mixed with *ghee* for use as “Kajal” for better eye vision.

Fresh leaves of the plant are crushed to yield an extract, which in small quantity is sipped with tea daily for 1-2 week’s time for curing gastroenteritis.

17. *Plectranthus rugosus* Wall., syn. *Isodon plectranthoides* Benth., (Lamiaceae), Shahdad 175, ‘Sloi’
Leaf extract is mixed with hot water or milk to form bitter syrup, which is administered orally as an antidote in snake bite.

Seeds are used for curing headache and common cold. Poultice derived from the crushed seeds is rubbed externally to get relief instantly.

Extract of roots taken in the quantity of two spoons in a cup of tea, two times daily for 15-30 days, for curing constipation.

Extract obtained by crushing of roots is mixed with edible oil, the paste is applied for two to three months regularly on weekly basis for curing arthritis.

Fresh leaves are crushed to produce an extract, which is taken along with milk to get relief from urinary infections. Smoke of the dried leaves is also used as insect repellent.
22. *Solena amplexicaulis* (Lamk.) Gandhii, syn. *S. heterophylla* (Lour.) Cogn. (Cucurbitaceae), Shahdad 504, “Khakri”
A decoction of rhizomes is used to treat diarrhoea.

23. *Urtica dioica* Linn. (Urticaceae), Shahdad 375, “Soi”
Roots made into a paste in oil are applied to cure rheumatoid pains; and also to heal up minor wounds.

Dried seeds are crushed to produce an extract, which is used against whooping cough and other chronic respiratory disorders.

25. *Viola odorata* Linn. (Violaceae), Shahdad 303, “Bunufsha”
Dry flowers are ground with sugar to form a mixture, 2 to 5 gm of such a mixture is taken orally at bedtime for a week to cure respiratory infections.

A decoction made by grinding the whole plant with small quantity of common salt is taken orally as an efficient laxative. Poultice made from the dried parts of the plant is rubbed to heal up the fracture.

Decoction prepared by grinding the seeds in salty water is taken orally, with a dosage of two spoons thrice a day, for two months duration, to recover from jaundice.

**Discussion**
In this paper, 27 angiosperm plant species, belonging to 20 families with currently practiced ethnomedicinal value are listed. A multiple of home remedies are employed for the treatment of common ailments such as fever, headache, dysentery, constipation, and minor injuries. Mostly, the drugs are prepared in the form of paste, powder, poultice, latex, decoction, extracts, smoke, and even as herbal tea. Both fresh and dried parts of plants are used for making drugs in crude form. The methods of use, the dosage and the duration, differ from one herbalist to another, and also from one locality to another.

In recent times, serious threats of biopiracy and intellectual property rights (IPRs), with huge economy at stake, have necessitated the early bio-prospecting of the potential medicinal plants used in the folklore. In this process, the first and foremost step would be the documentation of the ethnomedicinal uses of plants, as attempted in the present study, throughout the country. Simultaneously, this indigenous knowledge could be translated into commercial products on industrial scale, and benefit sharing with all stakeholders. Such a strategy would ensure that our bio-resources are not pirated.

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