

SOME MEDICINAL PLANTS OF GOPESHWAR – TUNGNATH REGION OF UTTAR PRADESH

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Received: 8 February 1988

Accepted: 20 September 1988

ABSTRACT: This paper deals with medicinal plants of Gopeshwar-Tungnath region of Chamoli district of Uttar Pradesh based on the exploration. In all, 45 species are enumerated in this study.

Introduction

The use of medicinal plants for curing diseases in human society is almost as old as man himself. In India the earliest mentioned uses of medicinal plants are found in Rigveda, after Vedas, there is no information on the development of this science in India for a period of about 1000 years.

The study of Indian indigenous drugs was first begun in the early part of the century and it was then confined to the collection of available information with regard to various medicinal plants growing in different parts of the country. Dutt (1877), Watt (1889-1893), Dey (1896), Kirtikar and Basu (1935), Chopra & Chopra (1955), Bishwas (1956), Chopra et al (1956), Dustur (1970), Usher (1974) and Jain (1975), Nadkarni (1954) have described the medicinal plants.

A good deal of work has been done by the survey of medicinal plants of Garhwal by Uniyal (1964)-1977) Uniyal & Issar (1969). By the survey of literature it is learnt that there is lack of information about the medicinal plants found in Gopeshwar region. To supplement at this study makes a survey of that region and reports their local names and uses.

Location, Topography & Vegetation of the Area

Himalayas have been an interesting cynosure of global curiosity, observation, and exploration. In the silent sentinel of Northern India is the "Uttarakhan" region which means the kingdom of God.

The area Gopeshwar – Tungnath comes under Dist Chamoli, and is surrounded by huge mountains and deciduous temperate and alpine forest. The topography of the area is completely hilly with gradual slopes

forming alpine meadows. Small streams are also quite common.

Gopeshwar region is located approximately in an altitude of 1450 mt. a.s.l., while Tungnath region is situated at an altitude of 3250 mt. a.s.l., and Chandra shila at 3850 mt a.s.l. In general the area is monsoonic; the maximum temp. at Gopeshwar recorded as 35°C, and 12°-22°C at Tungnath. The minimum temperature in the region ranges between 3°C and 8°C. Snow fall occurs very commonly in winter and in Tungnath it takes a very long duration.

The vegetation is mostly found in farmlands, forest, meadows and alpine. The forest of *Nuercus Incana*, *N. semicarpifolia*, and tall trees of *Pinus* spp. *C. deodara*, *Abies pindrow* are very dense. The mosaic type vegetation are found in Tungnath and Chandrasila.

Method of Study

The region of Gopeshwar-Tungnath was surveyed during 1984-85 and medicinal plants were collected from the localities. Tungnath (3250 mt) Chandrasila (3850 mt), Mandalgoun (2400 mt) Chopta 2700 mt.), Dhotidhar (2600 mt). the medicinal plants material collected were dried in shade and identified. During the course of survey, first hand information on the medicinal uses of the plant was gathered from local people and Vaidyas.

Result

The medicinal plants have been arranged in an alphabetical order, locality, local name, used part of the plant and local medicinal uses (Folk-lore). The Specimen of the plants are preserved in the Dept. of Botany, Govt. P.G. College, Gopeshwar (Chamoli).

ENUMERATION OF THE PLANTS

Sl. No.	Botanical/Vernacular Name	Description	Distribution	Parts used	Local uses
1	<i>Abies pindrow</i> , Spach (Taxaceae), Raga.	A large tree, Fl.A Apr.-May	Abundant sub-alpine zone on exposed hill scopes, 1500-2800 mt.	Leaves	The leaves in the form of decoction are used in chronic bronchitis and other pulmonary affections.
2	<i>Acorus calamus</i> , Linn (Araceae) Vacha.	A Perennial, rhizomatus aromatic herb	Abundantly found at Sagar, Gangolgoan & Batarni-dhara, 1200-1500 mt	Rhizome 1	Useful in disease of nervous system loss of memory. In case of irritation of the throat, the rhizome simply chewed, produce copious salivation and an agreeable sensation of warmth.
3	<i>Achyranthus aspera</i> , (L) (Amaranthaceae) Latzira.	Small herb, Leaves thick, flower green violet, Fl. July – August.	Commonly found at road side of Pathali-Dhar. Gopeshwar.	Leaves and Root	According to local Vaidyas “Root taken on Sunday conjoined with pushy nakshatra is tied to waist this fastness labour pains.
4	<i>Adhatoda vasica</i> , Nees (Acanthaceae) Vasinga.	An erect shrub, flower long, dotted, streaked with pink fl. Dec-April.	Commonly found at road side of Gopeshwar, Pathali-Dhar, Gwargoush 900-1200 mt.	Leaves	Juice of fresh leaves mixed with ginger juice used in cough and asthma.
5	<i>Aegle marmelos</i> , Corr,	A small tree	Commonly found	Fruit, Root, &	Fruit is useful in chronic dysentery

	(Rutaceae) Belpatri.	attaining 35 mt. flower white, fl March-May.	at Paduligaun, 1200-1500 mt.	leaves.	Leaves are made in to poultice and applied to inflamed parts.
6	Anaphalis contorta, Hook. (Asteraceae) Bubula	Small aromatic herb, stem branched form the case, flower white-yellow, Fl Aug-Sept.	Commonly found at Gopeshwar, Dhotidhar, 1200- 12500 mt.	Leaves	Juice or decoction of leaves is useful in cut injuries and infection
7	Artimitia parviflora,Roxb (Asetaraceae) Kunja	Small aromatic shrub leaves wedge shaped tip toothed, floral leaves similarly Fl Aug-Oct.	Abundently found at Gopeshwar- Mandal-goun, Sagar, 1200-2400 mt.	Leaves	The leaves juice used in cut injuries Decoction of the leaves is used as vermifuge.
8	Bauhinia Variegata, Linn (Caesalpiniaceae) Gwiral	A medium size tree, flower small light paper and white colour, Fl.feb-April	Abundently found at Gopeshwar Chamoli road side, 900-1200 mt.	Bark & root flowers-bud	Buds are used as vegetable. Of buds is applied for bleeding pile. Bark decoction used in skin diseases.
9	Berberis aristata, DC. (Berberidaceae) Kirmora (Rasaut)	A shrub, with pink or yellow flowers and deep red colour fruit Fl. March-June.	Commonly found in all hill region, 900-13000 t.	Root bark extract, stem.	A Crude extract known as Rasaut, prepared from the root & root used as a local application in effection of the eye lids and in ophthalmia, Externally, the decoction of the root-bark is used to wash the ulcers, to improve their appearance.

10	<i>Centella asiatica</i> , Linn (Apiaceae) Brahmi	Small herb growing in wet places, flower an umbel white-purple	Commonly found in all in hill region, on the wet places, Fl. May-August.	Whole plant generally leaves. Up to 1500-2000 mt.	The leaves juice is used as a nervine tonic, and blood purifier.
11	<i>Cinnomonum tamala</i> Nees, (Lauraceae)Tejpat.	Small evergreen tree with greenish flowers. Fl. March-Sept.	Commonly found in the valley of Mandel, forest of Dhotidhar, 1200-1800 mt	Bark & leaves.	Leaves are largely used as a Condiment Leaves when powdered are useful in fevers; and U.T.I.
12	<i>Chenopodium album</i> , Linn (Chenopodiaceae) Bathuwa.	Errect annual herb, flower greenish colour, FI Feb-March	Commonly found in all crop filed up to 2400 mt.	Whole plant	Leaves are used as vegetable, Local Vaidyas use in hepatic disorder and in splenomagali.
13	<i>Corydalis gavaniana</i> , Wall, (Fumariaceae)	An aromatic rhinometric herb, flower bright yellow, Fl. June-July	Common between 2500-4000 mt.at Tugnath, Rudernath grass meadow	Whole plant	The paste of the root is applied for boils and wounds, the juice of the plant is employed in the treatment of eye disease.
14	<i>Curcuma</i> aromatic, Salish, (Zingiberaceae) Jangli huldi	Perennial herb, root stem rhizomatous, flower C Yellow – pink FI May-June.	Commonly found at forest of Dhotidhar, chopta up to 2500-3000 mt.	Rhizome	Juice of the fresh rhizome is applied to injuries.
15	<i>Cuscuta reflexa</i> Roxb (Convalvulceae) Akashbel.	Annual parasitic, leaf-less herb. Stem succulent, flowers,	Commonly found in Valley of Mandel, Sagar	Plant juice	The juice of plant is useful in hookworm infestations, and in diphtheria.

		fragrant, waxy white. Fl July-Oct	Gangolgom, Ascending		
16	Cynodon dactylon, person (Poaceae) Doob.	Perennial grass	Commonly found in all region up to 5000 ft.	Whole plant	The juice is used as a soother
17	Cyperus rotatus, Linn (Cyperaceae) Motha.	Perennial herb, spikelets red brown, is short Spikes.	It is also found in river bank of Alaknanda (Chamoli)	Bulbous root (Tubers)	Tubers are used as infusion or soup for fever. The paste is also applied in Scorpion bite.
18	Datura stramonium (L) (Solanaceae) Dhatura	Annual herb, Fl white, corolla funnel shaped, Fl.Fed-May	Commonly found in the paduligoun and nearly plaes, 1200-2400 mt	Whole plant	Poultice of leaves is applied for spasmodic pains. Fresh juice of leaves is used for gland-ulcer swellings.
19	Drosera rotundifolia, Buch-Ham (Droseraceae) Mukhjali	A small herb leaves half moon shaped, flower white, Fl Ayg-Sept.	Commonly found in the forest of chopta, Dhotidhar, 1200-12300mt.	leaves	This plant used in the preparation of swarna bhasma. It is also used Phthisis.
20	Emblica officinalis, Gaerth (Euphorbiaceae) Aoula.	A small tree, foliage light green, flowers. Yellow-green or white Fl. March-May.	Commonly found in the road side of the Pathalishar, up to 4500 ft.	Fruit, leaves, root & bark	The infusion of seed is a useful as eye wash in ophthalmic diseases.
21	Euphorbia hirta, Linn. (Euphorbiaceae) Dugdhi.	A small herb, flower greenish, Fl: March, to May.	Commonly found in wet places, upto 2000 mts.	Leaves & Juice.	Used as an ingredient of medicines for cough & asthma. Latex applied to warts.
22	Morinda longifolia, wall.	A Spinous, aromatic,	Commonly found	Root	Root powder is applied as a poultice

	(Dispsaceae)Bish Kandaru	Fl. Pinkish in oxilary whorls. Fl June- Augst.	in meadow at Rudurnath, Tungnath, 2500 mt.		in boils, for non healing wounds.
23	Myrica nagi, Thunb (myricaceae) Kaphal	A small tree with greenish flower. Fl Oct-Dec.	Commonly found at f of chopta, Dhotidhar, Gopeshwar, 1500-2100 mt.	Bark & fruits	Fruits edible, Bark useful in asthma, also it is chewed to relieve tooth- ache.
24	Nardostachya jatamansi, DC (Valerianaceae) jatamashi	A perennial rhimatic herb, with pinkish flower Fl. July Aug.	Commonly found in the alpine zone at Rudarnath Tungnath 2700- 3500 mt	Root	The decoction of the roots is used mental diseases, insomnia and cardio-vascular diseases.
25	Oxalis corniculata, Linn (Ocalidaceae) Bhilmora	Procumbant herb, with yellow bright flower	Commonly found in the wet & dry places,	Leaves	The leaves are used in removing corns, warts, and other excrecences on skin. Leaf paste with the paste of Piaz and Chiura is used in skin eruptions.
26	Piczorhiza kurroa, Royle ex-Benth, (Scrophulariaceae) Katki	A hairy prennical herb with blue flower. Fl. July-Sept.	Found abundantly on rocks and slopes a tunganth, Rudernath 3000- 4000 mt.	Root	Specially useful in fever
27	Pieris avalifolia, D Don (Eriasceae) Anyar	A small deciduous tree, with white	Commonly found in the Mandel,	Young leave and buds	The juice of tender leaves & buds mixed with mustard oil and used as

		yellow flower. Fl March- April	Dhotidhar and near Gopeshwar forest. 1500-2500 mt		an external application in itching.
28	<i>Pinus roxburghii</i> , sarg (Pinaceae) Kuaen	A large tree, leaves needle shaped. Fl Feb-April.	Abundant in sub tropical zone on exposed hill slopes 900-1800 mt	Resin & Bark	Resin or oil is used for head-ache. Bark paste used to relieve burning sensation due to insect stings.
29	<i>Potentilla fulgens</i> , wall (Rosaceae) Bajerdanti	Perennial herb, flower. Orange- yellow, Fl Aug – Oct.	Commonly found in the forest of chopta, Dhotidhar, Mandel 2000-3--- mt.	Root & leaves.	The root and leaves are used as tooth brush, for cleaning and to relieve tooth-ache.
30	<i>Prinsepia utalis</i> , Royle (Rosaceae) Bhenkel	A glabrous spiny shrub, flower white Fl April-May	Commonly found in the temperate Himalaya up to 2500 mt.	Root & Seed oil	Seed oil is used in skin diseases. Paste of the root is healer for cuts for cuts & wounds. Fresh root juice is very useful for fever.
31	<i>Quercus incana</i> , (Fagaceae) Banj	A large tree, forming patches in sub alpine zone, flower- white	Commonly found in the sub alpine and temperate zone up to 2500- 3000 mt	Seeds & bark	The seed paste used in insect bites & decoction of the bark is used in scabies and other skin diseases.
32	<i>Rheum emodi</i> , wall (Polygonaceae) Dolu,	A perennial rhizomatic herb,	Commonly found on stony slope at	Rhizome	Lotion made of the root, is used in all types of skin disease, sore, eyes &

	(Archu)	with white pink flower. Fl June-July	tungnath, Rudernath. 3000-4500 mt		pile. The powder of the root is taken in abdominal pains, and of swellings.
33	Rhododendron anthopoyon (Eriaceae) Kothya	A aromatic shrub with purple white flower Fl June-July	Commonly found in the meadow slope at tungnath, Rudernath 3000 mt	Leaves & flowers	Fragrance from the flower is very attractive, but causes giddiness.
34	Rumex hastatus D.Don (polygonaceae) Chilmora	It is an erect herb with pinkish flower	Commonly found on slope & meadow at Gopeshwar, Mandelgoun.	Leaves, root & flower	Locally, paste of the flower is used a made up Chatani, the plant is used as a cooling agent and the leaves are applied to burns & cuts.
35	Sexifrega Ciliata, Royle, (Saxifragaceae) Sitphori	It is a rhizomatic herb, with pinkish white flower, Sporadically grows on rocky slopes flower Feb-April.	Commonly found in the hill slopes, up to 1800-2700 mt.	Rhizome	Locally, leaves are given to cattles as a galactagogue, root decoction is used in kidneystones.
36	Silene conoidea, Linn (Caryophyllaceae) Pyankuri (Tomarya)	An annual herb, flower Pinkish, Fl Feb-March.	Mostly found in spring season.	Whole plant	The fresh juice of whole plant is used in eye diseases. The paste of used in treatment of piles.
37	Smilax aspera, Linn (Liliaceae) Kukurdarya	A prickly Climber.	Commonly found in the forest of sagar, Gangalgaon.	Root	The bark is used in treating skin eruptions and other chronic diseases.

38	<i>Solanum nigrum</i> Linn (solanaceae) Makoi	An erect branching shrub with white flower	Commonly found at Gongalgon, Mandal, Gopeshwar, up to 1200-2000 mt	Whole plant	Poultice is used locally for inflammations and to cure cough.
39	<i>Swertia chirata</i> , Buch-Ham (Gentianaceae) Chiratu	A tall perennial under shrub with purplish blue flower Fl July-Aug	It is mostly found in Tungnath, Rudernath, up to 1000-12000 ft.	Whole plant	The whole plant is used as febrifuge and blood purifier.
40	<i>Trichosanthes palmate</i> Roxb, (Cucurbitaceae) Ilarc	A large perennial climber, with white flower, fruit smooth & red colour.	Commonly found in the Valley of Atri-Ansuya Ashram, Mandalgoun up to 6000-8500 ft	Leaves & root	Abdominal pains are used to relieve leaves juice, the seeds are used as a shortifecient. Root is an ingredient of a paste used on carbuncles.
41	<i>Urtica dioica</i> , Linn (Urticaceae) Kandali	A herb with stinging hairs.	Commonly found at the all valley of hill region, ascending 7000-8000ft.	Leaves	It is also used for Jaundice and constipation.
42	<i>Valeriana hardwicki</i> wall valerianaceae (Samaiya)	An erect aromatic herb with small white flower Fl. March-May	Growing abundantly in moist, shady places, throughout the hill region up to 3000 mt	Root	The paste is used for bright and scaly skin lesions.
43	<i>Viola pilosa</i> , wall	An annual herb with	Commonly found	Whole plant	The decoction of the flowers is for

	(Violaceae) Vanfsa	white blue flower Fl. April-May.	in the all hill region up to 3000 mt.		cough and cold.
44	Woodfordia fruticosa, Linn (Lythraceae) Dhoulu	A large much branched shrub with brilliant scarlet flower. Fl March - June	Mostly found in the rocky place of hill region up to 1800 mt	flower	Flowers are used for making a drink and are also used in dysentery.
45	Zanthoxylum alatum, Roxb (Rutaceae) Timru	A spiny shrub or small tree	Commonly found at Gopeshwar, sayar, up to 1200 mt.	Bark seed	The decoction of the plant gives relief in rheumatic pain. Powdered fruits relieve tooth-ache.

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Local people & Vaidyas.

