ETHNOPHARMACOLOGICAL STUDY OF THE PHILIPPINE ETHNOLINGUISTIC GROUPS: THE BUGKALOT PEOPLE OF TALBEC, DUPAX DEL SUR, NUEVA VIZCAYA

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ABSTRACT

An ethnopharmacological study of the Bugkalot people in Barangay Talbec, Dupax del Sur, Nueva Vizcaya, Philippines was conducted during the year 1996. The study included the documentation of the ethnopharmacological knowledge and indigenous healing practices of, and photodocumentation and collection of voucher specimens of plants and other natural products used by the Bugkalot people. Information was gathered from 6 healers and elders. A total of 55 plants were documented. Documentation of herbal plants included the local names, the therapeutic indications, the plant parts used, the method of preparation and the direction for use. The plants were identified by their scientific names, where applicable.

Thirteen (13) plants were reportedly used for urinary problems, 10 for wounds and 6 for stomach ache, among others. Many of the medicinal plants used by the Bugkalots were noted to be known among lowlanders. The study was not able to find specimen vouchers for twenty three (23) plants despite repeated visits to different forest sites, underscoring the need to conserve the forests which provide the Bugkalot people their food, water, shelter, medicine, economic livelihood, spiritual refuge and home.

INTRODUCTION

The Philippines is home to about 13 million indigenous peoples belonging to more than 130 distinct ethnolinguistic groups. Each ethnolinguistic group generally has a rich tradition of practices, including those which refer to healing of the sick. Our indigenous peoples, mostly living in the mountains or their fringes, have depended mostly on plants and other natural products from the forest to treat their sick. The threat of forest denudation, coupled by the onslaught of lowland mainstream culture, may result in the loss of the healing traditions of our indigenous peoples.

Few studies have been conducted to document the ethnopharmacological knowledge and healing practices of our people. Madulid and others reported 46 plants used by the Ati tribe in Nagpana, Iloilo, Panay Island (Madulid et al, 1990).

The Complementary and Traditional Medicine Study Group of the National Institutes of Health, University of the Philippines Manila with assistance from Philippine Institute for Traditional and Alternative Health Care in the series of studies were able to document the ethnopharmacological knowledge and healing practices of the following ethnolinguistic groups: the Isnag, Kalinga, Ifugao, Kankana-ey, and Ibaloi peoples of the Cordillera; the Pala'wan, Batak and Tagbanua peoples of Palawan; and the Ata Manobo, Bagobo, Mansaka, Mandaya and Talaingod peoples of Davao.

We recognized the need to document, and hopefully preserve, the beneficial healing traditions of our indigenous peoples. In addition, we recognized that the domain of our indigenous peoples is a rich source of potentially useful pharmacologic agents.

This study documented the ethnopharmacological knowledge of the Bugkalots in Talbec, Dupax del Sur, Nueva Vizcaya. The study, likewise, addressed the need for long-term, sustained advocacy to help preserve the ancestral homeland of the bugkalot people even as we rendered certain urgent health services that needed to be done for the Bugkalot communities covered by this study.

METHODOLOGY

Selection of the study area

A full-time research assistant did the essential social preparation of the area. The study site was chosen based on the following criteria:

- Community is reported to actively practice their traditions, ie, presence of traditional healers
- Community living near the forest
- Security is not a problem in the community
- Community accessible to reasonable means of transportation

Two communities were visited for the study: one was in Nagtipunan, Quirino and the second was in Talbec, Dupax del Sur, Nueva Vizcaya.

Contact building was first conducted among the mayors of the different municipalities where Bugkalots were located. The objectives of the study were presented to the members of the health committee of the Local Government Unit and selected Bugkalots who were also members of the Sangguniang Bayan. Basing on the customary practices of the Bugkalots, the group suggested that a consultation with Begenget (elders of the community) was necessary for the approval of the conduct of the study. A series of consultations was then conducted with the Begengets in communities targeted for the study.

Though all communities agreed to the conduct of the study, Barangay Talbec was chosen based on the criteria set by the study.

The Barangay Leader of the area signed a Prior Informed Consent (PIC) allowing conduct of the study.

Gathering of data

A research assistant lived and integrated with the community for an aggregate period of 6 months. During the time, data were gathered utilizing participants' observation, survey, focus group discussion and interview using a pre-tested interview guide.

The main data consisted of the local name of the plant, the medicinal uses, the plant part used, the method of preparation and the direction for use. Methods of gathering and storing, where available, were also noted.

Specimen vouchers were found both in the community and in the forest. A tour of and collection of plants found in the forest was done during the time where healers or the *Begenget* went to for hunting and rattan gathering.

Four specimen vouchers for each plant were prepared and tagged according to the method of the National Museum. Identification was done by a botanist from the University of the Philippines Diliman Herbarium.

Verification of gathered data was done after it was encoded or written. The informants utilizing one on one consultation and focus group discussion validated the data.

Secondary data were also obtained from the barangay and municipal officers.

Informants

Informants were selected based on their reputation of active practice of the traditional healing arts in the community. Six (6) healers served as key informants during the study. These healers were the remaining keepers of the healing knowledge of Bugkalots in the area. Some of them were solely herbalist while others were at the same time birth attendants.

RESULTS

Location of the study

The main study site was Barangay Talbec in Dupax del Sur, Nueva Vizcaya. It is 48 kilometers from the *poblacion*. From Manila, it may be reached passing through San Jose City and Caranglan, Nueva Ecija. The total land area is 12.22 square km, mostly mountainous (80%) and hill (15%). Population is 296, with 63 households. Eighty five percent (85%) of the total population are Bugkalots.

The Bugkalot People

The Bugkalot people are popularly known as Ilongots. The word "Ilongot" came from "i" a prefix denoting people and "ngongot" meaning forest. The term Ilongot simply means "people from the forest". The term was coined by lowlanders. The Ilongots are indeed people from the forest. Ilongot histories evolved in the forest of Sierra Madre and Caraballo mountains. Early reports referred to them as Italon, Abaka and Ibilao.

Today, they prefer to be called Bugkalot, a self-designated term by the people themselves.

For centuries the Ilongots made a distinctive mark in the history of colonization. From the Spanish era until the invasion of the Japanese, the Bugkalots stood bravely against the attempt of colonizers to penetrate their villages.

The Bugkalots were famous for their head hunting practices. Perhaps among many indigenous groups who practiced head hunting, the Bugkalots were the last to abandon the practice of head hunting. The last time that headhunting was reported to be done by the Ilongots was in 1969.

Historians believed that, headhunting was not only a ritual that proved manhood but a cultural practice that protected Bugkalots from foreign penetration.

The Bugkalots were barely penetrated during the Spanish era. Though there were some who were lured to lowland missions, most of them were dissuaded by their more ethnocentric fellow Bugkalots from assimilation. Missions were reported to be abandoned because many were always subject to attack by these people.

Even during the American time, the Bugkalots remained untouched and unpacified as testified by the murder of William Jones, an ethnologist, in 1909. American colonizers described the Bugkalots as fierce and wild.

Rosaldo noted that the history of the people during peace time was marked by shifts in population and movement. Movement was not motivated by their inter tribal feuds but rather the effect of lowland disorder, such as the revolution in 1890,early 1900, and the insurgency of the HUKs in 1950.

In the 1960s peoples' lives gradually changed. Other neighboring indigenous groups such as the Ibalois and the Ifugaos began to penetrate the Bugkalot people. They

were not spared from the arrival of the New Tribal Mission, a Protestant group that did evangelization work among the indigenous people. The coming of this church group marked the end of the headhunting practices of the people.

Martial Law in the 1970s contributed a remarkable change in the traditional society of the people. Schools were built and political groups were organized.

Today, majority of the Bugkalots are christianized and assimilated. The influx of lowlanders in their territories contributed to the gradual extinction of their culture. The appearance, clothing and even materials used in building houses manifested assimilation and creeping loss of traditions.

As forest dwellers, the Bugkalots subsist in hunting and gathering. Today, young Bugkalots still hunt for wild boars, deer and birds. Dogs are considered partners in hunting activities. To those who live near the river, catching fish with the arrow is still considered as one of the sources of food. Other river products include the following: *kadezap* (referred as the cockroach of the rivers), *kanit* (worm of the river), *iget* (eel), *beyek* (*biya*), *alaken* (frogs), *tak-kang* (crabs), *nuto* (snails), *guddong* (*karpa*), *tilapia* and *kulanip* (shrimps).

Swidden farming is one of the major economic activities of the people. They clear a portion of the forest and cultivate rice for a particular season. Whoever clear and cultivate the area owns the land. People are not conscious about land title.

The migration of the Ifugaos influenced the economic activity of some Bugkalots. Some of them are now planting cash crops such as pechay, *gepang* (ginger), cabbage, sweet peas, pineapple, beans and even fruit tress. Products are sold to lowlanders. *Olangkeyo* (cassava), *ola* (sweet potatoes), *langka* (jackfruit), *onat* (sugar cane) are planted for home consumption. The land that they are now tilling are part of their ancestral land.

The present generation of Bugkalots recognize the importance of education. Parents are working hard to send their children to school to pursue college education.

The Bugkalots are known to be a "people with one language", however each group is distinct from the other according to kinship and proximity of their dwelling place. There are no descent groups.

According to Michelle Rosaldo, the Bugkalots are described into various *Begtan*-"timeless and discreet collections of related persons who share an origin from unknown ancestors, common ancestors, who live together "downstream, in the lowland, "on islands", "near mountains" - in short, in some environment form which the *begtan t*ake its name" As the largest unit of Bugkalots social system, *begtans* are composed of persons who choose to reckon their identity through either parents.

Begtans are categorized in three ways. One, they designate members as legitimately claimed through filiation. Second, all people who lived in an area dominated by a particular Begtan in a given time. And the third, designate the area where people reside. Mostly people identify themselves not according to their roots but to their histories of living together. Collective identity is not based on descent but rather the

time they have spent together. Most often, members of the *Begtan* carry a single family name.

Most marriages in a *Begtan* are endogamous. Marriages are also monogamous and enduring. Divorce was also practiced and allowed in some cases. Once married, the man lives with wife's parents. Husbands are forbidden to call their parents in law by their names. When the wife's parent gets old, they stay with the youngest married daughter. At this point, the husband now assumes leadership of the family.

Healing practices

Like other indigenous groups, health is defined differently from the mainstream medicine. One is healthy when s/he is still able to do her/his economic task. Illnesses are caused by malevolent spirits called the *agimang*. The *agimang* dwells in the forest (*gongot*), trees, river (*pi-nget*) and farm (*eoma*). The *enpapagak* or the indigenous healer were responsible in driving malevolent spirits away from the sick.

The *enpapaanak* or the birth attendant was another specialization of women healers in the community.

The *enpapaanak* (birth attendant) and the *tezab* (person who does fundal push during delivery) assist pregnant women during delivery. During delivery, pregnant mothers assume either the squatting or kneeling position. Legs apart, the hands were rested on the floor. The *enpapaanak* catches the baby during delivery. The *enpapaanak* wipes the head of the baby and cord cutting is done only upon the expulsion of the *inabong* (placenta). *Adomi* plant was used in tying the severed umbilical cord.

Gepang (ginger) and bayabat (guava) are used as vaginal wash after delivery. The mother is also asked to drink gepang decoction after giving birth. Mothers are not forbidden to take a bath after giving birth. Decoction of *inamo* and *lazona* leaves are used during the first postpartum bath. After three days, mothers may now resume their routine work at home and in the farm.

A newborn is usually bathed with *lazona* and *kamoletlet* decoction. This is done to prevent darkening of the skin.

First solid foods are only introduced when babies start to crawl.

Circumcision or *laksyento* is done when boys are ready for the rites. The *Begenget* performs the circumcision utilizing the traditional method.

Materia medica of the Bugkalots

Fifty five plants were identified as medicinal by the Bugkalots (See Table 1). The plant preparation were either used externally or taken by mouth.

The most frequently cited indication of the medicinal plants was for urinary problems; thirteen plants were cited to be used for problems such difficult urination, blood in the urine and kidney stone. Ten plants were cited to be used for wounds (See Table 2).

Table 1.List of Medicinal Plants commonly used by the Bugkalots of Talbec, Dupax del Sur, Nueva Vizcaya

Family:

Local name: Bulinangan

Medicinal Uses	Plant parts used	Preparation	Direction for use
Wounds	Leaves	Pound leaves until	Wash hands. Use
(Tuge't)		juice is extracted.	pounded leaves as
			poultice on the
			affected area

Scientific name: Manihot esculenta Cranz

Family: Euphorbiaceae

Local name: Olangkeyo (Bugkalot), Kamoteng kahoy (Tagalog)

Medicinal Uses	Plant parts used	Preparation	Direction for use
Wounds	Roots or tuber	Scrape plant part	Wash hands. Apply
(Tuge't)		until juice is	scraped plant part
		extracted.	on the affected area
			to stop bleeding.

Scientific name:

Family:

Local name: Gine'se; geten

Medicinal Uses	Plant parts used	Preparation	Direction for use
Wounds	Vine	Scrape bark. Wrap	Apply juice on
(Tuge't)		in a clean cloth, add	affected area.
		a few drops of water	
		and squeeze to	
		extract juice.	

Scientific name: Mikania cordata

Family: Compositae Local name: *Dug-ga*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Wounds	Leaves	Pound leaves. Wrap	Wash wounds.
(Tuge't)		in a clean cloth and	Apply juice on the
		squeeze to extract	affected area.
		juice.	
	Leaves of the	Mix all plant	Apply juice extract
	following:	ingredients and	on the affected
	Dug-ga	pound to extract	area,
	Aymbongabon	juice.	
	Butalangan		
	Kalabangan		
	Bark of <i>Adewe</i>		

Family: Local name: *But'ngog*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Wounds	Roots or young	Pull vine from the	Apply juice extract
(Tuge't)	leaves	ground. Pound	on the affected
		plant ingredient to	area.
		extract juice.	

Scientific name: Vermonia vidalii Merr

Family: Compositae Local name: Adeve'y

Medicinal Uses	Plant parts used	Preparation	Direction for use
Wounds	Leaves	Pound young	Apply juice extract
(Tuge't)		leaves. Wrap in a	on the affected
		clean cloth until	area.
		juice is extracted.	
Foreign body on	Leaves or bark	Pound leaves to	Drop juice extract
the eye		extract juice.	on the affected eye.
(Napsit)			

Scientific name: *Mimosa pudica* Linn. Family: Leguminosae

Local name: *Kalupe'pet*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Difficulty and	Roots	Wash an ample	Drink decoction
urination, painful		amount of roots.	every now and then
urination		Squeeze to extract	until symptoms
(Maboboladen)		juice. Add ample	disappear.
		amount of water	
		and boil for a few	
		minutes.	
Pus in the urine	Roots of	Boil roots in an	Drink decoction as
(Ampepenage'totan)	Kalupe'pet	ample amount of	tolerated.
	Roots of Inamo	water until	
	Roots of <i>Aysit</i>	decoction tastes	
		bitter.	
Amenorrhea	Roots	Boil roots in an	Drink decoction
(Avan di me'degong)		ample amount of	
		water for a few	Contraindicated to
		minutes.	pregnant women.
Scabies	Roots	Boil roots in	Wash affected area
(Gadot)		ample amount of	using the decoction.
		water.`	

Family:

Local name: Getagete

Medicinal Uses	Plant parts used	Preparation	Direction for use
Toothache	Roots and leaves	Wash plant	Chew roots and
(Me-eebot)		ingredient	leaves using the
			affected tooth.

Scientific name:

Family:

Local name: Talipangpang

Medicinal Uses	Plant parts used	Preparation	Direction for use
High fever, chilling,	Leaves	Boil an ample	Steam the patient
commonly called by		amount of leaves in	using the
the lowlanders as		an ample amount of	decoction. Do this
Malaria		water.	once.
(Mapopogangan)			

Scientific name:

Family:

Local name: Biaw (Bugkalot), Runo (Ilocano)

Medicinal Uses	Plant parts used	Preparation	Direction for use
Headache	Young leaves	Pound leaves to	Rub juice extract
(E'n-agte'ng)		extract juice and	on the forehead
		add lime powder.	(from the temple to
Stomach ache			the center)
(Kinapatan)			

Scientific name:

Family:

Local name: Adiew (Bugkalot), Pine tree

Medicinal Uses	Plant parts used	Preparation	Direction for use
Joint pains	Roots	Scrape roots.	Use as poultice.
(Madedepe'zow)			

Scientific name:

Family:

Local name: Dempugan

Medicinal Uses	Plant parts used	Preparation	Direction for use
High fever, chilling,	Leaves	Wash plant	Tie vine on the
commonly called by		ingredient.	waist.
the lowlanders as			
malaria			
(Mapopogangan)			

Scientific name: Momordica charantia

Family:

Local name: *Apalya* (Bugkalot), *Ampalaya* (Tagalog)

Medicinal Uses	Plant parts used	Preparation	Direction for use
Colic (especially	Leaves	Pound leaves to	Give newborn a
for newborn)		extract juice.	few drops of juice
			before introducing
			breast milk.

Scientific name: Zingiber officinale

Family:

Local name: Ge-pang (Bugkalot), Luya (Tagalog)

Medicinal Uses	Plant parts used	Preparation	Direction for use
Postpartum drink	Rhizomes	Boil rhizomes in an ample amount of water for a few minutes.	Drink decoction.
Fever (Mepe'pe'gengan)	Rhizomes	Pound and squeeze to extract juice.	Apply juice extract to all parts of the body.

Scientific name:

Family:

Local name: Nadiya (Bugkalot), Narra (Tagalog, English)

Medicinal Uses	Plant parts used	Preparation	Direction for use
Mouth sores	Sap	Get sap from the	Rub sap on the
(Dilat)		plant.	affected part of the
			mouth.

Scientific name:

Family:

Local name: Giyanget

Medicinal Uses	Plant parts used	Preparation	Direction for use
Headache (En'agteng)	Leaves	Pound leaves until juice is extracted.	Use juice extract in massaging the head.

Family: Local name: *Tuwaw*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Difficulty and	Woody part of the	Scrape plant	Drink infusion.
painful urination	plant	ingredient, soak in	
(Maboboladen)		an ample amount of	
	Woody part of the	water until infusion	Contraindicated to
Constipation	Pan-naw	tastes bitter.	pregnant women.
Stomache ache	Bark	Scrape bark, soak	
(Kinapatan)		in an ample amount	
		of water until	
		infusion attain a	
		yellowish	
		coloration.	

Scientific name:

Family:

Local name: Pan-naw

Medicinal Uses	Plant parts used	Preparation	Direction for use
Difficulty and	Woody part of the	Scrape plant	Drink infusion.
painful urination		ingredient, soak in	
(Maboboladen)		an ample amount of	
	Woody part of the	water until infusion	Contraindicated to
Constipation	Tuwaw	tastes bitter	pregnant women

Scientific name: Blumea balsamifera

Family:

Local name: *Inamo* (Bugkalot), *Sambong* (Tagalog)

Medicinal Uses	Plant parts used	Preparation	Direction for use
Pus in the urine	Roots of Inamo	Boil plant	Drink decoction.
(Ampepenage'totan)	Roots of	ingredients in an	May be taken as
	Kalupe'pet	ample amount of	tolerated.
	Roots of <i>Aysit</i>	water until	
		decoction tastes	Contraindicated to
		bitter or will attain	pregnant women. It
		yellowish	can cause abortion.
		coloration.	
Stomach ache	Whole plant	Heat over a low	Rub juice extract on
(Kinapatan)		fire.	the abdominal area.
		Squeeze to extract	
		juice.	

Family: Local name: *Aysit*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Blood in the urine	Roots of Atisek	Boil an ample	Drink decoction
(Ampepenage'totan)	Roots of Inamo	amount of plant	as tolerated. Do
	Roots of	ingredients in an	this until
	Kalupe'pe't	ample amount of	symptoms
		water until	disappear.
		decoction tastes	
		bitter.	

Scientific name:

Family:

Local name: Bogiew

Medicinal Uses	Plant parts used	Preparation	Direction for use
Blood in the urine	Leaves of <i>Bogiew</i>	Heat plant	Rub and apply as
(Ampepenage'totan)	Leaves of	ingredient over a	poultice on the
	Bayatbat	low fire. Put	abdominal area,
	Leaves of	coconut oil on the	
	Guyabana	heated plant.	

Scientific name: Psidium guajava

Family:

Local name: Bayatbat (Bugklalot), Bayabas (Tagalog)

Medicinal Uses	Plant parts used	Preparation	Direction for use
Difficulty and	Leaves of Bayatbat	Heat plant	Rub and apply as
painful urination	Leaves of <i>Bogiew</i>	ingredient over a	poultice on the
(Maboboladen)	Leaves of	low fire. Put	abdominal area
	Guyabana	coconut oil on the	
Constipation		heated plant.	

Scientific name:

Family:

Local name: Guayabana

Medicinal Uses	Plant parts used	Preparation	Direction for use
Blood in the urine	Leaves of	Heat plant	Rub and apply as
(Ampepenage'totan)	Guyabana	ingredient over a	poultice on the
	Leaves of	low fire. Put	abdominal area
	Bayatbat	coconut oil on the	
	Leaves of <i>Bogiew</i>	heated plant.	
		_	

Family:
Local name: Ageteve'n

Medicinal Uses	Plant parts used	Preparation	Direction for use
Cough	Leaves	Heat leaves over a	Rub on the neck
(Ok-ok)		low fire at apply	area.
		coconut oil on the	
		heated leaves.	

Scientific name:

Family:

Local name: Adewe

Medicinal Uses	Plant parts used	Preparation	Direction for use
Wound	Young leaves	Pound leaves to	Apply juice extract
(Tuge't)		extract juice.	on the wound.
	Bark of Adewe	Pound leaves and	Apply juice extract
	Leaves of the	bark to extract	on the wound.
	following:	juice.	
	Aymbongabon		
	Butalangan		
	Dug-ga		
	Kalabangan		
Foreign body on	Young leaves	Pound leaves to	Drop juice extract
the eyes		extract juice.	on the affected
(Nap-sit)			eye.
Foreign body on	Young leaves or	Wrap plant in a	Put 3 drops of the
the eyes	bark of <i>Adewe</i> ,	clean cloth.	mixture on the
(Nap-sit)	Anayop, Nag-gi	Squeeze to extract	affected eye. Do
Punctured eyes		juice. Add a few	this 3 x a day.
(Benmoseng)		drop of breast milk	
		(optional).	

Scientific name:

Family:

Local name: Balugan Denom

Medicinal Uses	Plant parts used	Preparation	Direction for use
Otitis Media	Young leaves and	Pound leaves to	Put a few drops of
(Nantalo)	roots	extract juice.	juice extract on the affected ear.

Family:
Local name: Aymbongabon

Medicinal Uses	Plant parts used	Preparation	Direction for use
Wound	Leaves of the	Pound leaves and	Apply juice extract
(Tuge't)	following:	bark to extract	on the wound.
	Aymbongabon	juice.	
	Butalangan		
	Dug-ga		
	Kalabangan		
	Bark of Adewe		
Gunshot wound	Leaves	Pound leaves to	Apply juice extract
(Tuge't ng baril)		mextract juice.	on the wounds.

Scientific name:

Family:

Local name: Butalangan

Medicinal Uses	Plant parts used	Preparation	Direction for use
Wound	Leaves of the	Pound leaves and	Apply juice extract
(Tuge't)	following:	bark to extract	on the wound.
	Butalangan	juice.	
	Aymbongabon		
	Dug-ga		
	Kalabangan		
	Bark of Adewe		

Scientific name:

Family:

Local name: Kalabangan

Medicinal Uses	Plant parts used	Preparation	Direction for use
Wound	Leaves of the	Pound leaves and	Apply juice extract
(Tuge't)	following:	bark to extract	on the wound.
	Kalabangan	juice.	
	Aymbongabon		
	Butalangan		
	Dug-ga		
	Bark of <i>Adewe</i>		

Scientific name:

Family:

Local name: Anayop

Medicinal Uses	Plant parts used	Preparation	Direction for use
Foreign body on	Young leaves or	Wrap plant in a	Put 3 drops of the
the eyes	bark of Anayop,	clean cloth.	mixture on the
(Nap-sit)	Adewe,Nag-gi	Squeeze to extract	affected eye. Do
Punctured eyes		juice. Add a few	this 3 x a day.
(Benmoseng)		drop of breast milk	
		(optional).	

Family: Local name: *Pag*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Falling Hair	Whole plant	Pound plant	Apply juice extract
(Matetak-dot)	except the roots.	ingredient to extract	on the scalp. Do
		juice.	not rinse.

Scientific name:

Family:

Local name: Taday (Bugkalot), Salay (Tagalog), Lemon Grass

Medicinal Uses	Plant parts used	Preparation	Direction for use
Falling Hair	Whole plant	Pound plant	Apply juice extract
(Matetak-dot)	except the roots.	ingredient to extract	on the scalp. Do
		juice.	not rinse.
Kidney stones	Whole plant.	Boil plant in an	Drink decoction,
(Pantat)		ample amount of	
		water for a few	
		minutes.	

Scientific name:

Family:

Local name: Tak-deng

Medicinal Uses	Plant parts used	Preparation	Direction for use
Nose bleeding	Whole plant	Boil plant in 2-3	Drink the
(Mamamayongbong)	including roots.	glasses of water until the decoction tastes bitter.	decoction 2-3 x a day.

Scientific name:

Family:

Local name: Pok-kot

Medicinal Uses	Plant parts used	Preparation	Direction for use
Diarrhea	Roots	Boil roots in 2-3	Drink decoction 3
(Unlo-yot)		glasses of water	x a day.
		until half of	
		decoction is left.	
Amenorrhea	Roots	Boil roots in 2-3	Drink decoction 3
		glasses of water	x a day
		until half of	
		decoction is left	

Family: Local name: *Kad-dew*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Ringworn (Gu-lad)	Leaves	Pound leaves and squeeze to extract juice.	Apply juice extract on the affected area.

Scientific name:

Family:

Local name: Nau-ngonoy

Medicinal Uses	Plant parts used	Preparation	Direction for use
Difficulty in urination (Maboboladen)	Bark	Scrape bark and squeeze to extract juice.	Use juice extract to massage the abdomen.
		Boil bark in an ample amount of water in a few minutes.	Drink a glass of decoction 3 x a day.

Scientific name:

Family:
Local name: *Amoletlet*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Postpartum drink	Leaves	Boil leaves in an	Use decoction in
(Matetak-dot)		ample amount of	bathing.
		water for a few	
		minutes.	

Scientific name:

Family:

Local name: Ate'wen

Medicinal Uses	Plant parts used	Preparation	Direction for use
Abdominal	Bark	Scrape bark and	Rub on the
cramps/pain		squeeze.	abdominal area
(Kinapatant)			
		Boil bark in an	Drink decoction.
		ample amount of	
		water for a few	
		minutes.	

Family: Local name: *Ungkop*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Sprain	Vine	Boil vine in an	Drink decoction.
(Gusing)		ample amount of	
		water for a few	
		minutes.	

Scientific name:

Family:

Local name: Bungeg

Medicinal Uses	Plant parts used	Preparation	Direction for use
Scabies	Vine	Scrape bark and	Apply on the
(Gadot)		squeeze to extract	affected area.
		juice.	
Falling Hair	Whole plant	Pound plant	Apply juice extract
(Matetak-dot)	except the roots.	ingredient to extract	on the scalp. Do
		juice.	not rinse.

Scientific name:

Family:

Local name: Bongog-bongog

Medicinal Uses	Plant parts used	Preparation	Direction for use
Boils	Leaves	Pound to extract	Apply on the
(Ugot)		juice.	affected area.

Scientific name:

Family:

Local name: Okoyan

Medicinal Uses	Plant parts used	Preparation	Direction for use
Swelling in all part	Young leaves.	Heat leaves over a	Apply juice extract
of the body		low fire until juice	on the affected part
(Demateg-mateg)		is extracted	of the body. Use
			heated leaves as
			poultice.

Scientific name:

Family:

Local name: Pinagototan

Medicinal Uses	Plant parts used	Preparation	Direction for use
Swollen penis	Young leaves.	Pound leaves to	Apply juice extract
(Sinambongolan)		extract juice.	on the affected
			part.

Family:
Local name: *Bulakot*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Patient experiences	Leaves of Bulakot	Boil plant	Steam patient
loss of memory,	Leaves of Gevakan	ingredients in an	using the
visual and auditory	Whole plant of	ample amount of	decoction.
hallucination. This	Payakde	water for a few	
is believed to be	Leaves of	minutes.	
caused by	Talidungan		
malevolent spirits	Leaves of <i>Odongde</i>		
or Betong			
(Sepanon)			

Scientific name:

Family:

Local name: *Pitok*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Stomache	Young leaves of	Mix all plant	Rub juice mixture
(Nagkinapatan)	Pitok	ingredients and add	on the abdominal
	Young leaves of	lime. Squeeze to	area.
	Lasaw	extract juice, See to	
	Young leaves of	it that the juice is	
	Biaw	reddish in color. If	
		reddish color is not	
		attain after	
		thorough mixing,	
		do not proceed with	
		the medication.	

Scientific name:

Family:

Local name: Tabeget

Medicinal Uses	Plant parts used	Preparation	Direction for use
Difficulty in	Young leaves	Pound plant	Rub juice extract
urination		ingredient to extract	all over the body.
(Maboboladen)		juice.	
	Roots	Boil roots in an	Drink decoction.
		ample amount of	
		water for a few	
		minutes.	

Family: Local name: *Pakoy* (Bugkalot), *Lazona* (Tagalog)

Medicinal Uses	Plant parts used	Preparation	Direction for use
Bath for newborn	Whole plant	Boil plant	Use decoction in
Colds		ingredient in an	bathing the child
		ample amount of	for the first time.
		water for a few	
		minutes.	
Colds	Whole plant	Boil plant	Drink decoction
		ingredient in an	every now and
		ample amount of	then. Continue
		water for a few	until symptoms
		minutes.	disappear.

Scientific name:

Family: Local name: *Te-gang*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Kidney stone	Woody part of the	Chew the plant	Swallow the juice.
(Betok	plant	ingredient.	
madsisduzan)			
	Whole plant	Boil plant	Steam using the
		ingredient in an	decoction.
		ample amount of	Or
		water.	Drink the
			decoction every
			now and then

Scientific name:

Family:

Local name: Binagaga

Medicinal Uses	Plant parts used	Preparation	Direction for use
Swelling of the	Leaves	Heat leaves over a	Use as poultice the
breast or any part of		low fire.	affected part of the
the body			body while heated
(Nambinagaga)			plant is still
			lukewarm.

Family: Local name: *Bozoy*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Swelling in any	Whole plant	Heat stone. Put	Smoke the patient.
part of the body		plant ingredient	
that usually causes		above the heated	
death if it spread in		stone.	
all parts of the			
body. Believed to			
cure cancer.			
(Matetak-dot)			

Scientific name:

Family:

Local name: *Api-ap*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Diarrhea	Whole plant.	Boil plant in a half	Drink decoction
(Un-luyot)		glass of water for a	until symptoms
		few minutes.	disappear.

Scientific name:

Family:

Local name: Kale'ge'mge'm

Medicinal Uses	Plant parts used	Preparation	Direction for use
Snake bites	Whole plant	Pound plant	Apply juice extract
(Katno ole'g)		ingredient to extract	on the affected area
		juice.	
Seizure (Malidogen)	Whole plant	Boil plant in an ample amount of	
		water	

Scientific name:

Family:

Local name: Lepong

Medicinal Uses	Plant parts used	Preparation	Direction for use
Swelling in all	Leaves	Boil plant in an	Use as poultice.
parts of the body		ample amount of	
(Bengkel-bengkel		water.	
nagoteg-goteg)			
		Heat over a low	
		fire.	

Family:
Local name: *Padong-padong*

Medicinal Uses	Plant parts used	Preparation	Direction for use
Difficulty in	Leaves	Boil plant	Drink decoction
urination		ingredient in an	until symptoms
Pus and blood in		ample amount of	disappear.
the urine		water for a few	
		minutes.	

Table 2. List of indications for the medicinal plants used by the Bugkalots of Talbec, Dupax del Sur, Nueva Vizcaya

Indication	Number of plants mentioned for the indication
Fever	3
Ear discharge	1
Mouth sore	1
Cough/colds	2
Diarrhea	3
Scabies	2
Ringworm	1
Boil	1
Wounds	10
Snake bite	1
Urinary problem	13
Swollen penis	1
Swollen breast	1
Body swelling	3
Mental disorder	1
Seizure	1
Falling hair	3
Foreign body in eye	3
Headache	2
Toothache	1
Stomach ache/colic	6
Constipation	2
Joint pain	1
Sprain	1
Nosebleed	1
Amenorrhea	2
Postpartum drink	2
Baby's bath	1