Importance of local names of some useful plants in ethnobotanical study

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Plants are commonly known by their local names in every part of the world. These local names play a very important role in ethnobotanical study of a specific tribe or region. Local names given to plants by indigenous people in their local dialects often reflect a broad spectrum of information on their understanding of plants. Most often, the local names are given based on some salient features, e.g. appearance, shape, size, habit, habitat, smell, taste, colour, utility, and other peculiar character, etc of the plants. These practical, meaningful, easily understandable and rememberable local names are disappearing rapidly along with the culture and tradition of the tribal group of our country. Therefore, it must be recorded, preserved and documented before lost forever. In the paper, about 100 plants of Garhwal, Kumaun and Bhoxar area of Uttarakhand have been given in alphabetical order with their family followed by local names including their meaning in English along with detail reason / basis for the naming of the plants.

Keywords: *Bhoxa*, *Garhwali*, *Kumauni*, Ethnobotany, Garhwal, Kumaun, Bhoxar, Etymology, Uttaranchal **IPC Int. Cl.**⁸: A61K36/00, A61P9/14, A61P13/00, A61P13/02, A61P17/00, A61P17/02, A61P19/00, A61P39/00, A61P39/02, A61P39/02

The nomenclature of useful plants is an old and basic human urge. Local plant names are the manifestations of man's long standing association with his green surroundings. Names of plants or animals are of value in avoiding descriptive phrases to refer to objects and render communication easier. This information is often precise and helps infer certain character related details. Plants are generally known by their local names in every part of the world. However, Binomial Latin names for plants are used and accepted internationally in scientific literature. The linguists and anthropologists have provided fascinating examples of hierarchical plant taxonomies in the language of aboriginal or primitive human societies. At first, only few plants of immediate importance received attention of the primitive people and they gave name. The folk nomenclatures are concerned only with locally observed phenomena. The native names for taxa always comprise a segment of everyday vocabulary of a particular language. They are based on criteria, which may differ greatly from people to people, area to area and culture to culture¹. In folk nomenclature, there are no formal rules of the recognition or rejection of taxa, like scientific nomenclature rules.

Most of the communities have a definite system of nomenclature of the forest flora. In tribal communities, the name given to the plants conveyed

their characteristics which were common knowledge. These early naming were practical and determined largely by their culture importance²⁻⁶. Most often, the local names are given based on some salient features e.g. appearance, shape, size, habit, habitat, smell, taste, colour, utility and other peculiar character, etc of the plants. These local names reflect a broad spectrum of information on local uses, ecology, physiology, anatomy, pharmacognosy, chemistry and several other aspects. A local name often describes some characteristics feature of the plant or the plant parts, in which the communities are interested. The descriptive word to denote that character may be different in different languages or dialects and, hence, different names may assign to the same plant in different languages and region.

It is well known fact that most of the knowledge about plants as well as many native local languages are becoming extinct. Therefore, it is urgent and important that these must be preserved and properly documented before the information is lost forever. More than hundred plants from different parts of Uttaranchal are analysed for the origin and etymology of these local names of the plants. Some researchers have emphasized the importance and origin of the local names of plants from different region.

Uttarakhand comprising of 13 districts is bounded in the northwest by Himachal Pradesh, in the North by Tibet, in the East by Nepal and in the South by Uttar Pradesh. The state covers an area of 53,485 km² with a wide elevation ranging from 210 m to 7,817 m. Uttarakhand is inhabited by tribes like *Bhotia, Raji (Ban Rawat), Jaunsari, Tharu* and *Bhoxa*. The inhabitants of Uttaranchal have also developed specific terms for naming the plants. Due to lack of any recognized language, people speak local dialects, called *Garhwali, Kumauni* and *Bhoxa* in Garhwal, Kumaun and Bhoxar, regions, respectively. These dialects are a combination of Hindi, Urdu and Sanskrit words. An attempt has been made to identify the origin of local names. Some interesting aspects of

these qualifying names were noted while working among the *Garhwali*, *Kumauni* and *Bhoxas* of Uttarakhand.

Enumeration

About 100 local names have been analysed etymologically on the basis of their appearance, shape, size, habit, habitat, smell, taste, colour, utility and other peculiar characters. These plants are arranged in alphabetical order with their family followed by the local names with their meaning in English and the etymology of the plant name (Table 1).

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Plant name	Family	Local names & meaning	Etymology
Abrus precatorius Linn.	Fabaceae	Ratti (B)= jeweler's weights	Seeds are used for weighing the jewelry.
Achyranthes aspera Linn.	Amaranthaceae	Adhyaa-jharo & Ulta chadchita (B) = to ward off evil spirits and reflexed bracts.	Plants are used to ward off evil spirits and plants having reflexed bracts.
Aconitum ferox Wall.ex Ser.	Ranunculaceae	Vis(G) = poison	Root acts as poison.
Aconitum hetrophyllum Wall. ex Royle	Ranunculaceae	Atees (G) = poison when consumed in excess dose	The roots act as poison when taken in excess dose.
Acorus calamus Linn.	Araceae	Bach(B) = speak	The roots are given to the victim suffering from speaking problem.
Adiantum capillus-veneris Linn.	Adiantaceae	<i>Kaali- chhadee</i> (B) = black stipes	The stipeses of the plants are usually black in colour.
Adina cordifolia (Roxb.) Benth.& Hook.f. ex Brandis	Rubiaceae	Haldu (B) = Turmeric	The woods are usually yellow colour like turmeric.
Aerva lanata (L.) Juss.	Amaranthaceae	Keero kaa ghas (B) =grass of worm	Plant decoction is used to kill worms in the infected hoof of cattle.
Ageratum conyzoides Linn.	Asteraceae	Fulania (B) = in flowering	Plants remain in flowering in all the season.
Allium auriculatum Kunth	Alliaceae	Farn (G) & Jambu (K) = fry and $J\&K$	Whole plant is dried and used to fry the vegetables and <i>dal</i> . It is mostly found at the height of J&K that is why known as <i>Jambu</i> .
Alternanthera pungens H. B. & K.	Amaranthaceae	Chapdyaa (B) = spreading	Plant is mostly spreaded on the land.
Amaranthes spinosus Linn.	Amaranthaceae	<i>Kantilee chauli</i> (B) = with spines	Plants have many spines.
Andrographis paniculata (Burm.f.) Wall. ex Nees	Acanthaceae	Kaal Megh (B) = black clouds	Stem and leaves are black in colour.
Angelica glauca Edgew.	Apiaceae	Gandren(K) = smell	The roots are contains a specific odour.
Argemone mexicana Linn.	Papaveraceae	Peelee kataiya (B) =yellow with spines	Flowers are yellow; plants are with spines.
Ariseama jacquemontii Bl.	Araceae	Syaapak ghwag (K) = maize of the snake	The fruits are like cob of maize and its spath is like hood of snake.
Arnebia benthamii (Wall.ex G.Don) J.M. Johnston	Boraginaceae	Baal-chhadee (G) = root for hairs	The roots are kept in mustard oil and the red coloured oil is used for better growth of the hair.
Artemisia nilagirica (Clarke.) Pamp.	Asteraceae	Paatee (K) = sacred.	The plants are considered sacred and leaves are used in religious ceremonies.
Arundo donax Linn.	Poaceae	Nalaee (B) = pipe	The culms of the plants are hollow and used as pipe.
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Table 1 -	— List of Etymologic	cal plants followed by local people	in Uttarakhand — Contd
Plant name	Family	Local names & meaning	Etymology
Bacopa monnieri (Linn.) Pennell	Scrophulariaceae	Jal neem (B) = margosa on water	Plants are bitter in taste and grow near the water.
Bambusa arundinacea (Retz.) Willd.	Bambusaceae	<i>Kantela-bans</i> (B) = thorny bamboo	There are several thorns on the culms of the plant.
Barleria cristata Linn.	Acanthaceae	Kaala- bansa (B) = black bansa	The plants are black in colour.
Barringtonia acutangula (Linn.) Geartn.	Barringtoniaceae	Prasut (B) = weakness and fever after delivery	Leaves and bark are given to women suffering from weakness and fever after delivery.
Benincasa hispida(Thunb.) Cogn.	Cucurbitaceae	Petha (B) = name of a sweet	A sweet, <i>Petha</i> is made from the fruits of the plant.
Berberis spp.	Berberidaceae	Kilmoda (G) & Daru haldi (K) = sourly spines and turmeric like pith	Plants are full of spines and leaves are sour in taste. Woods including pith are yellow in colour.
Bergenia ciliata (Haw.) Sternb.	Saxifragaceae	Seel-phoda (G) & Pasan-bhed (K) = stone breaker and stone piercer	Plant roots are used in the treatment of stone in kidney or urinary tract. The plant usually grows on crakes of stones and rocky places.
Betula utilis D.Don	Betulaceae	Bhoj-patra (G)= Letter-paper of King Bhoj	Thin barks are used as letter paper for writing and invitation purposes.
Bischofia javanica Blume	Bischofiaceae	Paniyala (B) = near the water	It usually grows near water.
Blumea lacera (Burm.f.) DC.	Asteraceae	Kukrondha (B) = related to dog.	Leaves are used in the treatment of dog bite.
Boenninghausenia albiflora (Hook.) Meissn.	Rutaceae	<i>Upaniya jhad</i> (K) = bed bug shrub	The leaves are used to kill the bed bug.
Boerhavia diffusa Linn.	Nyctaginaceae	Paththar-chatta (B) =grows on the wall of stones.	Plants often grow on walls of stones.
Broussonetia papyrifera (L.)Vent.	Moraceae	<i>Phool batan</i> (B) = flowers as button	The rounded flowers seem like buttons.
Caesapinia crista Linn.	Caesalpiniaceae	<i>Kantela</i> & <i>Karanjua</i> (B) = fruits with spines	There are several spines on the pods of the plant.
Carissa carandas Linn.	Apocynaceae	Karondha (B) = spines/thorns.	The plant bears several thorns.
Cassia occidentalis Linn.	Caesalpiniaceae	Babaseer(B) = piles.	The leaves are used in the treatment of piles.
Cheilanthes farinosa (Forsk.) Kaulf.	Cheilanthaceae	Chapalee (B) = to imprint	The leaves imprint their impression on any object as the lower surface of the fronds is covered with white powder.
Cissus repanda Vahl	Vitaceae	Jal bel (B) = climber having potable water	Stem oozes potable water, whenever cuts obliquely.
Cocculus hirsutus (Linn.) Diels	Menispermaceae	Jal jamni (B) = coagulate on water	Leaf powder coagulates whenever kept in water.
Crinum defixum ker-Gawl.	Amaryllidaceae	$Kan\ man\ (B) = related\ to\ ear$	The extract of the bulbs is poured in earache.
Cryptolepsis buchanani Roem. & Schult.	Asclepiadaceae	Dudhi (B) = milk	The plant contains milk like latex.
Curculigo orchioides Gaertn.	Hypoxidaceae	Kari musari (B) = black musali	The roots are black in colour.
Cuscuta reflexa Roxb.	Cuscutaceae	Sadak-bel (B) = road sides climber	This parasitic climber grows on shrubs and trees along road side.
Dactylorhiza hatagirea (D.Don) Soo	Orchidaceae	<i>Hattha jadee</i> (G) = hand like roots	The roots are seems as palm with fingers.
Diplanzium esculentum (Retz.) Sw.	Athyriaceae	Linguda (G) = turned-ling	The upper most part of the plant is rounded and circinate.
Diplocyclos palmatus (L.) Jaffrey	Cucurbitaceae	Shiv-lingi (B) = lingum of lord Shiva	An impression of <i>lingum</i> of lord Shiva seems on the seeds of the plant.
<i>Drypetes roxburghii</i> (Wall.) Hurusawa	Euphorbiaceae	<pre>Pitt-mar (B) = to reduce allergic red pimples</pre>	Leaves are used to treat allergic red pimples on the bodies.
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Plant name	Family	Local names & meaning	Etymology
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Eclipta prostrata (Linn.) Linn.	Asteraceae	Kala -bhangra (B) = black Bhangra	The fruits of the plant are black in colour.
Equisetum debile Roxb.	Equisetaceae	Had-jod (B) & Jod-tod (G) = for bone fracture; detachable from joints	Plant paste is applied on fractured bone.
Eranthemum pulchellum Andr.	Acanthaceae	Nili (B) = blue	The plant bears blue flowers.
Eucalyptus citriodora Hook.	Myrtaceae	Safeda (B) = white.	The bark of the plant is white in colour.
Euphorbia spp.	Euphorbiaceae	Dudhi (B) = milk.	All species contain milk like latex.
Flacourtia indica (Burm.f. Merr.	Flacourtiaceae	Kataiya (B) = thorny	The plant bears several thorns.
Fragaria vesca Linn.	Rosaceae	Bhunla (G) = straggling on ground	The plants straggle on the ground.
Fumaria indica (Hassk.) Pugsley	Fumariaceae	Gajar ghas (B) = carrot- grass	The leaves of the plant resemble carrot leaves.
Gloriosa superba Linn.	Liliaceae	Agni-shikha (B) = top alike fire	Flowers are red in colour; looks as fire.
Glycosmis mauritiana Lamk.) Tanaka	Rutaceae	Pilu (B) = yellow	The fruits of the plant are yellow in color
Helicteres isora Linn.	Sterculiaceae	Maroda (B) = spirally twisted	Fruits look like a screw; used in the treatment of griping pain and boils.
Helminthostachys zeylanica Linn.) Hook.	Ophioglossaceae	Ek dandi (B) = single stalk	There is only one stalk in the plant.
Holarrhena antidysenterica Linn.) Wall. ex DC.	Apocynaceae	Indra jau and Dudhi (B) = barley of lord Indra and milk	The seeds are like hordeum and plant contains milk like latex.
chnocarpus frutescens Linn.) R.Br.	Apocynaceae	Dudhi (B) = milk	The plant contains milk like latex.
<i>Ipomea carnea</i> Jacq. subsp. Fistulosa (Mart. ex Choisy) Austin	Convolvulaceae	Besharam / Behaya (B) = shameless	Plant grows any where in moist, marshy a dry places.
Leptodermis lanceolata Wall.	Rubiaceae	Padeda(K) = foul smell	After crushing the leaves it gives foul sm
Leucas lanata Benth.	Lamiaceae	Peeb- sos (K) = pus absorber	Leaves are used for absorbing pus from infected parts of the body.
Lygodium flexuosum (Linn.) Sw.	Lygodiaceae	Kaali sinki (B) = black dot	There are several black sori on the fronds the plant.
Martynia annua Linn.	Martyniaceae	Bagh-nakha (B) = tiger's nail	Fruits tips are hooked as nail of the tiger.
Mimosa pudica Linn.	Mimosaceae	Sharmili (B) = shy	The leaf becomes shy by mere touching.
Mucuna pruriens (Linn.) DC.	Fabaceae	Konch (B) = Irritating hairs	Fruits are covered with several small hair which cause irritation and itching on the body.
Murraya koenigii (Linn.) Spreng.	Rutaceae	Gandhi (B) = smell	The leaf produces a special type of smell after crushing.
Nardostachys grandiflora OC.	Valerianaceae	Jata-mansi (G) = roots with long hairs	The scented roots are covered with long hairs like structure.
Oroxylum indicum (Linn.) Vent.	Bignoniaceae	Ullu ki Phali (B) = owl's fruit	The fruits (pods) are long with winged se
Oxalis corniculata Linn.	Oxalidaceae	Chil-modi (G) = very sour	The leaves are very sour in taste.
Paeonia emodi Wall. ex Royle	Paeoniaceae	Chandra (G) = moon	The flowers are round and white as moon
Panicum antidotale Retz.	Poaceae	Had- jod (B) = bone-healer	The plant is used in the treatment of bone fracture.
Parietaria debilis Forst.	Urticaceae	Chifaw-jadi (K) = sticky/slimy root	Crushed slimy roots are used as soap by women for washing hairs.

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Table 1	— List of Etymologic	cal plants followed by local people	in Uttarakhand — <i>Contd</i>
Plant name	Family	Local names & meaning	Etymology
Passiflora foetida Linn.	Passifloraceae	$Ghud\ saar\ (B) = horse-breath$	Leaves are used in the treatment of breathing problem of horses.
Pedilanthes tithymaloides (Linn.) Poit.	Euphorbiaceae	Nag daun (B) = related to cobra/snakes	Leaves are used as anti-venom for cobra poison.
Phyla nodiflora (Linn.) Greene	Verbenaceae	$Jal\ peepar\ (B) = aquatic$ $Peepal$	The plants are mostly found near water.
Picrorrhiza scrophulariflora Pennell	Scrophulariaceae	Kaduyee (G) = bitter.	The roots are very bitter in taste.
<i>Pithecellobium dulce</i> (Roxb.) Benth.	Mimosaceae	Janglee-jalebee (B) = rounded shape like jalebee	The rounded fruits are seems like a sweet called <i>jalebee</i> .
Pogostemone benghalensis (Burm.f.) Ktze.	Lamiaceae	Masa-pindi (B) = heap of flesh	Leaf paste is used for healing of deep wounds and considered the skin will get normal as earlier.
Porana paniculata Roxb.	Convolvulaceae	Sufed-bel(B) = white climber	The leaves are white in colour.
Potentilla fulgens Wall.ex Hook.	Rosaceae	Bazra danti (G) = strong teeth	Leaves are chewed for strengthening the tooth.
Ranunculus sceleratus Linn.	Ranunculaceae	<i>Jal-dhaniya</i> (G) = aquatic coriander	Leaves resemble with coriander and are found near water.
Rauvolfia serpentina (Linn.) Benth. ex Kurz	Apocynaceae	Sarp-gandha (B) = related to snake	The roots are used in the treatment of snakebite.
Reinwardtia indica Dumort.	Linaceae	Piyunladee (G) = yellow	The flowers are yellow in colour.
Rubus niveus Thunb.	Rosaceae	Kaoo hisaoo (G) = black rubus	Ripen fruits are usually black in colour and eaten by local people.
Sarcostemma scamone (Linn.) Bennet	Asclepiadaceae	Dudh-bakariya (B) = milk of goat.	The leaves are fed to goat for increasing milk quantity.
Saussurea costas (Falc.) Lipsch.	Asteraceae	Kuth(K) = leprosy	The plants are used in the treatment of leprosy.
Saussurea obvallata (DC.) Edgew.	Asteraceae	$Barma\ konu\ (G) = lotus\ of\ lord\ Brahma.$	Flowers seem like lotus and considered sacred; used in worship.
Scoparia dulcis Linn.	Scrophulariaceae	Bicchu-ghas (B) = scorpion- grass	Leaves are used in the treatment of scorpion sting.
Selinum candollii DC.	Apiaceae	Bhut- $keshi$ (K) = ghost's hair.	Long hairs on the roots of the plant are used to ward off the evil spirits.
Sisymbrium irio Linn.	Brassicaceae	Pan-sag (B) = aquatic vegetable	This plant usually grows near water.
Smilax aspara Linn.	Smilacaceae	Kukur-dar (B) = dog's teeth	The hooked spines seem like teeth of dogs.
Solanum nigrum Linn.	Solanaceae	Kaari makoye (B) = black makoi	The ripe fruits are black in colour.
Sphearanthus indicus Linn.	Asteraceae	Gorakh mundi (B) = rounded head.	The fruits (capitulum) seem like rounded head.
<i>Urgenia indica</i> (Roxb.)Kunth.	Liliaceae	Ban- $pyajee$ (G) = wild onion.	The bulbs seem alike onion.
Urtica dioica Linn.	Urticaceae	<i>Kandayi</i> (G) = herb with stinging hair	Plant bears several small white stinging hairs causing irritation like scorpion sting.
Vallaris solanacea (Roth.) Ktze.	Apocynaceae	Dudhi (B) = milk	Plant contains milk like latex.
Vanda tessellata (Roxb.) Hook. ex G.Don	Orchidaceae	$Had\text{-}jod\left(\mathbf{K}\right)$ = bone healer	The plant paste is used in bone fracture.
Verbascum thapsus Linn.	Scrophulariaceae	Ekula veer (G) = solitary brave	The plant usually grows alone.
<i>Vetiveria zizanioides</i> (Linn.) Nash	Poaceae	Seenk (B) = knitting needle	Culms look like knitting needle; used for making baskets.

Table 1	— List of Etymolog	cical plants followed by local people i	in Uttarakhand — <i>Contd</i>
Plant name	Family	Local names & meaning	Etymology
Withania sominifera (Linn.) Dunal	Solanaceae	Ashwa-gandha (G) = horse's smell	The roots smell like horse urine.
Wrightia tomentosa (Roxb.) Roem. & Schult.	Apocynaceae	Dudhi (B) =milk	Plant contains milk like latex.
Zehneria umbellata Thw.	Cucurbitaceae	Gwal-kakadee (G) =cow-herd's cucumber	The ripe red fruits are often eaten by the cowherds.

B = Bhoxa name; G = Garhwali name; K = Kumauni name

Discussion

The primitive people of Uttarakhand have clear cut knowledge about the recognition of some allied species by indicating different local names. So, one can identify these allied species easily without any scientific parameters e.g. Cassia occidentalis Linn. is known as Bhansia Bamar, while C. sophera Linn. is called Bamar. Corchus aestuans Linn. is known as karona, while C. olitorius Linn. is known as Baro Karona. Momordica charantia Linn. is called as karela, while M. dioica Linn. is called as Janglee karela. Ocimum canum Linn. is called as Jangli Tulsi and O. sanctum Linn. is known as Tulsi. Phonenix acaulis Roxb. ex Buch.-Ham. is known as Khajuri while P. sylvestris Roxb. is known as Khajur. Saccharum benghalense Retz. is known as Munj, while S. spontaneum Linn. is called as Kasera. Ziziphus mauritiana Lamk. is known as Beri and Z. nummularia Wt.-Arn. is known as Jhar beri.

Though, local names are not recommended directly for scientific accounts of plants as they lack uniformity and consistency. But it may certainly be considered as a useful tool for search of new useful plants or new uses of known plants. Apart from the utility, the local names may be very useful and easy parameter for scientific identification of the taxa. They render a useful service as a means of reference by local people in a particular area. Efforts should be

made to collect and preserved information on local names especially from tribal and rural areas. Once this information is lost, it may become impossible to get insight into several unknown facts about plants and their names.

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