



ETHNOPHARMACOLOGICAL USES OF PLANTS AMONG TRIBAL AND RURAL FOLKS OF BANIHAL FOREST AREA OF KASHMIR

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ABSTRACT

Banihal forest area falls in Pirpanjal mountainous range of Kashmir, an integral part of great Himalaya. The forest of Banihal is represented by good vegetation of which conifers are dominated ones. During ethnopharmacological exploration in the area, the survey team from Regional Research Institute of Unani Medicine, Srinagar-Kashmir collected and identified 63 plants species from the study area. Data on medicinal uses of 20 plants species was recorded by the team from the local tribal and rural folks. The information recorded for the treatment of different ailments has been presented in the paper so as to enrich the existing knowledge on ethnopharmacology.

KAY WORD: Ethnopharmacology, Tribal, Banihal Forest, Kashmir.



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INTRODUCTION

Banihal forest area of Ramban district falls in Pirpanjal mountainous range of Kashmir which is an integral part of Great Himalaya. Banihal town is located at national Highway No. 1 in southern Kashmir. It lies in North latitude between 30° – 25' and east longitude between 75° – 12' at an altitude 2758 m above sea level. The area besides other population is also inhabited by tribal communities namely Gujjars, Bakarwal and Kodi. These tribal communities living close to nature have acquired good knowledge about the medicinal uses of plants for the treatment of different common and chronic ailments. This knowledge of the tribal and other rural folks may provide potential remedies for mankind. In view of this rationale the present study was undertaken and presents the data on ethno-pharmacological uses of plants recorded from the tribal inhabitants of the study area. The work on ethno-medicinal aspects of Jammu & Kashmir has been undertaken earlier [1] [2] [3][5][6][7][8][9][10][11]. However, the forest area of Banihal in the district Ramban has not been explored by the researchers. Therefore, the present data has its importance recorded for the first time. It has been suggested that more and more areas which are inhabited by ethnic groups may be studied to record information on medicinal potential endemic to such primitive and rural communities. This may provide indicators for development of new drugs.

MATERIALS AND METHODS

The plants specimens and data on medicinal uses was collected during ethnopharmacological survey trip in Banihal forest area of Kashmir during October 2011. The field exploration work undertaken by the survey team of Regional Research Institute of Unani Medicine (RRIUM), Srinagar. The information on medicinal uses of plants were recorded by the team from the local tribal

communities viz., Gujjars and Bakarwals. Plants species collected were identified and the specimens were mounted on herbarium sheets as per standard methods [4]. These herbarium specimens have been deposited in the unit herbarium of RRIUM, Srinagar. The data on plants species collected has been presented in (Table-I). Plants species in the table have been arranged in alphabetical order with their botanical name, family, local name, locality and source of information, part used followed by disease/condition.

RESULTS AND DISCUSSION

Ethnopharmacological data on 19 medicinal plants as recorded from the study area has been presented in the paper. It has been observed that different parts of the plant viz., root, shoot, leaves, flowers, seed, resin and oil are used for the treatment of various ailments. Due to lack of proper health care facilities, the inhabitants of the area living in close vicinity of forest, mostly depend on wild source for their day-to-day needs including medicinal therapeutics. They usually collect fresh plant material and prepare medicine as and when desired for the treatment of health disorders. In the present report, it was observed that leaf is used in most of the remedies. However, whole plant and root is used in case of herbs. It was also observed that the plants used for the treatment of Respiratory disorders including asthma, bronchitis, cough & cold and arthritis are mostly met in the area as claimed by the informants. These include *Berberis lycium* Royle, *Cichorium intybus* L., *Prunella vulgaris* L., *Geranium wallichianum* D. Don, *Salix alba* L., *Urtica dioica* L., etc. Screening of literature on ethnobotanical studies of Kashmir reveals that most of the medicinal uses reported in the present paper are new or less known.

Table 1
Ethno-pharmacological uses of plants from Banihal forest area of Kashmir

Botanical Name	Local Name	Locality and Source of information	Part used	Disease/condition
<i>Achillea millefolium</i> L. (Asteraceae)	Pehal gasa	Chaknarwah – Gujjar	Leaves	Tooth ache.
<i>Adiantum capillus veneris</i> L. (Adiantaceae)	Gevtheer	Mangith – Bakarwal	Plant	Body pain.
<i>Artemisia absinthium</i> L. (Asteraceae)	Tethwan	Malik pora – Gujjar	Plant Leaves	Hyperacidity. Wounds.
<i>Berberis lycium</i> Royle (Berberidaceae)	Barkund	Badidhar – Bakarwal	Shoot	Asthma, Cough.
<i>Cannabis sativa</i> L. (Cannabinaceae)	Charis	Badidhar – Gujjar	Plant Part (Aerial)	Backache.
<i>Cedrus deodara</i> (Roxb.) Loud. (Pinaceae)	Deodar	Mangith – Bakarwal	Resin Oil	Skin disorder. Toothache.
<i>Cichorium intybus</i> L. (Asteraceae)	Handh	Chaknarwah – Gujjar	Leaves Leaves	Bronchitis Cough & Colds.
<i>Cynodon dactylon</i> (L.) Pers. (Poaceae)	Berin ghas	Adimarg – Bakarwal	Root	Fever
<i>Datura stramonium</i> L. (Solanaceae)	Datur	Chaknarwah – Gujjar	Seed	Inflammation
<i>Desmodium elegans</i> Dc. (Fabaceae)	Madiwar	Badidhar – Gujjar	Leaves	Cuts & wounds
<i>Fagopyrum esculentum</i> Moench (Polygonaceae)	Trumbe	Parentheer – Gujjar	Plant Part (Aerial)	Dysentery
<i>Geranium wallichianum</i> D. Don (Geraniaceae)	Ratanjot	Adimarg – Bakarwal	Root	Arthritis
<i>Pinus wallichiana</i> A. B. Jacks (Pinaceae)	Kavur	Mangith – Bakarwal	Resin	Wounds, Bone fracture
<i>Prunella vulgaris</i> L. (Lamiaceae)	Sershikhi	Adimarg – Bakarwal	Flower	Respiratory disorder
<i>Rabdisia rugosa</i> Wall. ex Bth. (Lamiaceae)	Sulai	Chaknarwah – Gujjar	Leaves	Dermatitis
<i>Salix alba</i> L. (Salicaceae)	Ver	Badidhar – Gujjar	Leaves	Arthritis
<i>Trigonella foenum-graecum</i> L. (Fabaceae)	Methi	Adimarg – Gujjar	Seed	Dystocia
<i>Urtica dioica</i> L. (Urticaceae)	Soi	Badidhar – Gujjar	Plant (aerial part)	Arthritis
<i>Viola odorata</i> L. (Violaceae)	Bunafsha	Parentheer – Gujjar	Flowers	Tonsillitis, Gastric problem

CONCLUSION

Based on the study it may be suggested that the plants reported in this communication may be taken up for scientific analysis including phytochemical and pharmacological studies to find out some useful indicators for the process of discovery of new drugs of plant origin.

REFERENCES

1. Abdul Rashid, V.K. Anand & Jawaid Serwer 2008. Less known wild edible plants used by Gujjars tribe of District Rajouri, J&K State. *International Journal of Botany* 4: 219-224.
2. Dar G. H., J. Veer, P. Kachroo and G. M. Buth 1984. *Ethno botany of Kashmir – 1*. *J. Econ. Tax. Bot.* 5:668.
3. Iqbal Chak, R. K. Agrwal and A. Majeed Khan 2009. Ethno medicinal study of important plants used in the treatment of hair & boils in District Pulwama of Kashmir. *Ann. For.* 17 (1): 101-107.
4. Jain S. K. and Rao R. R. 1977. *A handbook of Field and Herbarium Methods*. Today's and Tomorrows Printers and Publishers, New Delhi.
5. Kapahi B. K., T. N. Srivastava & Y. K. Sain 1993. Traditional medicinal plants of Gurez (Kashmir)-An ethno botanical study. *Ancient Science of life* 13: (1): 119-124.
6. Khan Z.S., A. A. Khuroo & G. H. Dar 2004. Ethno botanical survey of Uri, Kashmir Himalaya. *Indian journal of traditional knowledge* 3 (4): 351-357.
7. Malik A. R., M. A. A. Siddique, P.A. Sofi and J.S. Butola, 2011. Ethnomedicinal Practices and Conservation Status of Medicinal Plants of North Kashmir Himalayas. *Research Journal of Medicinal Plant*, 5: 515-530.
8. Mukesh Kumar, Yashpaul and V.K. Anand 2009. An ethno botanical study of medicinal plants used by the locals in Kishtwar, J& K, India. *Ethno botanical leaflets* 13: 1280-56.
9. Shree Kar Pant and Susheel Verma 2008. Ethno medicinal notes on trees of

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- Pirpanjal Biodiversity park Baba Ghulam Shah Badshah University, Rajouri, J&K. *Ethno botanical Leaflets* 12: 404-412.
10. Singh V. 1995. Herbal remedies in traditional medicines of the local valley in Kashmir Himalayas, India, round progress in medicinal plants. *Ethno-Medi. Pharmacol.* 1: 63-71.
11. Tantray M. A., K. A. Tariq, M. M. Mir, M. A. Bhat & A. S. Shawl 2009. Ethno botanical survey of Shopian, Kashmir (J&K), India. *Asian journal of traditional medicines* 4 (1):1-6.