



Short Communication

Important Medicinal and Aromatic Plants and Their Traditional Use in District Hamirpur–A Sub Himalayan Tropical Region of Himachal Pradesh

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INTRODUCTION

India has one of the oldest, richest and most diverse cultural tradition associated with the use of medicinal plants. Use of medicinal plants by ancient people and handing over the uses from one generation to next generation by tribal people led to the study of plants covered under ethno botany, where relationship between humans and plants can be taken care of in health care programmes and also for exploration of various lives supporting species. It also studies useful information about socio-cultural, medico-religious lures and mores, phrases and proverbs, taboos and totems prevailing in an area or in a society.

Himachal Pradesh is endowed with four agro-climatic zones with district Hamirpur located in subtropical climatic zone. The knowledge of the curative properties of medicinal and aromatic plants is acknowledged since time immemorial. There are nearly about 15,000 species of flowering plants, out of which only 17 per cent are recognized as having potential medicinal properties. Forest areas of district Hamirpur are endowed with plants having useful medicinal properties which are very well recognized by village people and even now cure their ailments by such plants. With the advancement of time and technology, various pharmaceutical companies have extended their efforts to recognize and develop the worth of such plants but still more efforts are required in this direction. However, there exist numerous plants with medicinal properties whose potential is yet to be recognized and utilized for the benefit of mankind.

As most of the time collection and harvesting

of these medicinal plants is un-scientific and therefore, results in depletion of their natural population and even some time makes them endangered. So there is urgent need to collect and conserve the endemic diversity of medicinal plants through efforts like creation of herbal garden, arboretum, herbarium preparation and people oriented extension awareness campaign and promotion of farming and cultivation of these plants by local people. The present study was therefore undertaken with the objective to identify some of the available aromatic and medicinal plants and their probable use by the local people in treating their livestock species.

MATERIALS AND METHODS

For the enumeration of important medicinal and aromatic plants having use in treatment of ailments of animals, data were collected by observations, discussions with the local people and study of available literature on medicinal plants. In the present study, data regarding identification of medicinal and aromatic plants were collected by direct observations and study of literature. Likewise, information regarding method of use of different plant materials for cure of different ailments were based on indigenous knowledge which was collected through focused group discussions.

RESULTS AND DISCUSSION

Land Use

According to estimates of revenue department the total geographical area of district Hamirpur is 1,10,070 ha. Nadaun is largest and Bijhari is the

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Table 1. Important medicinal and aromatic plants and their use in treatment of animals.

Sr. No.	Latin Name	Local Name	Material Used	Ailment	Method of use
1.	<i>Mallotus philippinensis</i>	Kamal	Seeds are powdered and used.	Worm infection, Pica and Constipation	The brick-red powder of seeds of Kamila tree (25g) alongwith 100g raya mixed in 1.5lt. of lassi is given to animals. This causes cleaning of stomach and animal is cured.
2.	<i>Butea monosperma</i>	Palah	Seed of palas (Flame of Forest)	Worm-infection and indigestion.	Seeds of palas with cumin seeds are used for treating worm infection and indigestion in cows and buffaloes.
3.	<i>Pinnus spp.</i>	Cheer	Green spikes of pine tree & Lassi.	Worm-infection	Green spikes of pine tree mixed with lassi are given to the animal having endoparasites.
4.	<i>Grevia optiva</i>	Buel	Crushed bark of Buel.	Worm-infection	Bark of Buel is crushed and given to the animals suffering from Worm-infections.
5.	<i>Sesamum orientale</i>	Til	Til oil, Sugar and eggs.	Blockage of teats of milch animal	The ingredients likes Til oil 250g sugar 250g and eggs (6 No.) are mixed and fed to the milch animal 2-3 times.
6.	<i>Solanum nigrum</i>	Jangli Bhindi	Fruits of wild Bhindi	Blockage of teats of milch animal	Fruits of wild Bhindi are ground and paste is applied on the affected teats to remove blockage.
7.	<i>Asafoetida</i>	Heeng	Heeng	Indigestion and bloat	For curing indigestion, a piece of heeng is first heated and then fed @ 3g/animal and in bloat it is mixed with mustard and turpentine oil.
8.	<i>Azadirachta indica</i>	Neem	Crushed Neem leaves in water	Skin disease	Juice is applied on the affected skin.
9.	<i>Duchensnea indica, Carum copticum</i>	Tea Ajwain Soanf	Tea leaves, Ajwain and Fennel	Abdominal pain	A decoction of tea leaves (250g), Ajwain (100g) and Fennel (100g) are boiled together and fed to the ailing animal.
10.	<i>Foeniculum vilgara, Zizipus jujuba, Curcuma longa</i>	Jarer, Kangoo Haldi & Sarson	Sarson oil	Foot and Mouth Disease (FMD)	Roots of Jarer, bark of Kangoo and Haldi are boiled in water. The affected hoofs are washed with this solution. Mouth infection is cured with the application of sarson oil.
11.	<i>Flacourtia indica, Brassica campestris.</i>	Aak	Crushed leaves of Aak mixed with concentrate	Foot and Mouth Disease (FMD)	Leaves of Aak are crushed and mixed with concentrate and then fed to the ailing animal.
12.	<i>Cuscuta reflexa</i>	Amber bel, Akash bel	Extract of Aakash Bel	Foot and Mouth Disease (FMD)	Affected animals are treated by applying the extract of Aakash bel for 3-5 times.
13.	<i>Pennisetum spp.</i>	Mandal	Roots of mandal plant.	Maggot infection	The roots of mandal plants are crushed and applied on the affected portion to kill maggots.
14.	<i>Ficus pameta</i>	Bharooni khashra	Fig stick.	Tongue swelling	Fig stick is heated /roasted and placed on affected portion of tongue.
15.	<i>Flacourtia indica</i>	Kungu	Kungu powder	Eye swelling	Kungu powder (orange mass) is used against eye infection.

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16. <i>Acacia fistula</i>	Amaltash	Beads of Amaltash	Constipation	20-25 seeds of Amaltash are boiled in water and then lukewarm solution is given to the ailing animal.
17. <i>Brassica campestris</i>	Sarson	Mustard oil/desi ghee.	Constipation	For curing constipation in large animal, 1/3 to 1/2lt mustard oil is given whereas it is reduced to 25-75 ml in young ones. Mustard oil is also given in case of <i>Lantana</i> poisoning.
18. <i>Brassica campestris</i>	Ganna	Two and a half sugar cane top.	Expulsion of placenta	If the placenta is not expelled with in 5-8 hrs after calving, two and a half sugarcane top can be fed to the animal for expulsion of placenta.
19. <i>Allium sativum</i> <i>Gloriosa superba</i>	Lahasun kalijiri	Onion, <i>Hukka</i> (a local device use to smoke) water and kalijiri	Expulsion of placenta	Mixture of crushed onion, hukka water and kalijiri is given orally to the affected animals.
20. <i>Citrus pseudolimon</i> , <i>Zingiber officinale</i> .	Galgal, Adrak & Gumma Namak.	Dried galgal, ginger, rock salt.	Cough and internal injuries	Dried Galgal is burnt and the ash is mixed with ginger and rock salt and is given to the animal.
21. <i>Oryza sativa</i>	Dhann	Paddy	Cough and internal injuries	Paddy is fed to animal for curing respiratory ailments.
22. <i>Foeniculum vulgare</i>	Soanf	Fennel.	Prolapsed of uterus	100-200 g of Soanf is soaked in water overnight and the given to the suffering animal, to cure the problem of prolapsed of uterus.
23. <i>Musa sapientum</i> <i>Triticum aestivum</i>	Kela, kannak	Flowers of banana mixed with wheat flour	To bring animal into heat	Flowers of banana are crushed and mixed with wheat flour and fed to the animal for 2-3d. The female animal will come into heat with in 15 days.
24. <i>Curcuma longa</i> , <i>Brassica campestris</i>	Haldi, Sarson.	Powdered turmeric mixed with 1lt. of mustard oil.	Antiseptic and Blood purification	20-30g of powdered turmeric or black pepper is mixed with 1lt. of mustard oil. It is drenched to the animals for 5 alternate days.

smallest tehsil of the district. Cultivated area constitutes 33.1 per cent of the total geographical area. Bhoranj tehsil has relatively more cultivated area (53.2%) followed by Hamirpur (38.7%), Nadaun (29.9%), Barsar (28.6%), Bijhari (27.3%) and Sujampur (20.6%). The area under forest is 18.4 per cent of total geographical area, the maximum being in Bijhari tehsil (36.0%) and least in Bhoranj tehsil (5.4%). Area under permanent pastures and grazing lands is only 0.36 per cent. The cultivable waste land (5.21%) and uncultivable waste land (19.2%) whereas area under fallow land is 6.86 per cent. Based upon the survey, total cropped area is much higher owing to multiple cropping.

CONCLUSION:

Present study will prove extremely useful in assessing the status, utilization potential and future strategies for the conservation of medicinal plant resources. District is very rich in plants with medicinal value and a concerted effort is needed for their conservation. To check the loss of biodiversity owing to over exploitation and habitat degradation, effective measures for conservation and management need to be put in place. Priority should be given for conservation of high-value species listed in this study. The involvement of local inhabitants with their local tradition and culture is very important for conservation of indigenous knowledge and traditional practices.

REFERENCES

- Anonymous *Wildlife of Himachal*, Department of Forest Farming and Conservation, Himachal Pradesh. Shimla 1992:34
- Badola HK Biodiversity Conservation Study of Kanawar wildlife sanctuary in Himachal Pradesh, *In: Research for Mountain Development: Some Initiatives and Accomplishments*, Gyanadoya Prakashan, Nainital 1998: 407-430
- Charaka Samhita. Chakrapani (Ed.) 1941, Mirsanyasgar Press, Bombay.
- Chauhan, NS and Khosla, PK. Commercially important medicinal plants of Himachal Pradesh In: PK Khosla (Ed) *Trends in Tree Sciences* ISTS Publications 1988: 81-89.
- Chauhan NS *Medicinal and Aromatic Plants of Himachal Pradesh*, Indus Publishing Company, New Delhi, 1999: 500
- Chowdhery HJ, Wadhwa, BM *Flora of Himachal Pradesh* (Vol 3), Botanical Survey of India, Howrah, 1984: 276-278
- Dhaliwal DS, Sharma M. Flora of Kullu District, Himachal Pradesh. In: Singh B, Singh MP (Eds) *Survey of Flora*, Jaipal Publications, Dehradun 3, 1999: 221
- Samant, S.S., Shreekar Pant, Man Singh, Manohar Lal, Ashok Singh, Aman Sharma & Sakshi Bhandari. Medicinal Plants in Himachal Pradesh, north western Himalaya, India. *International Journal of Biodiversity Science and management* 2007: 234-251.
- Singh SK Ethnobotanical study of useful plants of Kullu district in north western Himalaya, India. *Journal of Economic and Taxonomic Botany* 23, 1999: 185-198
- Singh SK, Rawat GS. Flora of Great Himalayan National Park, Himachal Pradesh. In: Singh B, Singh MP (Eds) *The Great Himalayas*, Jaipal Publications, Dehradun, 2000: 105-109

Received on 12-12-2013 Accepted on 14-04-2014