

Documentation of Ethnomedicinal Knowledge on Plant Resources Used by Baram Community in Arupokhari VDC, Gorkha District, Central Nepal

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Abstract

The present paper highlights 80 species of plants used as medicine by the Baram (Baramu) community of Arupokhari VDC of Gorkha District. These reported plants were used in cough, cold, fever and gastritis, wound, diarrhea and other diseases.

Keywords: Ethno-medicine, Baram community, Arupokhari VDC, Gorkha district

Introduction

Ethno-botanical studies required to document and explore the traditional knowledge hidden in different ethnic group (Manandhar, 1993, Pandey, 2013, Parajuli, 2013). Among the 103 indigenous groups of Nepal, Baram (Baramu) is also one such ethnic group. Baram (or Baramu) is one of the indigenous minority nationalities scattered in different villages in the districts of Gorkha and territories (CBS, 2011). According to their mythology, they call themselves off-springs of what they call five brothers: Surel, Sunuwar, Jirel, Rai (Khambu) and Limbu, and claim to have scattered to the west from the east (Gautam and Thapa Magar, 1994). The Baram people are a Tibeto-Burman ethnic group (Kansakar et al, 2011). The objective of this study is to document the traditional knowledge of Baram community regarding ethno-medicine.

Materials and Methods

This study was conducted in indigenous Baram community at Arupokhari VDC, Gorkha district, Central Nepal during September 2015. This VDC inhabits most common Mountain Sal forest, Chirpine forest and *Schima-Castanopsis* forest at altitude ranges from 500 m asl to 1300 m asl. In the course of study, 8 experienced villagers (5 male and 3 female) were interviewed of age range between 40-80 years old. The plants were identified with the help

of photographs and related literatures (Polunin and Stainton, 1984, Baral and Kurmi, 2006, Jha et al., 2008, Manandhar, 2002, Shrestha, 1998, Shrestha and Shrestha, 2004, Stainton, 1998).

Results and Discussion

Total 80 species of 74 genera belongs to 44 families being used by Baram community as medicine to cure 27 diseases and troubles. Some major families are Moraceae (7 spp.), Asteraceae (6 spp.), Fabaceae (6 spp.), Lamiaceae (4 spp.), Verbenaceae (4 spp.) and others used to cure different diseases. On the basis of life form (habit) of plants 29 herb, 16 shrub, 29 tree and 6 climber species being used from past. Among all, 14 species being using in cough, 9 species in cold, 9 species fever, 9 species gastritis, 8 species in wound, 7 species in diarrhea and so on.

Ethno-medicinal use of plants

The information is arranged in alphabetical order of botanical name followed by family, nepali name, roman name habit and uses.

***Abrus precatorius* L.**, Fabaceae, रतिगेडी / लालगेडी, Ratigedi, Climber

Root directly is used to reduce hotness in stomach due to eating *Capsicum* spp.

***Acorus calamus* L.**, Araceae, बोझो, Bhojo, Herb

Juice of rhizome is drink to cure cough, cold and diarrhea.

Agave americana L., Agavaceae, हात्तीवार / केतुकी, Kettuke, Shrub

Leaves juice is apply to kill worms on wound.

Ageratum conyzoides L., Asteraceae, गन्धे, Gandhe, Herb

Juice of leaves is applied to stop bleeding in cut.

Ageretina adenophora (Spreng.) King & H. Rob., Asteraceae, बनमारा, Banmara, Herb

Juice of leaves is applied to stop bleeding.

Allium sativum L., Amaryllidaceae, लसुन, Lasun, Herb

Bulb is directly eating to reduce gastritis.

Aloe vera (L.) Burm. f., Liliaceae, घिउ कुमारी, Ghiu kumara, Herb

Juice of leaves is applied to cure skin burn by fire.

Ananas comosus (L.) Merr., Bromeliaceae, भूई कटहर, Bhui katahar, Herb

Fruit is directly eating to reduce warmness of body.

Artemisia indica Willd., Asteraceae, तिते पाती, Tite pati, Herb

Juice of leaves is applied to kill human louse, worms and also cure scabies.

Artocarpus heterophyllus Lam., Moraceae, कटहर, Katahar, Tree

Leaves is directly fed cattles to control cough.

Artocarpus lakoocha Wall. ex Roxb., Moraceae, बडहर, Badahar, Tree

Milky latex is applied to cure mumps.

Azadirachta indica A. Juss., Meliaceae, नीम, Neem, Tree

Juice of leaves is eating to cure cough and applied on skin diseases.

Bauhinia variegata L., Fabaceae, कोइरालो, Koiralo, Tree

Juice of bark is eating to cure fever, diarrhea as well as amebic dysentery.

Belamcanda chinensis (L.) Redoute, Iridaceae, तरवारे फूल/खुकुरी धारे, Tarbare phool/ Khukuri dhare, Herb

Decoction of root is eating to cure diarrhea.

Boenninghausenia albiflora (Hook.) Reichenb. ex Meissn., Rutaceae, माखे माउरो/ माउरे भार, Makhe

Mauro/ Maure jhar, Herb

Plant decoction is eating to cure cold and whole plant used for insect repellent.

Bombax ceiba L., Bombacaceae, सिमल, Simal, Tree

Dried flower is directly eating to cure dysentery.

Buddleja paniculata Wall., Buddlejaceae, भिमसेन पाती, Vimsen pati, Tree

Juice of leaves is use to kill fishes.

Callicarpa arborea Roxb., Verbenaceae, गुयालो, Guyalo, Tree

Decoction of bark is eating to cure fever.

Callicarpa macrophylla Vahl., Verbenaceae, दही चाम्ले/ दहीकमला, Dahichamle, Shrub

Decoction of bark as well as root is eating to cure fever, typhoid.

Calotropis gigantea (L.) Dryand., Asclepiadaceae, आँक, Aank, Shrub

Milky juice is applied to cure joint fracture and dried stem is use as smoke in Pinas.

Cannabis sativa L., Cannabaceae, गाँजा, Ganja, Herb

Decoction of leaves is fed to cure diarrhea of goat and other cattles.

Centella asiatica (L.) Urb., Apiaceae, घोडताप्रे, Ghodtapre, Herb

Decoction of plant is eating to cure fever and to reduce warmness of body.

Cheilanthes bicolor (Forssk.) Kaulf., Pteridaceae, रानी सिन्का/ काली सिन्का, Ranisinka, Herb

Mixture of leaf decoction of *Scutellaria discolor*, *Psidium guajava* and *Cheilanthes bicolor* is eating twice a day to cure gastritis troubles.

Chromolaena odorata (L.) King & H.E. Robins., Asteraceae, सेतो बनमारा, Banmara, Shrub

Decoction of leaves is applied to stop bleeding as well as skin ring of cattle.

Cissampelos pariera L., Menispermaceae, गुजर गानो, Gujar gano, Climber

Decoction of rhizome /root is eating to cure gastritis problems.

Citrus aurantifolia (Christ.) Swingle, Rutaceae, कागती, Kagati, Lemon, Tree

Juice of fruit is applied to cure pimple.

Cleistocalyx operculata (Roxb.) Merr. & Perry, Myrtaceae, क्यामुनो, Kyamuno, Tree

Dry leaves is used as smoke to cure cold, Pinas.
***Colebrookea oppositifolia* Sm.**, Lamiaceae, धुसुरे,
Dhusure, Shrub

Juice of young bud is applied to remove leech
from nose of cattle.

***Costus speciosus* (Koenig) Sm.**, Zingiberaceae,
बेतलौरी, Betlauri, Herb

Juice of root is eating to cure fever.

***Cuscuta reflexa* Roxb.**, Convolvulaceae, अकाश बेली,
Akashbeli, Climber

Juice of whole plant is eating to cure jaundice
and applied in bone fracture.

***Dolichus lablab* L.**, Fabaceae, सिमी, Simi, Climber

Juice of leaves is applied in ringworm disease
on skin.

***Drymaria diandra* Blume**, Caryophyllaceae,
अविजालो, Avijalo, Herb

Whole plant is used to cure Pinas, a disease in
which bleeding from nose.

***Erythrina stricta* Roxb.**, Fabaceae, फलेदो, Phaledo,
Tree

Juice of bark is eating to cure diarrhea and fever.

***Euphorbia thymifolia* L.**, Euphorbiaceae, दुधे भार,
Dudhe jhar, Herb

Juice of leaves/sap is applied to stop bleeding.

***Ficus benghalensis* L.**, Moraceae, वर, Bar, Tree

Milky latex is applied to cure mumps.

***Ficus racemosa* L.**, Moraceae, दुम्री, Dumri, Tree

Milky latex is applied to cure mumps.

***Ficus sarmentosa* Buch.-Ham. ex Sm.**, Moraceae,
बेरुलो, Berulo, Tree

Milky latex is applied to cure mumps.

***Ficus semicordata* Buch.-Ham. ex Sm.**, Moraceae,
खन्यू, Khanyu, Tree

Watery juice is eating to decrease warmness of
body and rehydration.

***Inula cappa* (Buch.-Ham. ex D. Don) DC.**,
Asteraceae, गाईतिहारे, Gaitihare, Herb

Juice of leaves is eating to increase appetite and
leaves also used to make 'Marcha', which use to make
alcoholic beverages.

***Justicia adhatoda* L.**, Acanthaceae, असुरो, Asuro/
Vashak, Shrub

Leaves boil in water and drink to cure cough.

Lichens, भयाउ, Lichens, Herb

Powder of whole plant is applied to stop bleeding
in cut.

***Lyonia ovalifolia* (Wall.) Drude**, Ericaceae, अंगेरी,
Angeri, Tree

Juice of leaves/bud is applied to control scabies.

***Maesa macrophylla* (Wall.) DC.**, Myrsinaceae, भगटे,
Vogate, Shrub

Juice of leaves is used to fish poisoning.

***Millettia extensa* Benth.**, Fabaceae, गाउजो, Gaujo,
Shrub

Juice of root applied to control scabies.

***Mimosa pudica* L.**, Fabaceae, लज्जावती, Lajjawati,
Herb

Juice of leaves is eating to cure jundice, reduce
warmness of body.

***Morus alba* L.**, Moraceae, किम्बु, Kimbu, Tree

Latex is used in anthe-helminthic for cattle.

***Musa paradisiaca* L.**, Musaceae, केरा, Kera, Herb

Juice of young bud of flower is eating to cure
jundice.

***Mussaenda macrophylla* Wall.**, Rubiaceae, धोबिनी,
Dhobini, Shrub

Juice of root is eating to treat typhoid.

***Myrica esculenta* Buch.-Ham. ex D. Don**,
Myricaceae, काफल, Kaphal, Tree

Juice of leaves applied to control toothache.

***Nicotiana tabacum* L.**, Solanaceae, सुर्ती, Surti, Herb
Juice of leaves applied to kill and remove leeches
from the nose of cattle.

***Nyctanthes arbor-tristis* L.**, Oleaceae, पारिजात,
Parijat, Shrub

Juice of leaves is drink to cure cough.

***Ocimum sanctum* L.**, Lamiaceae, तुलसी, Tulasi,
Herb

Leaves boils in water and drink to cure fever,
cough, cold.

***Oroxylum indicum* (L.) Kurz**, Bignoniaceae, टटेलो,
Tatelo, Tree

Decoction of bark is drink to cure jundice, seed
eat in fever and paste of bark applied in wound.

***Osbeckia nepalensis* Hook.**, Melastomaceae, सेतो
चुल्सी, Seto chulsi, Shrub

Leaves boils in water and drink to cure fever.

***Phyllanthus emblica* L.**, Euphorbiaceae, अमला, Amala, Tree

Fruit is eat to cure cold and cough.

***Pinus roxburghii* Sarg.**, Pinaceae, सल्ला, Khotte salla, Tree

Resin is applied to cure mumps.

***Piper longum* L.**, Piperaceae, पिपला, Pipla, Climber

Fruit is directly eating to cure cold and cough.

***Pogostemon benghalensis* (Brum. f.) Kuntze**, Lamiaceae, रुदिलो, Rudilo, Herb

Decoction of leaves use to cure cold and cough.

***Premna latifolia* L.**, Verbenaceae, गिन्नेरी, Ginneri, Tree

Juice of bark is drink to reduce gastritis problem.

***Prunus persica* (L.) Batsch.**, Rosaceae, आरु, Aaru, Tree

Juice of young bud is applied to kill worms on wound.

***Psidium guajava* L.**, Myrtaceae, अम्बा, Amba, Tree

Juice mixture of leaves of *Psidium guajava*, *Scutellaria discolor* and *Cheilanthes bicolor* is drink twice a day to cure gastritis and Bark decoction use to cure diarrhea.

***Rhododendron arboreum* Sm.**, Ericaceae, लाली गुराँस, Laligurans, Tree

Flower is directly eating to control diarrhea.

***Rubus ellipticus* Sm.**, Rosaceae, ऐसेलु, Aiselu, Shrub

Juice of root is drink to cure gastric and young bud used in stomach pain.

***Saccharum spontaneum* L.**, Poaceae, काँस, Kans, Herb

Root paste is directly applied to remove helminths of cattle.

***Sapium inisgne* (Royle) Benth.ex Hook.f.**, Euphorbiaceae, खिरो, Khirro, Tree

Milky latex is used in fish poisoning.

***Schima wallichii* (DC.) Korth.**, Theaceae, चिलाउने, Chilaune, Tree

Juice of bark is used in fish poisoning as well as drink in gastritis problem.

***Scutellaria discolor* Colebr.**, Lamiaceae, रतपते, Ratopate, Herb

Juice mixture of leaves of *Scutellaria discolor*, *Psidium guajava* and *Cheilanthes bicolor* is drink twice a day to cure gastritis. Root decoction is drink

to cure fever.

***Solanum virginianum* L.**, Solanaceae, कण्टकारी, Kanthakari, Herb

Dry fruit is used as smoke in toothache.

***Spermaceoce latifolia* Aubl.**, Rubiaceae, कुनेभार, Kune jhar, Herb

Juice of whole plant is applied to cure wound.

***Spilanthes paniculata* Wall.ex DC.**, Asteraceae, मरौटी, Marauti, Herb

Flower is applied to control toothache and stomach pain due to cold.

***Stephania glandulifera* Miers**, Menispermaceae, बाटुलपाते, Batulpate, Climber

Root juice is drink to cure cough.

***Syzygium cumini* (L.) Skeels**, Myrtaceae, जामुना, Jamuna, Tree

Juice of bark is drink to cure dysentery.

***Tectaria macrodonta* (Fee) C.Ch.**, Aspidiaceae, काली निउरो, Kali niuro, Herb

Root juice is drink to cure dysentery.

***Terminalia bellirica* (Gaertn.) Roxb.**, Combretaceae, बर्रो, Barro, Tree

Fruit is directly eating to cure cold and cough.

***Terminalia chebula* Retz.**, Combretaceae, हर्रो, Harro, Tree

Fruit is directly eating to cure cold and cough.

***Urtica dioica* L.**, Urticaceae, सिस्तु, Sisno, Herb

Leaves paste is use to make bandage in joint fracture/breakage.

***Vitex negundo* L.**, Verbenaceae, सिमाली, Simali, Shrub

Juice of leaves is used to cure cough and Pinas.

***Woodfordia fruticosa* (L.) Kurz**, Lythraceae, धैयारो, Dhayero, Shrub

Flower is directly eating to cure dysentery.

***Zanthoxylum armatum* DC.**, Rutaceae, टिमुर, Timur, Shrub

Fruit is directly applied to cure toothache.

***Zingiber officinale* (Willd.) Roscoe**, Zingiberaceae, अदुवा, Aduwa, Herb

Rhizome is directly eat to cure cold and cough.

Herbal plants are used in the form of juice, decoction, paste and also use directly by chewing. The most common cold and cough problem were treated by

using some plants like *Phyllanthus emblica*, *Pogostemon benghalensis*, *Terminalia bellirica*, *Terminalia chebula*, *Zingiber officinale*, *Acorus calamus* and *Ocimum sanctum*. Similarly, *Cheilanthes bicolor*, *Allium sativum*, *Cissampelos pariera*, *Osbeckia nepalensis*, *Premna latifolia*, *Scutellaria discolor* and *Rubus ellipticus* were used to cure gastritis. Most of the milky latex bearing plants (*Artocarpus lakoocha*, *Ficus benghalensis*, *Ficus racemosa*, *Ficus sarmentosa*) used to cure mumps problem. Only two species *Mussaenda macrophylla* and *Callicarpa macrophylla* are used to treat typhoid disease.

Conclusion

The Baram people of Gorkha district Central Nepal possess rich ethno-medicinal knowledge and practiced several species of plants to cure different diseases and health troubles. The globalization and modernization creating problem to conserve the Baram language as well as traditional practice to use medicinal plants. Documentation as well as bio-prospecting and patenting is very important to provide fair share of benefit to indigenous people.

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