

MEDICINAL PLANT WEALTH OF LANGATE FOREST DIVISION IN KASHMIR HIMALAYA

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ABSTRACT

The medicinal plant wealth of Langate Forest Division was surveyed during 2005 and 2006. In the present paper, some of the medicinally important plants growing in the forest division within the altitudinal range of 1650-3700 m (a.s.l) are briefly described. The plant species are listed in alphabetical order with details pertaining to scientific and local names, author citation, family, site of collection and some medicinal properties.

Keywords: Medicinal plants, resources, Langate forests, Kashmir Himalaya.

INTRODUCTION

The floristic and vegetation studies of Kashmir Himalaya have been carried out since first half of the twentieth century (Stewart, 1917, 1945, 1967; Rao, 1960; Dutt *et al*, 1964; Javeid, 1968; Singh and Kachroo, 1976; Dar and Kachroo, 1982, 1992; Dhar and Kachroo, 1983; Dar *et al*, 1984, 2002; Pandit, 2002). Although the authors have tried to cover whole Kashmir Himalayan region, yet the extensively surveyed areas include Gurez, Karnah, Lolab Valley, Gulmarg, Sonamarg, Khilanmarg and Ladakh regions. The noteworthy feature of these studies is paucity of information from a very remote but extensive area of Langate Forest Division falling in Kupwara and Baramulla districts. Except a few reports (Khuroo, 2003 and Lone, 2004) on some

general flora of Langate Forest Division, no extensive survey of the forests has been carried out so far so as to have an insight into the alpine and sub-alpine floristic wealth of the area in general and the medicinal wealth in particular. The present survey was, therefore, undertaken with the view to enlist and document the medicinal flora of this unexplored region.

MATERIAL AND METHODS

The present study was undertaken during different seasons from 2005 and 2006 on Langate Forest division of Kashmir Himalaya. The Division falls in north-west part of Kashmir valley and is situated between 34° 15' and 34° 45' N latitude and 73° 45' and 74° 35' E longitude. The Division extends over an area of about 360 km² and occupies north-eastern slopes of Kazi-Nag and Shamasbari Ranges. The plant specimens were collected from various places, viz. Mawar, Rafiabad, Rajwar and Magam ranges of Langate Forest Division. Three to four specimens of each species were collected. Using standard taxonomic methods, the plant specimens were properly processed for preparation of herbarium specimens. The specimens were identified by using the available literature (Stewart, 1972; Polunin and Stainton, 1997). The information regarding the medicinal value of plants was collected from the local people and available

literature (Koul, 1997; Trivedi, 2002; Prajapati *etal.*, 2003)

OBSERVATIONS

In the present paper, highly valued medicinal plants are listed alphabetically with their family and author citation, local names wherever available, month and year of collection, site of collection and their medicinal properties.

1. *Achillea millefolium* Linn. (Asteraceae)

Vernacular name : Pahale ghass

Part used : Whole plant

Site and period of collection : Mawar; July 2005

The decoction of the leaves and flower heads is used as a carminative, tonic and in the treatment of colds.

2. *Aconitum heterophyllum* Wall. ex Royle (Ranunculaceae)

Vernacular name : Patris

Part used : Underground stem and root

Site and period of collection : Mawar; July 2005

The extract of roots is used as astringent, tonic, antiperiodic. It is also used in diarrhoea, dyspepsia and cough.

3. *Adiantum capillus-veneris* Linn. (Adiantaceae)

Vernacular name : Geutheer

Part used : Above ground parts

Site and period of collection : Rafiabad; July 2006

The decoction of leaves is used for acute bronchitis and fever. It is also used as hair tonic.

4. *Ajuga bracteosa* Wall. ex Benth. (Lamiaceae)

Vernacular name : Janiadam

Part used : Whole plant

Site and period of collection : Magam; July 2005

The aromatic leaves are used as stimulant, diuretic and tonic. Locally, water extract of fresh leaves is administered orally with sugar to children in spasmodic pain

5. *Arisaema jacquemontii* Blume (Araceae)

Vernacular name : Surp

Part used : Tubers

Site and period of collection : Rafiabad; July 2006

The plant is used as an antiseptic on ruptured wounds.

6. *Arnebia benthamii* (Wall. ex G. Don) John. (Boraginaceae)

Vernacular name : Kahzaban

Part used : Whole plant

Site and period of collection : Rafiabad; July 2005

The plant is used as expectorant, antiseptic, antibiotic and used for cardiac disorders.

7. *Artemisia absinthium* Linn. (Asteraceae)

Vernacular name : Tethwan

Part used : Whole
plant

Site and period of : Mawar; June
2005
collection

The decoction of the plant is used against round worms. It is also used in chronic fevers, swellings and inflammation of liver.

8. *Artemisia maritima* Linn. (Asteraceae)

Vernacular name : Murin

Part used : Whole
plant

Site and period of : Mawar; June
2005
collection

It is used for the loss of appetite, weak digestion and stomach problems. It is also used against skin eruptions.

9. *Atropa acuminata* Royle (Solanaceae)

Vernacular name : Belladonna

Part used : Leaves
and roots

Site and period of : Rafiabad; July
2006 collection

It is used in asthma, whooping cough, urethral and bladder spasms. It is considered as sedative and narcotic.

10. *Berberis lycium* Royle (Berberidaceae)

Vernacular name : Kawdach

Part used : Root

Site and period of : Rafiabad; May
2006 collection

The plant is used in splenic troubles, febrifuge and intestinal astringent. It is also used in chronic diarrhoea.

11. *Bergenia ciliata* (Haw.) Sternb. (Saxifragaceae)

Vernacular name : Pahand

Part used : Root

Site and period of : Rafiabad; July
2006 collection

The plant is used as astringent, diuretic, tonic, and also used in fever. It is also used in dissolving kidney and bladder stones.

12. *Cannabis sativa* Linn. (Cannabaceae)

Vernacular name : Bhang

Part used : Dried leaves and
flowering shoots

Site and period of : Magam; July
2006 collection

The leaves are used in convulsions, abdominal disorders and diarrhoea. Its extensive use causes dyspepsia, cough, impotence, dropsy and insanity. Seeds are carminative, astringent, antiemetic and anti-inflammatory.

13. *Cichorium intybus* Linn. (Asteraceae)

Vernacular name : Handiposh

Part used : Root

Site and period of : Rafiabad,
Mawar; collection July
2006

The plant is used in fever, vomiting, diarrhoea and rheumatic pain. The root extract is used as stomachic and diuretic

14. *Digitalis purpurea* Linn. (Scrophulariaceae)

Vernacular name : Dastanna

Part used : Leaves

Site and period of : Rajwar; July
2006 collection

Its infusion is used to relieve sore throat and asthma. It is administered for the treatment of congestive heart failure.

15. *Dioscorea deltoidea* Wall. ex Kunth.
(Dioscoreaceae)

Vernacular name : Krinch
Part used : Rhizome
Site and period of : Rafiabad; July
2005 collection

It is used in the treatment of rheumatic and ophthalmic disorders. The crushed rhizomes are given with kneaded flour for general gastric complaints.

16. *Euphorbia wallichii* Hook
(Euphorbiaceae)

Vernacular name : Sarpgand
Part used : Root
Site and period of : Rafiabad; July
2006 collection

The plant is poisonous in nature and having anthelmintic properties. The latex is applied on wounds and sprains as antiseptic and applied on warts

17. *Geranium wallichianum* Wall.
(Geraniaceae)

Vernacular name :
Ratanjote
Part used : Root
Site and period of : Rafiabad; August
collection 2006

The plant is used in stomach disorders, gonorrhoea and ophthalmia.

18. *Inula royleana* C.B.Clarke
(Asteraceae).

Vernacular name : Pushkar
Part used : Root
Site and period of : Rafiabad; July
2006 collection

The roots possess anthelmintic, antiseptic, expectorant and diuretic properties.

19. *Jurinea dolomiaea* Boiss.(Asteraceae)

Vernacular name : Dhoop
Part used : Root
Site and period of : Rafiabad; July
2006 collection

The roots are considered stimulant and given in fever after child birth. The decoction of the root is also given in colic.

20. *Lavatera kashmiriana* Cambess.
(Malvaceae)

Vernacular name : Sazmool
Part used : Whole plant
Site and period of : Rafiabad; July
2006 collection

It is used in throat problems and given as mild laxative.

21. *Mecanopsis aculeata* Royle
(Papaveraceae)

Vernacular name : Gul-e-Neem
Part used : Whole plant
Site and period of : Rafiabad; July
2006 collection

The water extract of the whole plant including flowers is used to wash wounds. It is also used in renal colic and backache. The plant especially root is considered as narcotic and poisonous.

22. *Origanum vulgare* Linn.(Lamiaceae)

Vernacular name :
Wanbabar
Part used : Whole plant
Site and period of : Mawar: July
2005 collection

The plant possesses carminative, diuretic and diaphoretic properties. It is also given as a stimulant and tonic in diarrhoea, colic and is applied in chronic rheumatism and toothache.

23. *Phytolacca acinosa* Roxb.
(Phytolaccaceae)

Vernacular name : Brand

Part used : Root

Site and period of collection : Rafiabad; August 2006

The plant is used in oedema, rheumatic and arthritic conditions. It has also narcotic effect.

24. *Podophyllum hexandrum* Royle
(Berberidaceae)

Vernacular name : Wanwangun

Part used : Root and rhizome

Site and period of collection : Rafiabad; July 2006 collection

The rhizome and roots are considered as hepatic stimulant, cholagogue and purgative. It is used as an effective vermifuge and also used against cancer.

25. *Prunella vulgaris* Linn. (Lamiaceae)

Vernacular name : Kalveoth

Part used : Whole plant

Site and period of collection : Magam; August 2005

The plant possesses antiseptic, expectorant, anti-rheumatic, antispasmodic and stimulant properties. It is also used in fever, cough, haemorrhages and diarrhoea.

26. *Rheum emodi* Wall.ex Meissner
(Polygonaceae)

Vernacular name : Pumbhaak

Part used :

Rhizome and roots

Site and period of collection : Rafiabad; July 2006 collection

The extract of the rhizome is used as laxative, purgative and tonic. Powdered roots are used for cleaning teeth and are sprinkled over ulcers for quick healing.

27. *Saussurea costus* (Falc.) Lipsch.
(Asteraceae)

Vernacular name : Kuth

Part used :

Rhizome and roots

Site and period of collection : Rafiabad; July 2006 collection

The decoction of dried roots is used for treatment of asthma, chronic bronchitis, whooping cough, diarrhoea, menstruation trouble, rheumatism and promotes urination.

28. *Thymus serpyllum* Linn. (Lamiaceae)

Vernacular name : Javend

Part used : Whole plant

Site and period of collection : Rafiabad, Mawar; July 2005

The plant possesses antispasmodic, antiseptic, anthelmintic and stimulating properties. The leaves and floral shoots are used for the treatment of whooping cough, epilepsy and menstrual catarrh.

29. *Valeriana jatamansi* Jones (Valerianaceae)

Vernacular name :

Mushkibala

Part used : Roots

Site and period of : Mawar &
Rafiabad; collection
August 2006

The plant possesses antiseptic, diuretic,
expectorant, sedative and tonic properties.

30. *Verbascum thapsus* Linn. (Scrophulariaceae)

Vernacular name : Dandashah

Part used : Leaves
and flowers

Site and period of : Magam; July
2006 collection

The decoction of the plant is used to cure
migraine. The poultice of crushed leaves is
used to cure frostbite.

SUMMARY AND CONCLUSION

Inventorization of the components of
biology is the pre-requisite for its conservation
strategies. In the present paper, an attempt has
been made to document the important
medicinal flora of the alpine and sub-alpine
zones of the Langate forests, one of the least
explored areas of Kashmir valley. As some of
these species such as *Aconitum heterophyllum*,
Arnebia benthamii, *Meconopsis aculeate* and
Saussurea costus have been put under
endangered category (IUCN, 1994), it is
therefore, imperative to have extensive
exploratory and population studies of these
species in order to have a clear picture about
their status in the region.

ACKNOWLEDGEMENTS

Thanks are due to Director, Centre of Research for
Development, University of Kashmir for providing
necessary facilities. Thanks are also due to Chief
Conservator of Forests, Kashmir, for providing
assistance through local field staff.

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