



## **MEDICINAL PLANTS AND THEIR TRADITIONAL USES AMONG THE LOCAL COMMUNITIES OF DISTRICT ALMORA (UTTARAKHAND)**

**Sudhanshu Kaushik and B. D. Joshi**

Deptt. of Zoology & Env. Sciences, Faculty of life sciences,  
Gurukula Kangri University, Haridwar (Uttarakhand) India

The present study was carried out to document the diversity of medicinal plants and their traditional uses in health care system of local communities of district Almora. Present study reveals that 30 species of medicinal plants belonging to 25 families are being used by the local communities to cure the various human ailments like as- asthma, vomiting cough and cold, fever, urinary disorders, diarrhoea and dysentery etc.

The practice of medicinal plants is continuing from the time of Vedas. Sushruta Samhita and Charak Samhita gave a remarkable description of the Materia Medica as ancient Hindus knew it. There has been resurgence in the consumption and a global demand for medicinal plants. The reason of increasing demand of medicinal plants on the country level are the good economic output and the fact that the herbal medicines are very safe than the synthetic allopathic drugs in various ailments. WHO also estimated that four billion people, 80% of the world population use herbal medicines for some aspects of primary health care need<sup>1</sup>.

In India, the rich plant diversity of Himalaya (due to the favorable physiographic and climatic conditions); consist over 8000 species of angiosperm, 44 species of gymnosperm, 600 species of Pteridophytes, 1734 species of Bryophytes, 1159 species of Lichens etc. The Indian Himalayan region contributes over 1748 (32.2% of India) plants species<sup>2</sup>. The medicinal plants can be possible bridge between sustainable economy, affordable health care and conservation of vital biodiversity. But during past 2-3 decades due to the unscientific methods of harvesting, storage, transportation and lack of proper documentation the existence of some medicinal plants is in danger. Conservation Biologists warn that 25 % of medicinal plant species could be extinct during the next 20-30 yrs.

### **MATERIALS AND METHODS**

The present study was carried out during January to April 2007 in the remote areas of Kausani, Panuanaula, Chaubatia and Binsar of district Almora, which lies at Latitude 29° 32' 45" - 29° 53' 58" and longitude 79° 14' 25" - 79° 56' 71" E. In the study period local people and herbal healers were also consulted to get information about the traditional uses of the medicinal plants. The identification of these plant species was done using available literature<sup>3-6</sup>.

### **RESULTS AND DISCUSSION**

In the study period it was found 30 plants species belonging to 25 families are being used by the local communities of district Almora to cure various human ailments like Asthma, Urinary disorder, cough and cold, fever etc. Sharma and Joshi<sup>1</sup> have provided a list of 40 plants of 32 families, which are being used in Almora district<sup>1</sup>. Malabadi *et. al.* have described the use of 92 plant species belonging to 54 families to cure the different disease like diabetes, skin disease wound healing etc. in the Belgaum district of Karnatka<sup>7</sup>. Joshi<sup>8</sup> described in



detail the potential of Uttaranchal state to provide herbal medicine for developing a sustainable network of small scale pharmaceutical industries and specific role of certain tribals and their indigenous knowledge<sup>8</sup>. Medicinal plants have gained more importance because it is cheaper and brings about a permanent cure with no side effects. Global trade of the medicinal plants product is growing at the rate of 12.5% per annum. According to Shiva and Chandra about 80% medicinal and aromatic plants of the world biodiversity, are found in India<sup>9</sup>. It is also observed that among many factors involved in the decreasing number of species from the wild, the most common are due to restricted distribution of the plant species, anthropogenic pressure in the form of over harvesting, overgrazing and wrong method of collection by the local peoples. Semwal and Bhatt described the medicinal plant loss due to the anthropogenic pressure<sup>10</sup>. During the present study, it was also found that overgrazing, developmental activities, forest fires and improper collection of medicinal plants have posed a threat to vulnerable medicinal plants. Therefore, it is needed that a proper documentation of diversity of medicinal plants and traditional formulation to conserve the diversity and traditional knowledge system (TKS).

Sl. No.	Botanical Name	Common Name	Family	Parts Used	Medicinal Uses
1.	<i>Calotropis procera</i>	Aakh	Ficaceae	Latyx	Used in skin diseases
2.	<i>Verbascum thepsus</i> Linn.	Akel Veer	Scrophulariaceae	Whole plant	Asthma & pulmonary treatment
3.	<i>Juglans regia</i> Linn.	Akhrot	Juglandaceae	Fruits & seeds	Blood tonic, energier & blood purifier
4.	<i>Aloe berbedensis</i> Mill.	Aloe Vera	Liliaceae	Whole plant	Skin care as X-Ray burn & dermatitis
5.	<i>Ricinus communis</i> Linn.	Arand	Solanaceae	Leaves & seed oil	In child birth & menses
6.	<i>Aconitum heterophyllum</i> Wall.ex.Royle	Attis	Ranunculaceae	Leaves & flowers	Vomiting & digestion
7.	<i>Baccopa monnieri</i> L.(Penn.)	Barami	Scrophulariaceae	Whole plant	Anti-anxiety & asthma
8.	<i>Urtica dioica</i>	Bichhu ghas	Urticaceae	Leaves & seeds	Antiseptic
9.	<i>Rhododendron arboretum</i> Sm.	Burans	Rosaceae	Flowers & Leaves	Diarrhea & Dysentery
10.	<i>Swertia chirayta</i> (Roxb.ex.Flem)Karst	Chirayta	Gentianeae	Whole plant	Tonic & anti-diarrheal dyspepsia
11.	<i>Murraya koengii</i> Spreng.	Curry patta	Rutaceae	Leaves & flowers	Piles & bacterial infection
12.	<i>Datura metel</i> Linn.	Datura	Solanaceae	Whole plant	Asthma & antispasmodic
13.	<i>Cedrus deodara</i> (Roxb.)load	Deodar	Pinaceae	Oil & Wood	Expectorant, fever & skin disease
14.	<i>E.globules</i> Labill.	Eukalyptus	Myrtaceae	Bark & leaves	Antiseptic, asthma & Skin disease
15.	<i>Tinospora cardifolia</i> (Willd.)Miers	Giloy	Manispermaceae	Leaves & twig	Cough, digestive & blood purifier
16.	<i>Rubus ellipticus</i>	Hisalu	Rosaceae	Leaves and flowers	In the treatment of fevers
17.	<i>Solanum indicum</i> Linn.	Indrayan	Solanaceae	Whole plant	Cough & chest pain
18.	<i>Plantago ovata</i> Forsk	Isabgol	Plantaginaceae	Whole seed	Chronic dysentery & gastrointestinal infection
19.	<i>Muccuna pruriense</i> (L.) DC.	Kawanch	Papilionaceae	Seeds, root & legumes	Male virility & Parkinson's disease
20.	<i>Acacia catechu</i> (L.f.) Willd.	Khair	Mimosaceae	Barks & leaves	Digestive & used in cough
21.	<i>Euphorbia ligularia</i>	Kheena	Euphorbiaceae	Latyx	Used in toothache
22.	<i>Berberis asiatica</i> Roxb. Ex.DC.	Kingore	Berberidaceae	Fruits & leaves	Antibacterial, Jaundice & fever
23.	<i>Prunus cerasoides</i> D.Don	Payal	Rosaceae	Bark, Fruits & leaves	Backaches & improve digestion
24.	<i>Pinus roxburghii</i> Sarg.	Pinus	Coniferae	Oil & Resin	Urinary disorder & as a plaster
25.	<i>Valeriana wallilchi</i> DC.	Samyo	Valerianaceae	Whole plants	To improve mental strength
26.	<i>Asparagus racemosus</i> Willd.	Satavari	Liliaceae	Root & leaves	Weakness & headache
27.	<i>Berginia ciliata</i> (Wall.)Engl.	Shelfore	Saxifaragaceae	Root	Astringent & diuretic tonic
28.	<i>Cinnamomum tamala</i> Nees & Absum	Tejpatta	Lauraceae	Leaves & barks	Cardiac stimulant & digestive
29.	<i>Zanthoxylum armatum</i> DC.	Timur	Rutaceae	Fruits & seeds	Dyspepsia & cholera
30.	<i>Ocimum basilicum</i> Linn.	Van Tulsi	Labiatae	Whole plant	Typhoid fever & cough

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