

**ETHNOPHARMACOLOGICAL STUDY OF THE PHILIPPINE ETHNOLINGUISTIC
GROUPS: THE AYTA OF TONGKO, TAYABAS, QUEZON**

A collaborative project of

The Ayta community of Barangay Tongko, Tayabas, Quezon

Philippine Council for Health Research and Development
Department of Science and Technology

Institute of Herbal Medicine - National Institutes of Health
University of the Philippines Manila

2009

REMINDER

The indigenous knowledge and practices written in this report were obtained with full consent from informants belonging to the Ayta community of Tongko, Tayabas. Any information from this study to be used for further academic research or commercial purposes should have the free and prior informed consent of the knowledge-owners. The knowledge-owners and this study should be properly acknowledged and cited if information in this report will be used. Any commercial benefits which may arise from the utilization of the community's indigenous knowledge should be shared with the Ayta of Tongko, Tayabas or the respective Ayta knowledge-owner(s).¹

¹ Based on Elisabethsky and Posey 1994. From Posey and Dutfield 1996. *Beyond Intellectual Property: Toward Traditional Resource Rights for Indigenous Peoples and Local Communities*. p.48.

ABSTRACT

An ethnopharmacological study of the Ayta people in Barangay Tongko, Tayabas, Quezon, Philippines was conducted from November 2008 to March 2009. The study covers the documentation of the ethnopharmacological knowledge and indigenous healing practices of the Ayta people.

Information was gathered from 7 female herbal medicine vendors and 4 male respondents from the community. A total of 67 plants and 1 animal product were documented. Documentation included the local names, therapeutic indications, plant parts used, method of preparation, direction for use, precautionary measures, source of information, and other significant data. The plants were identified by their scientific names, where applicable.

Eight (8) plants were reportedly used to induce menstrual flow, 8 for cough, 7 for abdominal pain or stomachache, and 6 for arthritis, among others.

The primary source of income for the women in the community is selling herbal medicine and healing the various conditions of their customers. Further studies must be conducted to comprehensively document the people's beliefs and practices, not limited to health and healing. With the extinction of their language and the impact of neighboring dominant ethnolinguistic groups, encouragement is strongly recommended for the youth to learn and promote their culture, which has been insufficiently examined.

INTRODUCTION

The Philippines is rich in both cultural heritage and biodiversity. It is home to 110 indigenous communities and more than 170 ethnolinguistic groups¹ with diverse beliefs and practices, including healing the sick. Indigenous people rely on their natural environment in performing their healing traditions, such as obtaining medicinal plants. But with the threat of forest denudation and impact of low land mainstream cultures, these practices may soon disappear. Past documentations have been done, yet these have not covered the vast body of traditional knowledge of our indigenous communities.

Few studies have been conducted to document the ethnopharmacological knowledge and healing practices of our indigenous peoples. Madulid of the National Museum documented the medicinal plants used by the Ati people in Nagpana, Iloilo, Panay.² He has also compiled a bibliography of almost 1,000 references on Philippine ethnobotanical and ethnopharmacological studies.³

The Complementary and Traditional Medicine Study Group of the National Institutes of Health, University of the Philippines Manila (NIH – UPM) and the Philippine Institute of Traditional and Alternative Health Care (PITAHC) documented the ethnopharmacological knowledge and healing practices of the following ethnolinguistic groups: the Isneg,⁴ Kalinga,⁵ Ifugao,⁶ Kankanaey,⁷ and Ibaloi peoples of the Cordillera; the Bugkalot people of Dupax del Sur, Nueva Vizcaya;⁸ the Kabulowan, Tagibulos, and Idimala Agtas of Sierra Madre; the Ayta people of Morong, Bataan; the Tadyawan,⁹ and Alangan Mangyans¹⁰ of Mindoro; the Pala'wan,¹¹ Batak,¹² and Tagbanua¹³ peoples of Palawan; and the Ata Manobo,¹⁴ Bagobo,¹⁵ Mansaka,¹⁶ Mandaya,¹⁷ and Dibabaon¹⁸ peoples of Mindanao.

Maramba in "Medicinal plants: their role in health and biodiversity," reported that in 1978 to 1983, Quintana conducted a nationwide documentation of traditional healers and medicinal plants used.¹⁹ Maramba and Dayrit reported that out of this survey, 120 medicinal plants were chosen for priority studies by the National Integrated Research Program on Medicinal Plants.²⁰

Landa Jocano did his seminal work on the healing traditions of Bay, Laguna from 1968 to 1973.²¹ Documentation of healing traditions has likewise been done by Filipino anthropologists Abaya, Estacio, Padilla, Tan, and the Community Medicine Foundation.

The documentation previously done, though seemingly numerous, is not enough to cover the breadth and depth of the immense body of traditional knowledge held by our indigenous peoples.

The ethnopharmacological study of the Ayta of Tayabas is a component of the Documentation of Philippine Traditional Knowledge and Practices in Health Program. This project aims to conserve both the biodiversity and cultural heritage of the indigenous communities and ethnolinguistic groups in the country. Documenting traditional knowledge on herbal medicine may aid the indigenous communities in campaigns to conserve their forests and ancestral domains. The project recognizes that the domain of our indigenous peoples is a rich source of potentially useful pharmacologic agents. Knowledge gathered may also help in providing the indigenous communities with culturally acceptable health care services, including health education materials.

Apart from the initial documentation of the medicinal plants used by the Ayta community, instruments for gathering data on health and healing were also tested in this study.

METHODOLOGY

Selection of the study area

The study site was chosen based on the following criteria:

- Community is actively practicing their indigenous health and healing traditions, with the presence of 40 herbal medicine vendors who are also traditional healers
- Security is not a problem in the community
- Community is accessible using reasonable means of transportation

Social preparation

The project leader and research assistant met with the Ayta chieftain to obtain consent in conducting a study in the community. The project objectives and procedure were explained to the chieftain.

Since the mayor was not available, they paid a courtesy call to the municipal planning officer of Tayabas to inform him of the research to be carried out. The barangay captain was also briefed regarding the study to be conducted in Tongko.

Literature search

Prior to the field work, the research assistant reviewed past studies on the Ayta of Tayabas, Quezon. Very few studies have been done on the community, among these were papers written by Japanese economic anthropologist, Yasuaki Tamaki.²²

The researcher also visited the Manuel S. Enverga University in Lucena City to obtain a copy of a previous ethnobotanical study conducted by instructors from the said academic institution.²³ The plants listed in the study were reexamined and validated by the herbal medicine vendors.

Gathering of data

A research assistant lived and integrated with the community for an aggregate period of 2 weeks. Data was gathered through participant observation and interviews.

Through participant observation, the research assistant accompanied the herbal medicine vendors as they prepared herbal medicine at home, laid out and sold their goods on sidewalks in Lucena. Numerous plants were also identified while taking part in everyday conversations with community members.

During interviews, data gathering instruments were tested. The main data gathered consisted of the local name of the plant, its medicinal uses, plant part used, methods of gathering and storing, method of preparation and the direction for use. Precautions, toxicities of plants and data on the informants were also noted.

Verification of gathered information was done after it was written or encoded.

RESULTS

Location of the study

The study site was Barangay Tongko in Tayabas, Quezon. A four-hour bus trip from Manila, it may be reached passing through Alaminos and San Pablo, Laguna and Tiaong, Candelaria, Sariaya, and Lucena in Quezon. There are 54 Ayta households spread out in 6.7 hectares of land owned by a Tagalog family in Tayabas. Other residents in the area are Tagalog and Bicolano.

The Ayta of Tayabas

Through oral narration passed on to them by their elders, the Ayta know that they are originally from Tayabas. One story recounts a period of drought which their ancestors had experienced. The sound of a bird or *labuyo* led them to a spring, allowing them to survive. They resided near the spring for a long time but eventually fled in fear of the Tagalog who began to settle there. They say the exact location of the spring is the old abandoned church in Tayabas.

Initially, the nomadic Ayta moved around in search of land which could provide sustenance and was uninhabited by other people. Later on, they relocated to other places, such as those of their Ayta kin, for they were driven out in areas already owned by the Tagalog. The chieftain himself lived in Calamba, Laguna and Putingkahoy, Batangas before settling in Barangay Tongko.

The Ayta of Tayabas recognize kin relations with the Ayta residing in Makiling and Calamba, Laguna; Barangay Banoyo, San Luis, Barangay Putingkahoy, Rosario and Barangay San Jose Sico, Batangas City in the province of Batangas. Some inhabitants of Tayabas eventually lived in those areas. The Ayta also settled down in order to send their children to school. Although they have been living in Barangay Tongko for 20-30 years, their permanence in the area still depends on the landowner's use of the land.

The Ayta of Tayabas is among the four Philippine ethnolinguistic groups whose language is extinct.²⁴ The people now speak Filipino, the language used by the Tagalog whom they interact with on a daily basis, especially for their livelihood. Some have also intermarried with the Tagalog, Bicolano and Bisaya. In spite of all this, there are still Ayta words used by the people in their everyday conversations. Among these are *kapilo* and *kunyapit*, their terms for turtle and monitor lizard, animals which they occasionally hunt. These two are delicacies for the Ayta.

The main economic activity of the Ayta community is the women selling herbal medicine in Lucena and other municipalities. Most of the men are unemployed and have a difficult time looking for jobs. Previous jobs the men took on include jeepney dispatcher, bet collector in cockfights, and construction worker. During harvest time, Ayta men and women are given a share of the crops they help gather in neighboring fields.

Since they are easily accessible, many academic institutions and non-government organizations have approached the Ayta of Tongko to be beneficiaries of community service activities. Among these were building a basketball court, tribal hall with toilet, cementing of pathways and assistance in animal husbandry. Students have also lived with the community for short periods to experience their way of life. However, Tamaki noted that many of the community service activities conducted among the Ayta are not sustainable and most are one time visits only. (Tamaki, 2009) Some elders have articulated that livelihood assistance for the men in the community is needed the most, since selling herbal medicine is not enough to support their families.

Ayta parents aspire for their children to get an education but financial restraints keep many from regularly attending classes. Despite all this, a female Ayta youth recently graduated from college with a degree in Social Work. A scholar of the National Commission on Indigenous Peoples, she is the first in the Ayta community to obtain a college degree.

In terms of religion, a number of Christian missionary groups have visited the community and carried out bible studies. However, the Ayta identify themselves as Catholic. An herbal medicine vendor said that even though they are called Ayta, they are still Catholic. A social worker from a Catholic academic institution in Lucena, assists in community activities such as *pasyon* reading, praying the rosary and pilgrimages to the Kamay ni Hesus Grotto in Lucban during the Lenten season.

In their homes one will see Sto. Niño icons, posters and calendars with the images of Jesus and Mother Mary. They also use *agua bendita* (holy water) in their healing practice, specifically in cases of possession by an evil spirit. The Sto. Niño, whom they call Hele Abe, may also enter a person's body yet cause no harm.

Beliefs and practices in health and healing

Illness causation

“Hindi bato ang katawan mo, kaya ka nagkakasakit din.” - Carmen dela Cruz, Ayta healer
(You are not made of stone, which is why you get sick.)

For the Ayta of Tayabas, one of the causes of illnesses is the environment, such as rapid changes in the weather from dry and hot to rainy. Hot and cold temperature entering the body may bring about sickness. Parents scold their children who stay out under the sun too long, as the intense exposure to heat may lead to fever. Taking a bath or washing clothes in the morning without a hot drink or meal may cause *lamig* (coldness) to enter the body. This may bring about, *lamig sikmura*, stomachache due to the cold.

They say that excessive consumption of food such as beef and pork which are high in cholesterol also causes sickness. These include food with *betsin* (monosodium glutamate), which some of the Ayta occasionally add to their food. In the past, they maintained their health with a diet of *kapilo* (turtle), *kunypit* (monitor lizard), *alimos* (wild/forest cat), *pakit* (cassava) and other game and gathered plants. They say that they have also adapted negative practices of the Tagalog such as smoking cigarettes for the men while the children eat junk food daily.

Laman-lupa such as the *nuno* (a dwarf like being), *patianak* and other environmental spirits or elementals may cause illnesses if one has disturbed them and their dwelling place.

People may afflict maladies as well, intentionally or otherwise. Envious or angered people may use *kulam* (witchcraft) against a neighbor or an exhausted person may unknowingly cause *balis*. The Ayta ancestors themselves used herbs in causing illness to suspicious strangers.

The use of herbal medicine

The healing knowledge of the Ayta is primarily treating illnesses with the use of medicinal plants. The earliest curative practice that the young learn is *tapal*, pounding leaves and applying these on wounds. They manage illnesses by using herbal medicine first. If one plant or concoction is not effective, they will try an alternative. As an elder Ayta said, the healing practices they know now developed through the ingenuity of their ancestors.

Only in cases when herbal medicine is not efficacious do they resort to buying synthetic drugs. They emphasize their preference for herbal medicine because it has no side effect. They say that it is safe because it does not contain chemicals. If the Ayta do buy from the pharmacy, a commonly purchased product is Vicks for children's clogged noses during the cold season. They also give their children paracetamol for fever.

A problem they face regarding herbal medicine is the children disliking its bitter taste. The elders say that if they had money, they would rather buy synthetic drugs than make the children take herbal medicine which they will only throw up.

Herbal medicine vendors

Among the Ayta of Tayabas are 40 female herbal medicine vendors. Two types of vending are practiced by the women. *Pag-uuli* is traveling to municipalities to sell medicines house to house. This may be in Lucban, Sariaya, Mauban, Candelaria, Infanta and even Marinduque. *Latag* is staying put and selling one's herbal medicines on the sidewalks of Lucena. Older vendors say that young Ayta women who have just begun vending are shy and incapable of *pag-uuli*. Vendors may earn PHP 0.00 to 100.00+ a day.

Vendors, who are able to heal a person's illness, are usually flocked by neighbors and relatives of the cured individual. Some customers become regular patrons and friends of the vendors. They also listen to their customers' personal problems which are linked to the illnesses they are suffering. Some patrons have given vendors cellular phones so that they may be contacted easily.

Gathering medicinal plants and *agimat*

While the women sell medicinal plants, it is the men who are tasked to gather them. There are very few medicinal plants in Tayabas. Most of the plants they use are obtained in the forest and cannot be planted near their homes. Examples of these are marilao, saltiki and sapang.

It is during the Holy Week, specifically Good Friday, when Ayta men harvest a large amount of plants in Mt. Banahaw, Dolores, Quezon. They say that this has been the practice of their ancestors. Carmen, an elder healer also said that the plants collected during Good Friday are the most effective.

During this time, the chieftain explains, the Lord is dead and medicinal plants have no life. To restore these to life, the plants must be exposed under the sun. This is also when the *agimat* (stone amulets and prayers for protection) appear. Amulets are possessed by different spirits and the spirits are not afraid to expose these amulets in the Lord's absence. In other ordinary days, one will not be able to find an *agimat*.

The Ayta gather a large amount of medicinal plants during Good Friday to be used until the following year. Small quantities are also collected on other days of the year, in places such as Batangas and Marinduque. Large amounts of medicinal plants are collected only once a year in order to avoid depleting forest resources. Some who gather plants collect only for their family members. But one Ayta warns that the plants will not be effective if one does not share it with others.

Medicinal plants at risk

A number of medicinal plants which the Ayta of Tayabas use are gradually being exhausted. They say that it is already prohibited to cut even a part of the Makaisa tree, which is used to induce menstrual flow.

Sapang, used for anemia and inducing menstrual flow, was once abundant in Sariaya, Quezon. When bakeries began to use it for firewood, the number trees were greatly reduced. The Aytas must now travel to Batangas or Marinduque to gather Sapang.

Diagnosis of an illness

To know the root cause of an illness and how to treat it, the Ayta employ a number of methods:

Painuman or patinginan

The froth of liquor is examined to see if one has been afflicted by a *lamang lupa* (dweller of the earth).

Na-nuno

A person will know if he has been afflicted by a *nuno* by examining his/her little finger. Both fingers must be placed side-by-side, palms facing the person. Looking at the upper most line of the little finger, it should be aligned. If one line is significantly higher than the other, one has disturbed or is being played around by a *nuno* and must be cured through *suob*.

Healing practices

Tapal

Applying leaves, bark, sap or any plant part on a wound or aching part of the body.

Tapal is used in treating wounds caused by *paraya*. *Paraya* is a form of *kulam* (witchcraft) in which wounds will appear in any part of the body and will not heal even if one consults a doctor. In some cases, the stomach bloats up, while the limbs become thin. One will also experience stomachache and not being able to defecate. When one does defecate, the excrement will emit an odor similar to mud.

The Ayta say that the Bisaya are the people who commonly inflict *paraya*. They, on the other hand, only know how to cure the wounds through *tapal*.

Haplas

Rubbing or massaging an aching part of the body using a concoction of plants and oil.
See Table 3.

Orasyon

An uttered or written prayer which heals an ailment or counters an illness and/or negative action directed at a person.

Sample case:

The chieftain's youngest daughter complained to her mother that her tooth was hurting. The research assistant asked the child, what could be done to soothe her. The child asked for a paper and pen or pencil. The research assistant asked why she had to write down what needs to be done to relieve the pain. The mother laughed and explained that she will do an *orasyon*, taught by her father.

The child asked her older sister to get her father's *orasyon* kept in a box. Her sister handed her a small piece of yellow paper. The child copied the prayer on a new piece of paper. She wet the paper with her saliva and placed it on her cheek, near the aching tooth.

The orasyon:

SAFUA-RAOA ARFP-OTREP TEKGP<SZTF OPGRA-TORMN

Suob

Suob is the act of getting rid of the affliction caused by a *lamang lupa*, with the use of smoke from incense or *tawas* (alum crystals). These may be bought in the market. *Suob* must be done for three days at 5:30 in the afternoon or 6:00 in the evening.

The incense or crystals are laid on a coconut husk which is placed between the feet of the afflicted person. The individual and his/her home must be exposed to the smoke for an hour. Other occupants of the house and neighbors need not worry, for there is no harm in coming into contact with the smoke from the *suob*.

Balis and pagbubuga

An individual afflicted with *balis* experiences headache, dizziness and the urge to vomit. *Balis* is unintentionally caused by an exhausted person who has not rested.

Sample case:

A Tagalog customer in Lucena said that she was a Catholic and had strong faith in God but there was nothing wrong in being too safe. This is why she buys *kontra-balis* from the Aya. She shared her experience that one hot afternoon a man who was sweating profusely and smelled of beer and cigarette smoke asked her what time it was. When she was on her way home, she felt dizzy and suddenly wanted to defecate and vomit. She thought she was going to die. The man had a strong *balis*. *Balis*, she said, cannot be cured by doctors but only avoided through *pangontra*.

Mylene, one of the healers explains that *balis* is the effect of a person's *silakbo ng dugo* or blood boiling due to fatigue. A tired individual, who has walked a long distance and then greets or speaks to a person, will cause *balis*. One must rest or drink water to avoid affecting others with it. Children are easily afflicted by *balis*, especially if they are frequently noticed or criticized.

To counter *balis*, the tradition is to carry a small red cloth/pouch (1"x1") with herbal medicine and an *orasyon* inside. See Table 3.

Another way to counter *balis* is through *pagbubuga*. One must chew any amount of ginger and seven grains of rice. The juice is spitted out and used to mark a cross on the forehead, nape, stomach, back of the hand and arch of the foot. It is called *pagbubuga* because the ingredients that counter *balis* is placed in the mouth, mixed with saliva and spewed out.

Nasapian (spirit possession) and *agua bendita*

Sample case:

One of the healers shared that when her husband gets very drunk, he becomes possessed by a *masamang espiritu* (evil spirit) or an angel. If an evil spirit enters his body, he screams and wants to hurt others. But when an angel enters his body, he becomes talkative and playful with his children. Hele Abe is the angel who enters the man's body. The healer learned of this because the angel himself said that he was Abe, who has come from heaven. (Through further inquiry it was learned that the angel or Hele Abe is the Santo Niño. Hele stands for Mary singing a lullaby to the child Jesus. Abe comes from Ave Maria.)

The healer uses *agua bendita* or holy water (obtained from a priest in Tayabas) when the evil spirit enters her husband. She sprinkles him with holy water 3 times in the form of a cross. She calls the name of her husband for him to return to normal. It may take 1 hour to expel an evil spirit. If she would like Hele Abe to leave, she asks him politely to return to where he came from and marks a cross on her husband's forehead.

An Ayta view of their body and health

The Ayta view their body as different from others. The chieftain would not allow the research assistant, to walk outside during a drizzle or rain. The Ayta adult and children, on the other hand, are used to the environment, and can walk in the rain without getting ill.

After giving birth, an Ayta mother will only need 5 days of recuperation or less. She may then resume doing her household chores and livelihood. Yet, they say that a Tagalog mother would have to rest for about 1-2 months before doing strenuous work again.

Some beliefs in pregnancy and child birth

The Aytas say that a pregnant woman who devours sweets will have difficulty pushing the baby out during childbirth. While a woman who is fond of cold food or drinks such as softdrinks/cola will give birth to a big child.

A mother who has just given birth must not work or do household chores immediately to avoid acquiring *binat*. One may experience headaches and continuous bleeding, which may lead to death. A woman must only bathe 5 days after giving birth to avoid *hangin* (wind) from entering

the head which may cause madness. Even after the 5 days, one should not sleep right after taking a bath to prevent *lamig* (coldness) from entering the body.

The Ayta vendors say that they may sell abortifacients to women who are 1 week or a month pregnant. But they avoid selling it to those who are 2 to 4 months pregnant because taking the brew will have hazardous effects. In one instance, they asked a customer why she did not decide early on. They also encouraged the woman to give the baby a chance to live. They told her, “*Baka para sa iyo iyan. Baka suwerte yan at ‘di para sa lupa.*” (Maybe this baby is for you. Maybe the child will bring you luck.)

If a child is born with a covering on the whole body, the layer should not be used as a good luck charm in gambling or else the child will become sickly. When a child born with a covering grows up and goes to school, he will be intelligent but stubborn.

APPENDICES

Table No. 1 Life Stages of an Ayta

Stage	Condition/crisis	Health practices/rituals
Baby inside mother's womb	Unborn babies are sought out by the <i>patianak</i> also known as <i>tiyanak</i> , a kind of <i>lamang lupa</i> (malevolent spirit or dweller of the earth). If a mother is afflicted by it, she will feel labor pains even though she may be months away from giving birth. Blood will flow out as the <i>lamang lupa</i> forces the child out.	A <i>pangontra</i> is needed to counter the <i>patianak</i> . Seeds of kaytana, sagisi, and sahing are placed on a small red pouch (1"x1"), including an <i>orasyon</i> . This must always be pinned on the clothes of the pregnant woman.
<i>Bata</i> (months old baby)	<p><i>Impatso sa bata</i> A child may experience <i>impatso</i> or stomachache due to consuming stale milk. A mother's milk may become stale if she is tired from a day of work. A child may also get <i>impatso</i> if he/she gets the cold (<i>lamig</i>) from the mother's body through breastfeeding.</p> <p><i>Kabag</i> A child may get a stomachache due to <i>kabag</i>, when the stomach has a lot of air. He/she should pass gas or defecate for relief. If this is not effective, one may perform <i>pagbubuga</i> or <i>tapal</i>.</p>	<p><i>Hilisin ang suso</i> Before breastfeeding, a mother must squeeze out milk from the breast 3-4 times to remove the stale milk. Squeezing the breast or <i>hilisin ang suso</i> is done to avoid <i>impatso</i>.</p> <p><i>Pagbubuga</i> To remove <i>kabag</i>, one must chew the fruit of bunga. Spew out the fruit and place it on a leaf of ikmo. Apply on the baby's stomach.</p> <p><i>Tapal</i> Place 3 bagawak leaves on the baby's stomach. The leaves may be heated if desired.</p>

	At this age, children are easily afflicted with <i>balis</i> .	<p><i>Pagbubuga</i> To counter <i>balis</i>, one must chew ginger and 7 grains of rice. Spew it out and use it mark a cross on the forehead, nape, stomach, back of the hand and arch of the foot.</p> <p>One may also carry a <i>pangontra</i> for <i>balis</i>, a small pouch (1"x1") which contains herbs and an <i>orasyon</i> (prayer).</p>
<i>Anak</i> (a child who already knows how to walk)	<p>The common ailments of a child in this stage are stomachache, cough and fever.</p> <p>At this age, children are easily afflicted with <i>balis</i>.</p>	<p>Several <i>tapal</i> and decoctions may be applied to cure these ailments. See Table 3.</p> <p>See above.</p>
<i>Nagbibinata/ Nagdadalaga</i> (adolescent)	<p>Circumcision or <i>pungos</i></p> <p>First menstruation</p>	<p>A hole is made in the center of a coconut husk. The foreskin is inserted in the hole and is cut using a sharp <i>gulok</i> or <i>gulukan</i> (knife).</p> <p><i>Pamilangan</i> When a girl experiences her first menstruation, a ritual is done in which she will walk on a bamboo floor. She will count the number of slabs she has walked on and this will indicate the number of days of menstruation she will be having.</p>
<i>Matanda</i> (adult)	<p>Elders commonly experience pain in various parts of the body such as the back and the knees.</p> <p>They say that the elders experience these ailments because they now feel the exhaustion of their efforts and struggles during their youth.</p>	<p>To relieve the pain of <i>rayuma</i>, rub the aching part of the body with a <i>panghaplas</i>, a concoction of plants such as <i>batibog</i>, <i>karig</i> or <i>nipay</i>, mixed with oil.</p>

Table No. 2 Indications recognized and corresponding plants used

	Indication	Description	Plants Used	No. of Plants
1.	Abdominal pain/ Stomachache	<i>Sakit sa tiyan</i> may be due to various factors. Pain may occur when a child's stomach gets hot from eating different kinds of food all at once.	Bagawak Dita Ikmo Ka Maria Kalingag Mariang Diablo Sambong	7
2.	Acne	<i>Malubhang tigyawat</i> Pimples and swelling appear on the face.	Alaala	1
3.	Anemia	<i>Kulang sa dugo</i> When an individual's blood is pale, there is more water than blood in the body. The red blood 'loses' to the water. The person then lacks blood.	Sapang	1
4.	Ant bites	<i>Kagat ng langgam</i>	Ka Maria	1
5.	Arthritis	<i>Rayuma</i> When one experiences knee pain.	Batibog Pamagot Sangipin Mahogany Nipay Karig	6
6.	Asthma		Kayumkom	1
7.	Backache	<i>Sakit sa likod</i>	Sahing	1
8.	<i>Balis</i>	An individual afflicted with <i>balis</i> experiences headache, dizziness and the urge to vomit. <i>Balis</i> is unintentionally caused by an exhausted person who has not rested. <i>Balis</i> is the effect of a person's <i>silakbo ng dugo</i> or blood boiling due to fatigue. A tired individual, who has walked a long distance and then greets or speaks to a person, will cause <i>balis</i> . One must rest or drink water to avoid affecting others with it. Children are easily afflicted by <i>balis</i> , especially if they are frequently noticed or criticized.	Luya Balayong	2
9.	<i>Binat ng bagong panganak</i> (Post-partum bath for <i>binat</i>)	A mother who has just given birth must not work or do household chores immediately to avoid getting <i>binat</i> . One may experience headaches and continuous bleeding, which can lead to death. A mother must only bathe 5 days after giving birth to avoid <i>hangin</i> (wind) from entering the head which may cause madness. Even after the 5 days, one	Anonang Kalamansi Kalamias Lukban Mamalis Sampalok Tamla	7

		<p>should not sleep right after taking a bath to avoid <i>lamig</i> (coldness) from entering the body. To counter <i>lamig</i>, one must boil the leaves of sour fruits and use it for bathing.</p> <p>An Ayta does not get afflicted with <i>binat</i>. After giving birth, an Ayta mother will only need 5 days of recuperation or less. She may then resume doing her chores and livelihood. A Tagalog mother may have to rest for about 1-2 months before doing strenuous work again.</p>		
10.	<i>Binat sa trangkaso</i>	A relapse of fever.	Sahing	1
11.	Blurred vision	<i>Malabong mata</i> Blurred vision due to aging.	Alaala	1
12.	Boils	<i>Pigsa</i>	Gumamela Dalunot	2
13.	Burns	<i>Paso</i> When the skin is injured by a flame or tip of a cigarette.	Makabuhay	1
14.	Cough	<i>Ubo</i>	Kalamansi Katmon Lagundi Oregano Matang-ulang Palo Santo Panlaga Sambong	8
15.	Diabetes		Bignay Kayumkom Mahogany Makabuhay Marilao	5
16.	Diarrhea		Bayabas	1
17.	Induce dizziness and defecation	In the past, Aytas feared and distrusted non-Aytas. They fed the rice cooked with nami to people whom they thought were arrogant.	Nami	1
18.	Dysmenorrhea		Mariang Diablo	1
19.	Eczema	This skin ailment in which the legs and feet become itchy and painful is said to be caused by soap or slippers. A person's skin may have already bled due to scratching but the itch remains.	Bayabasan/ Bayabasin Makabuhay Kakawate	3
20.	Fever	<i>Lagnat</i>	Tsaang gubat Saltiki	2
21.	Fish poison	<i>Lason sa isda</i> Fish poison is made up of worms mixed	Bayati Nami	3

		with crushed fruits used to catch fish easily.	Tubli	
22.	Flatulence	<i>Kabag</i> When a lot of air is in the stomach.	Ka Maria Lubigan Kalingag	3
23.	Headache	<i>Sakit sa ulo</i> May be due to menstruation or colds.	Hawili	1
24.	Heaviness and pain in the legs	<i>Mabigat at masakit ang binti</i> This may be due to sitting down for a long period of time. Some herbal medicine vendors who sell on the sidewalk complain of this ailment.	Nipay	1
25.	Hypertension		Kayumkom Saba	2
26.	Inguinal hernia	<i>Luslos</i>	Tagup-tagupan	1
27.	Jaundice	<i>Naninilaw na mata at balat</i> Yellowing of the skin and eyes.	Marilao	1
28.	<i>Kontra/ Pangontra</i>	A piece of sinukuan wood with an <i>orasyon</i> can counter negative words and actions directed at a person. By carrying this, one won't have problems in dealing with people, wherever he/she goes. <i>Kontra/ pangontra ng bata sa pitong sakit</i> To counter 7 common illnesses of children: 1) <i>Balis</i> - See above. 2) <i>Tubo ng ngipin, nagtatae ang bata</i> – tooth growth causing loose bowel movement. 3) <i>Tubo ng ngipin, naglalaway ang bata</i> – tooth growth causing salivation. 4) <i>Na-nuno</i> – Affliction caused by a <i>nuno</i> . 5) <i>Kabag</i> – Stomachache due to a lot of air in the stomach. 6) <i>Uhiya</i> – <i>Balis</i> caused by the dead. 7) <i>Sampal ng hangin</i> – When a child who has just woken up is ‘slapped’ by wind, it will enter the body and cause fever. High fever may lead to convulsions. If one does not act upon the entry of the wind, the child may die. When the child is having convulsions he/she should already be brought to the hospital.	Sinukuan Kaytana Kupang Malaikmo Karig Sagisi Sahing	7
29.	To ease labor		Balimbing	1
30.	Malaria	Sickness/fever brought by a <i>lamok</i> (mosquito).	Tsaang gubat Saltiki	2
31.	Measles	<i>Tigdas</i> , though manifested on the outside through the appearance of rashes (<i>paninibol/ pagsibol sa balat</i>), also affects	Anis Kulantro	2

		the stomach. This is why children get fever when are sick with <i>tigdas</i> . This should be acted upon immediately for the skin irritation (<i>paninibol</i>) caused by the sickness may go under the skin and lead to a child's death.		
32.	Induce menstrual flow	<i>Pampaagas</i> or <i>pamparegla</i> is taken by women who experience irregular menstruation or long periods of absence of their menstrual period (<i>amenorrhea</i>). <i>Pampaagas</i> is also used as an abortifacient.	Ka Maria Makabuhay Marilao Saltiki Mahogany Sapang Makaisa Mariang Diablo	8
33.	Mental illness	<i>Nasiraan ng bait o ulo</i> This illness may be hereditary. An individual who is overwhelmed by problems in life may also get this illness. This may also be caused by <i>binat</i> , if <i>hangin</i> enters a woman's head after giving birth.	Balayong Kalingag	2
34.	Myoma	<i>Bukol sa sinapupunan.</i>	Bangkal	1
35.	<i>Pampaamo</i>	<i>Pampaamo</i> is used when a child is stubborn and disobedient or when an individual wants his/her spouse to return after they have separated. With the <i>pampaamo</i> , one may also regain contact with a relative who lives far away and hasn't been writing or calling.	Tawa-tawa	1
36.	<i>Kontra sa lason</i>	To treat poisoning.	Kalamansi	1
37.	Purgative for chickens	<i>Pampurga sa bulate ng manok.</i> Purgative for worms in a chicken's stomach.	Bunga	1
38.	Ringworm	<i>Buni</i>	Talong-talongan	1
39.	Scabies	<i>Galis-aso</i>	Makabuhay	1
40.	Skin irritation	<i>Halas</i> This skin irritation in the neck and groin area usually occurs in obese children when they sweat. This may also be due to friction of skin and clothes or skin to skin.	Bunga	1
41.	Skin itches/mites	Skin itches caused by mites called <i>kagaw</i> or <i>hanip</i> .	Alagaw	1
42.	Sore eyes	<i>Masakit at namumula ang mata.</i> Eyes ache and redden.	Pugad-Pugad	1
43.	Sore throat	<i>Sakit sa lalamunan.</i>	Kalamansi	1
44.	Sprain	<i>Pilay</i> is the inflammation of <i>kalamnan</i> (muscles) and <i>litid</i> (ligaments). One should apply a warm leaf (<i>tapal</i>) to relieve the sprain.	Ikmo Luya Tuba	3
45.	Stroke caused by	<i>Pamumuo ng dugo.</i>	Bangkal	1

	thrombosis			
46.	Tinea flava	<i>An-an</i>	Talong-talongan	1
47.	Toothache	<i>Sakit sa ngipin</i> One experiences sharp pain or <i>puntada</i> .	Sahing Sangipin Talampunai	3
48.	Urinary problem	<i>Problema sa pag-ih</i>	Kayumkom Kogon	2
49.	Spitting up blood	<i>Kapag nalura ng dugo</i>	Panlaga	1
50.	Wounds	<i>Sugat</i>	Ka Maria Makabuhay	2

Aesthetic use

51.	Hair Curler	<i>Pangkulot ng buhok</i>	Kakawate	1
-----	-------------	---------------------------	----------	---

Animal Product

52.	Rabies		Usa (Sungay)/ Deer antlers	1
-----	--------	--	-------------------------------	---

Table No. 3 Medicinal plants used by the Ayta of Tongko, Tayabas, Quezon

ABDOMINAL PAIN/ STOMACHACHE

Indication	<i>Sakit sa tiyan</i> (abdominal pain/stomachache)
Scientific name	<i>Clerodendron quadriloculare</i> (Blanco) Merr.
Family	Lamiaceae
Local name	Bagawak
Filipino	Bagawak
English	Shooting star, Fireworks
Part used	Leaves
Gathering and storing	No particular time of day, month or season preference.
Preparation	Obtain 3 young leaves.
Directions for use and dosage	Apply leaves over abdominal area and remove after overnight application.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Ronnie Aguila; Magtibay, Rowena dela Cruz
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.
Date	2008Nov03, 2008Dec28

Indication	<i>Sakit sa tiyan</i> (abdominal pain/stomachache)
Scientific name	<i>Alstonia scholaris</i> (L.) R. Br.
Family	Apocynaceae
Local name	Dita
Filipino	Dita
English	White cheesewood
Part used	Bark
Gathering and storing	Obtain a piece of bark (0.75" x 2")
Preparation	Boil in 1 glass of water.
Directions for use and dosage	Drink anytime.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb21

Indication	<i>Sakit sa tiyan</i> (abdominal pain/stomachache)
Scientific name	<i>Piper betle</i> L.
Family	Piperaceae
Local name	Ikmo
Filipino	Ikmo
English	Betel Leaf Pepper
Part used	Leaves
Gathering and storing	Obtain a mature leaf.
Preparation	

Directions for use and dosage	Apply on affected area.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aporentado, Maria Gabriela U.
Date	2009Feb21

Indication	<i>Sakit sa tiyan</i> (abdominal pain/stomachache)
Scientific name	<i>Artemisia vulgaris</i>
Family	Compositae
Local name	Ka Maria
Filipino	Damong Maria
English	Chinese honeysuckle, Maiden wort, Motherwort, Felon herb, Mugwort, Wegwood, Wormwood
Part used	Leaves, shoots
Gathering and storing	No particular time of day, month or seasonal preference
Preparation	A handful of leaves, preferably shoots are taken and mashed in a coconut shell. The mashed leaves are placed on a banana leaf, which is passed over fire to allow leaves to juice out. The Ka Maria leaves are placed on a cloth, which is to be bound around the abdomen.
Directions for use and dosage	Wrap cloth with Ka Maria leaves around the abdomen. Poultice is removed after overnight use.
Precautions and toxicities	
Remarks	
Informant	Ferrer, Mylene Magtibay; Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aporentado, Maria Gabriela U.
Date	2008Nov05, 2008Dec28

Indication	<i>Sakit sa tiyan</i> (abdominal pain/stomachache)
Scientific name	<i>Cinnamomum mindanaense</i>
Family	Lauraceae
Local name	Kalingag
Filipino	Kalingag
English	Ceylon cinnamon
Part used	Bark
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Boil the woody bark in seven glasses of water for less than 15 minutes. Allow to cool.
Directions for use and dosage	Drink lukewarm decoction, use dropper for children less than 8 months old.
Precautions and toxicities	
Remarks	
Informant	Remo, Marilou O.; Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon

Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.
Date	2008Nov07, 2008Sept13

Indication	<i>Sakit sa tiyan</i> (abdominal pain/stomachache)
Scientific name	
Family	
Local name	Mariang Diablo, Ramallosa
Filipino	
English	
Part used	Leaves
Gathering and storing	No particular time of day, month or seasonal preference. A stem with 4-5 leaves is cut.
Preparation	Boil the stem and leaves in 2 glasses of water for 3 minutes. Remove the leaves from the pot. Divide the extract into 2 glasses. Store plant in a dry area. It can still be used for about 4 times.
Directions for use and dosage	Drink one part of the extract (about $\frac{3}{4}$ glass) twice a day until pain subsides.
Precautions and toxicities	Not to be given to pregnant women as it can induce abortion. Ramallosa leaves should also not be smelled by pregnant women as it is believed to induce abortion.
Remarks	
Informant	Remo, Ruby; Remo, Marilou O.
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Quiogue, Rowell S.; Reynaldo, Chris-Angelo R.
Date	2008Nov07

Indication	<i>Sakit sa tiyan</i> (abdominal pain/stomachache)
Scientific name	<i>Blumea balsamifera</i> (Linn.) DC.
Family	Compositae
Local name	Sambong
Filipino	Sambong
English	Blumea camphor
Part used	
Gathering and storing	Boil 4 leaves in 2 glasses of water.
Preparation	Drink in the morning and afternoon.
Directions for use and dosage	
Precautions and toxicities	
Remarks	
Informant	Ferrer, Mylene Magtibay
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec28

ACNE

Indication	<i>Tigyawat na malubha, namamaga</i> (Severe acne)
Scientific name	
Family	
Local name	Alaala
Filipino	
English	
Part used	Roots
Gathering and storing	Obtain roots from young tree.
Preparation	Wash 50 pieces of roots and dry. Soak overnight in a dipper of water.
Directions for use and dosage	Use to wash the face in the morning.
Precautions and toxicities	
Remarks	Roots may be used until aroma fades.
Informant	Magtibay, Ronnie Aguila; Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.; Sia, Isidro C.
Date	2008Sept13, 2009Feb20

ANEMIA

Indication	<i>Kulang sa dugo</i> (Anemia)
Scientific name	<i>Caesalpinia sappan</i> Linn.
Family	Leguminosae
Local name	Sapang
Filipino	Sapang
English	Sappan wood, Bukkum wood
Part used	Wood (stem)
Gathering and storing	Plant parts are harvested during the Holy Week, preferably on Good Friday. The wood stem is cut into sticks about 5"x0.5"x0.5" and exposed under the sun for about a week until dry. The woody stems are stored in a sack on a dry area and maintained moist free to prevent decomposition.
Preparation	Boil a stick in a pot with 2 glasses of water for about 5 minutes until the water reddens. Remove wood from the pot. Divide decoction into two. Let wood dry. Store on a dry area. It may still be used for about 4 times.
Directions for use and dosage	Drink 1 part of the decoction (about ¾ glass) twice a day until paleness disappears.
Precautions and toxicities	
Remarks	Not to be given to those with hypertension since it can worsen their condition.
Informant	Remo, Ruby
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Quiogue, Rowell S.
Date	2008Nov07

ANT BITES

Indication	<i>Kagat ng langgam</i> (Ant bites)
Scientific name	<i>Artemisia vulgaris</i>
Family	Compositae
Local name	Ka Maria
Filipino	Damong Maria
English	Chinese honeysuckle, Maiden wort, Motherwort, Felon herb, Mugwort, Wegwood, Wormwood
Part used	Leaves, shoots
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Pound the young leaves and squeeze out the juice.
Directions for use and dosage	Place any amount of poultice on affected area.
Precautions and toxicities	
Remarks	
Informant	Ferrer, Mylene Magtibay
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec28

ARTHRITIS

Indication	<i>Panghaplas sa rayuma</i> (Arthritis)
Scientific name	
Family	
Local name	1. Batibog 2. Pamagot 3. Sangipin
Filipino	
English	
Part used	Wood
Gathering and storing	Gather wood of Batibog, Pamagot and Sangipin and let dry. Store in a plastic container until needed.
Preparation	Chop wood of the three plants into small pieces and place in a bottle with alcohol and baby oil.
Directions for use and dosage	Rub in affected area during afternoons.
Precautions and toxicities	
Remarks	Karig may also be used instead of Batibog.
Informant	Magtibay, Ronnie Aguila; Magtibay, Rowena dela Cruz
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.; Sia, Isidro C.
Date	2008Sept13, 2008Dec27, 2008Dec28

Indication	<i>Panghaplas sa rayuma</i> (Arthritis)
Scientific name	<i>Swietenia macrophylla</i>
Family	Meliaceae
Local name	
Filipino	
English	Mahogany

Part used	Seed
Gathering and storing	
Preparation	
Directions for use and dosage	Occasionally included in <i>panghaplas</i> preparations.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb20

Indication	<i>Panghaplas sa rayuma</i> (Arthritis)
Scientific name	<i>Mucuna pruriens</i>
Family	Fabaceae
Local name	Nipay
Filipino	Nipay
English	Cow-itch, Velvet bean, Cowhage
Part used	Fruit
Gathering and storing	One should obtain the fruit during the dry season.
Preparation	Mix the fruit's flesh with coconut oil.
Directions for use and dosage	Use it to rub/massage the affected area.
Precautions and toxicities	Handling the exterior of the fruit may cause itches.
Remarks	
Informant	Magtibay, Arnel Aguila; Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec29

ASTHMA

Indication	Asthma
Scientific name	<i>Selaginella tamariscina</i>
Family	Selaginellaceae
Local name	Kayumkom
Filipino	Milagrosa
English	Resurrection fern
Part used	Whole plant, mature
Gathering and storing	The plants are harvested during the Holy Week, preferably on Good Friday. Plants are exposed under the sun for 3-7 days until dry and stored in a sack on a dry area. If plants start to blacken, re-exposure to the sun is done to prevent further decomposition.
Preparation	Boil one pack (about 5 whole plants) in a pot with 3 glasses of water. Using a strainer, separate the plants from the decoction. Divide the filtrate in two. Let the plants dry. Store in a dry area. It can be boiled over and over again as long as the plants are not yet decomposed.

Directions for use and dosage	Drink one part of the decoction (about 1 glass) twice a day until symptom free.
Precautions and toxicities	Not to be given to pregnant women as it can induce abortion.
Remarks	
Informant	Remo, Ruby; Remo, Marilou O.
Address	Barangay Tongko, Tayabas, Quezon
Interviewer	Quiogue Rowell S.; Reynaldo, Chris-Angelo R.
Date	2008Nov07

BACKACHE

Indication	<i>Sakit sa likod</i> (Backache)
Scientific name	<i>Canarium luzonicum</i> (Blume) A. Gray
Family	Burseraceae
Local name	Sahing
Filipino	Pili
English	Manila elemi
Part used	Tree sap
Gathering and storing	No particular time of day, month, or seasonal preference.
Preparation	Obtain clear to whitish sap from the tree bark.
Directions for use and dosage	Place sap on a banana leaf and apply on affected area.
Precautions and toxicities	
Remarks	The sap is useful and effective as long as it is soft.
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.
Date	2008Nov03

BALIS

Indication	<i>Kontra-balis</i> (To counter <i>balis</i>)
Scientific name	
Family	
Local name	Balayong
Filipino	
English	
Part used	Fruit
Gathering and storing	Gather fruit during the dry season.
Preparation	A handle is sewn on the fruit so it can easily be pinned on clothes.
Directions for use and dosage	The fruit is pinned on a child's clothes. Child must be 10 years of age and below.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2009Feb20

Indication	<i>Kontra-balis</i> (To counter <i>balis</i>)
Scientific name	<i>Zingiber officinale</i> Rosc.
Family	Zingiberaceae
Local name	Luya
Filipino	Luya
English	Ginger
Part used	Rhizome
Gathering and storing	
Preparation	Obtain ginger of any size and 7 grains of uncooked rice.
Directions for use and dosage	Chew ginger and grains of rice. Spew out the juice. Use it to mark a cross on the forehead, nape, stomach, back of the hand and arch of the foot.
Precautions and toxicities	
Remarks	Seven (7) is the number that counters the negative e.g. sickness.
Informant	Ferrer, Mylene Magtibay
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec28

BINAT NG BAGONG PANGANAK

Indication	<i>Binat ng bagong panganak</i> (Post-partum bath/drink for <i>binat</i>)
Scientific name	<i>Cordia dichotoma</i> Forst. f.
Family	Boraginaceae
Local name	Anonang
Filipino	Anonang
English	Sebestan plum, Soap berry
Part used	Bark
Gathering and storing	Chop bark into small pieces (1" x 2")
Preparation	a. Boil 2 pieces of bark in 1-2 glasses of water b. Boil 10 pieces of bark in a pot of water. Add cold water until it is warm enough to use for bathing.
Directions for use and dosage	a. Drink decoction after meals. b. Bathe with decoction.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Ronnie Aguila; Magtibay, Jaime Gadiola
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec29

Indication	<i>Binat ng bagong panganak</i> (Post-partum bath for <i>binat</i>)
Scientific name	1. <i>Cordia dichotoma</i> Forst. f. 2. <i>Citrus microcarpa</i> 3. <i>Averrhoa bilimbi</i> Linn. 4. <i>Citrus grandis</i> Osbeck 5. <i>Pittosporum pentandrum</i> (Blanco) Merr.

	6. <i>Tamarindus indica</i> Linn. 7. <i>Schefflera insularum</i>
Family	1. Boraginaceae 2. Rutaceae 3. Oxalidaceae 4. Rutaceae 5. Pittosporaceae 6. Leguminosae 7. Araliaceae
Local name	1. Anonang 2. Kalamansi 3. Kalamias 4. Lukban 5. Mamalis 6. Sampalok 7. Tamla
Filipino	1. Anonang 2. Kalamansi 3. Kamias 4. Suha 5. Mamalis 6. Sampalok 7. Galamai-amo
English	1. Sebestan plum, Soap berry 2. Calamondin, Philippine lime 3. -- 4. Grape-fruit pomelo 5. -- 6. Tamarind 7. --
Part used	1. Bark 2-7. Leaves
Gathering and storing	Obtain a piece of Anonang bark (1" x 2") and a leaf each of Kalamansi, Kalamias, Lukban, Mamalis, Sampalok and Galamai-amo. One may use young or mature leaves.
Preparation	One must obtain a total of 7 plants. Boil the bark and leaves in a pot or 3 dippers of water. Cool the decoction.
Directions for use and dosage	Bathe with decoction, 5 days after labor.
Precautions and toxicities	
Remarks	The leaves of sour fruits may help to counter cold/wind from entering the body. A mother must only bathe 5 days after giving birth to avoid <i>hangin</i> (wind) entering the head which may cause madness. Mamalis may be removed from the preparation since it is difficult to find the plant, as long as there is still a total of 7 plants e.g. obtain 2 kalamansi leaves instead of one. Seven (7) is the number that counters ailments.
Informant	Magtibay, Cristina Conje

Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb21, 2009March19

Indication	<i>Binat ng bagong panganak</i> (Post partum bath/drink)
Scientific name	<i>Schefflera insularum</i>
Family	Araliaceae
Local name	Tamla
Filipino	Galamai-amo
English	
Part used	Leaves
Gathering and storing	No particular time of day, month, or seasonal preference. a) Gather 7 leaves. b) Gather a handful of leaves or 4 branches (each branch has 4-5 leaves).
Preparation	a) Boil leaves in 1-2 glasses of water until leaves are wilted. b) Boil leaves in a pot. Add cold water until it is warm enough to use for bathing.
Directions for use and dosage	a) Drink decoction as needed. b) Bathe with decoction.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje; Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.
Date	2008Nov05, 2008Dec29

BINAT

Indication	<i>Binat sa trangkaso</i> (relapse of fever)
Scientific name	<i>Canarium luzonicum</i> (Blume) A. Gray
Family	Burseraceae
Local name	Sahing
Filipino	Pili
English	Manila elemi
Part used	Tree sap
Gathering and storing	No particular time of day, month, or seasonal preference.
Preparation	Obtain clear to whitish sap from the tree bark.
Directions for use and dosage	Mold sap into a small ball (size of a kernel of corn). Eat a banana while taking in the sap to conceal its taste.
Precautions and toxicities	
Remarks	The sap is useful and effective as long as it is soft.
Informant	Magtibay, Ronnie Aguila; Lazado, Susan
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.
Date	2008Nov03

BLURRED VISION

Indication	<i>Malabong mata ng may edad</i> (Blurred vision due to aging)
Scientific name	
Family	
Local name	Alaala
Filipino	
English	
Part used	Roots
Gathering and storing	Obtain roots from young tree.
Preparation	Wash 50 pieces of roots and dry. Soak overnight in a dipper of water.
Directions for use and dosage	Use decoction to wash the eyes when washing the face in the morning.
Precautions and toxicities	
Remarks	Roots may be used until aroma fades.
Informant	Magtibay, Ronnie Aguila; Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.; Sia, Isidro C.
Date	2008Sept13, 2009Feb20

BOILS

Indication	<i>Pigsa</i> (Boils)
Scientific name	<i>Hibiscus rosa-sinensis</i> L.
Family	Malvaceae
Local name	Gumamela
Filipino	Gumamela
English	Hibiscus, China rose, Shoefflower
Part used	Woody part
Gathering and storing	Obtain a piece of wood from the plant.
Preparation	Scrape the piece of wood. Cut a piece of cloth into a circle (2" diameter) and put a hole in the middle in which the eye of the boil can fit.
Directions for use and dosage	Place the scraped wood in the cloth. Apply to the boil.
Precautions and toxicities	
Remarks	Let the boil ripen before applying the medicine.
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb21

Indication	<i>Pigsa</i> (Boils)
Scientific name	<i>Pipturus arborescens</i> (Link.) C.B. Rob.
Family	Urticaceae
Local name	Dalunot
Filipino	Dalunot
English	--
Part used	Bark

Gathering and storing	Obtain a piece of wood from the plant.
Preparation	Scrape the piece of wood. Cut a piece of cloth into a circle (2" diameter) and put a hole in the middle in which the eye of the boil can fit.
Directions for use and dosage	Place the scraped wood in the cloth. Apply to the boil.
Precautions and toxicities	
Remarks	Let the boil ripen before applying the medicine.
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb21

BURNS

Indication	<i>Paso</i> (Burns)
Scientific name	<i>Tinospora rumphii</i> Boerl
Family	Menispermaceae
Local name	Makabuhay
Filipino	Makabuhay
English	
Part used	Stem
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Only clean utensils are used for preparing the medicine. Chop makabuhay stem into small pieces and cook in a pan with oil. Add <i>asupre</i> (sulfur) after cooking and place in a bottle.
Directions for use and dosage	The topical medication is applied using a cotton tip applicator.
Precautions and toxicities	Decoction of makabuhay may induce abortion.
Remarks	
Informant	Magtibay, Ronnie Aguila; Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.
Date	2008Nov03, 2008Nov07, 2009March19

COUGH

Indication	<i>Ubo</i> (Cough)
Scientific name	<i>Citrus microcarpa</i>
Family	Rutaceae
Local name	Kalamansi
Filipino	Kalamansi
English	Calamondin, Philippine lime
Part used	Fruit
Gathering and storing	
Preparation	Squeeze juice of the fruit in one glass of water.
Directions for use and dosage	Drink the juice.
Precautions and toxicities	
Remarks	
Informant	Ferrer, Mylene Magtibay
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon

Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec28

Indication	<i>Ubo</i> (Cough)
Scientific name	<i>Dillenia philippinensis</i> Rolfe
Family	Dilleniaceae
Local name	Katmon
Filipino	Katmon
English	
Part used	Roots
Gathering and storing	Gather an 11" long reddish root.
Preparation	Cut the root into 4 pieces. Boil in 1 ½ - 2 ½ glass of water.
Directions for use and dosage	Drink as substitute for water until cough subsides.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009March19

Indication	<i>Ubo</i> (Cough)
Scientific name	<i>Vitex negundo</i> L.
Family	Verbenaceae
Local name	Lagundi
Filipino	Lagundi
English	Five-leaved chaste tree
Part used	Leaves
Gathering and storing	Gather fresh young or mature leaves, 7 leaves or 2 branches.
Preparation	Boil in 1 ½ glass of water.
Directions for use and dosage	Drink as substitute for water.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009March19

Indication	<i>Ubo</i> (Cough)
Scientific name	1. <i>Origanum vulgare</i> 2. <i>Citrus microcarpa</i> Bunge
Family	1. Labiatae 2. Rutaceae
Local name	1. Oregano 2. Kalamansi
Filipino	1. Oregano 2. Kalamansi

English	1. Oregano 2. Calamondin, Philippine lime
Part used	1. Leaves 2. Fruit
Gathering and storing	
Preparation	Place 4 leaves on top of rice while it is on low fire (<i>pag-iinin</i>). Leave for a few minutes. Take the leaves and squeeze the juice on to a spoon. Squeeze 1 whole kalamansi on to the spoon.
Directions for use and dosage	Take 3 times a day, after meals.
Precautions and toxicities	
Remarks	
Informant	Ferrer, Mylene Magtibay
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec28

Indication	<i>Ubo</i> (Cough)
Scientific name	1. <i>Breynia rhamnoides</i> (Retz.) Muell.-Arg. 2. <i>Samadera indica</i> Gaertn.
Family	1. Euphorbiaceae 2. Simarubaceae
Local name	1. Matang-ulang 2. Palo Santo
Filipino	1. Matang-hipon 2. Manunggal
English	
Part used	Leaves
Gathering and storing	
Preparation	Boil the leaves of Matang-ulang and Palo Santo in ample amount of water.
Directions for use and dosage	Drink the decoction.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec27

Indication	<i>Ubo</i> (Cough)
Scientific name	
Family	
Local name	Panlaga
Filipino	
English	
Part used	Vine
Gathering and storing	Gather fresh vine.
Preparation	

Directions for use and dosage	Suck the sap from the vine.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2009March19

Indication	<i>Ubo</i> (Cough)
Scientific name	<i>Blumea balsamifera</i> (Linn.) DC.
Family	Compositae
Local name	Sambong
Filipino	Sambong
English	Blumea camphor
Part used	Leaves
Gathering and storing	Boil 4 leaves in 2 glasses of water.
Preparation	Drink in the morning and afternoon.
Directions for use and dosage	
Precautions and toxicities	
Remarks	
Informant	Ferrer, Mylene Magtibay
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2008Dec28

DIABETES

Indication	Diabetes
Scientific name	<i>Antidesma buniis</i> (L.) Spreng.
Family	Euphorbiaceae
Local name	Bignay
Filipino	Bignay
English	Bignay
Part used	Bark of the trunk
Gathering and storing	
Preparation	Boil the bark in 1 ½ glass of water.
Directions for use and dosage	Drink as substitute for water.
Precautions and toxicities	
Remarks	Plant is commonly found near the river.
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2009March19

Indication	Diabetes
Scientific name	<i>Selaginella tamariscina</i>
Family	Selaginellaceae
Local name	Kayumkom
Filipino	Milagrosa
English	Resurrection fern
Part used	Whole plant, mature
Gathering and storing	The plants are harvested during the Holy Week, preferably on Good Friday. Plants are exposed under the sun for 3-7 days until dry and stored in a sack on a dry area. If plants start to blacken, re-exposure to the sun is done to prevent further decomposition.
Preparation	Boil one pack (about 5 whole plants) in a pot with 3 glasses of water. Using a strainer, separate the plants from the decoction. Divide the filtrate in two. Let the plants dry. Store in a dry area. It can be boiled over and over again as long as the plants have not decomposed.
Directions for use and dosage	Drink one part of the decoction (about 1 glass) twice a day until symptom free.
Precautions and toxicities	Not to be given to pregnant women as it can induce abortion.
Remarks	
Informant	Remo, Ruby; Remo, Marilou O.
Address	Barangay Tongko, Tayabas, Quezon
Interviewer	Quiogue Rowell S.; Reynaldo, Chris-Angelo R.
Date	2008Nov07

Indication	Diabetes
Scientific name	<i>Swietenia macrophylla</i>
Family	Meliaceae
Local name	
Filipino	
English	Mahogany
Part used	Seed
Gathering and storing	
Preparation	
Directions for use and dosage	
Precautions and toxicities	
Remarks	Previously banned to be sold because of cases of death due to overdose.
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb20

Indication	Diabetes
Scientific name	<i>Tinospora rumphii</i> Boerl
Family	Menispermaceae
Local name	Makabuhay
Filipino	Makabuhay
English	
Part used	Stem
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	A piece of wood is boiled in ample amount of water.
Directions for use and dosage	Drink the decoction.
Precautions and toxicities	May induce abortion.
Remarks	
Informant	Magtibay, Ronnie Aguila; Remo, Marilou O.
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.
Date	2008Nov03, 2008Nov07

Indication	Diabetes
Scientific name	<i>Arcangelisia flava</i>
Family	Menispermaceae
Local name	Marilao
Filipino	Abutra, Albotra, Galbutra, Suma
English	Yellow-fruited moonseed
Part used	Stem wood
Gathering and storing	No particular time of day, month, or seasonal preference.
Preparation	The woody stem is boiled in water until a yellow color is obtained. The decoction is cooled after boiling.
Directions for use and dosage	Drink twice a week.
Precautions and toxicities	
Remarks	
Informant	Remo, Marilou O.
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.
Date	2008Nov07

DIARRHEA

Indication	Diarrhea
Scientific name	<i>Psidium guajava</i> Linn.
Family	Myrtaceae
Local name	Bayabas
Filipino	Bayabas
English	Guava
Part used	Young fruit
Gathering and storing	No particular time of day, month or seasonal preference
Preparation	Boil at least 7 young guava fruits in 1 glass of water. Allow the decoction to cool.
Directions for use and dosage	Drink the decoction as needed.

Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.
Date	2008Nov05

INDUCE DIZZINESS AND DEFECATION

Indication	Induces dizziness and/or defecation
Scientific name	<i>Dioscorea hispida</i> Dennst.
Family	Dioscoreaceae
Local name	Nami
Filipino	Nami
English	Asiatic bitter yam
Part used	Shoots
Gathering and storing	
Preparation	Remove excess of water from the rice being cooked. Cover the pot for 2 minutes. Place a shoot of Nami in the rice. Let it stay for 1 minute.
Directions for use and dosage	Serve the cooked rice.
Precautions and toxicities	
Remarks	In the past, Aytas feared and distrusted non-Aytas. They fed the rice cooked with Nami to people whom they thought were arrogant.
Informant	Magtibay, Cristina Conje; Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.; Sia, Isidro C.
Date	2008Nov05, 2008Dec29

DYSMENORRHEA

Indication	Dysmenorrhea
Scientific name	
Family	
Local name	Mariang Diablo, Ramallosa
Filipino	
English	
Part used	Leaves
Gathering and storing	No particular time of day, month or seasonal preference. A stem with 4-5 leaves is cut.
Preparation	Boil the stem and leaves in 2 glasses of water for 3 minutes. Remove the leaves from the pot. Divide the extract into 2 glasses. Store plant in a dry area. It can still be boiled for about 4 times.
Directions for use and dosage	Drink one part of the extract (about $\frac{3}{4}$ glass) twice a day until pain subsides.
Precautions and toxicities	Not to be given to pregnant women as it can induce abortion.

	Ramalloso leaves should also not be smelled by pregnant women as it is believed to induce abortion.
Remarks	Not used/known by Tagalog.
Informant	Remo, Ruby; Remo, Marilou O.
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Quiogue, Rowell S.; Reynaldo, Chris-Angelo R.
Date	2008Nov07

ECZEMA

Indication	Eczema
Scientific name	<i>Tinospora rumphii</i> Boerl
Family	Menispermaceae
Local name	Makabuhay
Filipino	Makabuhay
English	
Part used	Stem
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Only clean utensils are used for preparing the medicine. Chop makabuhay stem into small pieces and cook in a pan with oil. Add <i>asupre</i> (sulfur) after cooking and place in a bottle.
Directions for use and dosage	The wound is washed before application of medicine. The topical medication is applied using a cotton tip applicator.
Precautions and toxicities	Decoction of makabuhay may induce abortion.
Remarks	
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.
Date	2008Nov03, 2008Nov07

Indication	Eczema
Scientific name	1. <i>Cassia alata</i> Linn. 2. <i>Tinospora rumphii</i> Boerl 3. <i>Gliricidia sepium</i> (Jacq.) Kunth ex Walt.
Family	1. Leguminosae 2. Menispermaceae 3. Fabaceae
Local name	1. Bayabasan/Bayabasin 2. Makabuhay 3. Kakawate
Filipino	1. Akapulko 2. Makabuhay 3. Madre Kakaw
English	1. Ringworm bush or shrub 2. -- 3. --
Part used	1. Leaves 2. Stem

	3. Stem
Gathering and storing	Gather leaves from 2 branches of bayabasan.
Preparation	Prepare a piece of makabuhay, peeled skin of a piece of madre kakaw, ¼ of a candle (esperma) and a small packet of asupre (sulfur). Cook these in a bottle of coconut oil. Boil the bayabasan leaves.
Directions for use and dosage	Use the leaves to clean the affected foot or leg. Apply concoction to the affected part. May be used anytime.
Precautions and toxicities	Decoction of makabuhay may induce abortion.
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb21

FEVER

Indication	<i>Lagnat</i> (Fever)
Scientific name	<i>Ehretia microphylla</i> Lam.
Family	Boraginaceae
Local name	Tsaang gubat
Filipino	Tsaang gubat
English	
Part used	Leaves
Gathering and storing	No particular time of day, month, or season preferred
Preparation	Leaves are boiled in 1-2 cups of water and decoction is allowed to cool.
Directions for use and dosage	Drink the decoction.
Precautions and toxicities	
Remarks	Leaves can be boiled repeatedly as long as it produces taste. New leaves are used if previously boiled leaves no longer produce the desired color of decoction.
Informant	Magtibay, Cristina Conje; Lazado, Susan
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.
Date	2008Nov05, 2008Nov03

Indication	<i>Lagnat</i> (Fever)
Scientific name	
Family	
Local name	Saltiki
Filipino	
English	
Part used	Leaves
Gathering and storing	No particular time of day, month, or season preferred
Preparation	Leaves are boiled in 1-2 cups of water and decoction is allowed to cool.
Directions for use and dosage	Drink the decoction.

Precautions and toxicities	May induce abortion.
Remarks	
Informant	Dela Cruz, Carmen Nadres
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb20

FISH POISON

Indication	<i>Lason sa isda</i> (Fish poison)
Scientific name	<i>Anamirta cocculus</i>
Family	Menispermaceae
Local name	Bayati
Filipino	Bayati
English	Fishberry, Levant nut
Part used	Fruit
Gathering and storing	Fruits can be gathered anytime when needed. Pick mature brown fruits. Dry the fruits under the sun for about a week.
Preparation	Pound the dried fruits. Mix the pounded fruits with worms.
Directions for use and dosage	Scatter the mixture of fruits and worms on the river. Wait for about 15 minutes. Fish will start to manifest changes in movement and can be easily caught.
Precautions and toxicities	Fruits may cause dizziness especially to children
Remarks	Use of bayati confirmed by Chieftain Ronnie Magtibay.
Informant	Remo, Ruby
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Quiogue, Rowell S.
Date	2008Nov07

Indication	<i>Lason sa isda</i> (Fish poison)
Scientific name	<i>Dioscorea hispida</i> Dennst.
Family	Dioscoreaceae
Local name	Nami
Filipino	Nami
English	Asiatic bitter yam
Part used	Tuber
Gathering and storing	
Preparation	The roots are chopped and mixed with earthworms to serve as fish bait.
Directions for use and dosage	The bait is thrown to the river and the fishes are observed for changes in movement. Changes in fish motion indicate effect of the poison. The fish will now be easy to catch.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.; Sia, Isidro C.

Date	2008Nov05
------	-----------

Indication	<i>Lason sa isda</i> (Fish poison)
Scientific name	<i>Derris elliptica</i> (Roxb.) Benth.
Family	Leguminosae
Local name	Tubli
Filipino	Tubli
English	
Part used	Roots
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Roots are crushed and mixed with earthworms.
Directions for use and dosage	The mixture is scattered in the river. Fish will start to manifest changes in movement and can be easily caught.
Precautions and toxicities	May cause dizziness in humans.
Remarks	After a while, when fish are left alone, tubli loses effect and they will return to their normal movement.
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Sia, Isidro C.
Date	2008Nov08

FLATULENCE

Indication	<i>Kabag</i> (Flatulence)
Scientific name	<i>Artemisia vulgaris</i>
Family	Compositae
Local name	Ka Maria
Filipino	Damong Maria
English	Chinese honeysuckle, Maiden wort, Motherwort, Felon herb, Mugwort, Wegwood, Wormwood
Part used	Leaves, shoots
Gathering and storing	No particular time of day, month or seasonal preference
Preparation	At least 7 leaves are boiled for about a minute in a ½ glass of water. Let decoction to cool.
Directions for use and dosage	Drink extract.
Precautions and toxicities	May induce abortion.
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.
Date	2008Dec28

Indication	<i>Kabag ng bata</i> (Flatulence)
Scientific name	1. <i>Acorus calamus</i> L. 2. <i>Cinnamomum mindanaense</i>
Family	1. Acoraceae 2. Lauraceae

Local name	1. Lubigan 2. Kalingag
Filipino	1. Lubigan 2. Kalingag
English	1. Sweet flag 2. Ceylon cinnamon
Part used	1. Stem 2. Bark
Gathering and storing	
Preparation	Boil the stem of Lubigan and bark of Kalingag in one glass of water.
Directions for use and dosage	Drink 3 times a day or substitute for water. Use a dropper for very young children. A breastfeeding mother may also drink the decoction instead.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009March19

HEADACHE

Indication	<i>Sakit sa ulo</i> (Headache)
Scientific name	
Family	
Local name	Hawili
Filipino	
English	
Part used	Young leaf
Gathering and storing	Pick 1-2 young leaves.
Preparation	
Directions for use and dosage	Apply on affected area.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb21

HEAVINESS AND PAIN IN THE LEGS

Indication	<i>Panghaplas sa mabigat na binti</i> (Heavy and painful feeling in the legs)
Scientific name	<i>Mucuna pruriens</i>
Family	Fabaceae
Local name	Nipay
Filipino	Nipay
English	Cow-itch, Velvet bean, Cowhage

Part used	Fruit
Gathering and storing	One should obtain the fruit during the dry season.
Preparation	Mix the fruit's flesh with coconut oil.
Directions for use and dosage	Use it to rub/massage the affected area.
Precautions and toxicities	Handling the exterior of the fruit may cause itches.
Remarks	
Informant	Magtibay, Arnel Aguila; Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2008Dec29

HYPERTENSION

Indication	<i>Altapresyon</i> (Hypertension)
Scientific name	<i>Selaginella tamariscina</i>
Family	Selaginellaceae
Local name	Kayumkom
Filipino	Milagrosa
English	Resurrection fern
Part used	Whole plant, mature
Gathering and storing	The plants are harvested during the Holy Week, preferably on Good Friday. Plants are exposed under the sun for 3-7 days until dry and stored in a sack on a dry area. If plants start to blacken, re-exposure to the sun is done to prevent further decomposition.
Preparation	Boil one pack (about 5 whole plants) in a pot with 3 glasses of water. Using a strainer, separate the plants from the decoction. Divide the filtrate in two. Let the plants dry. Store in a dry area. It can be boiled over and over again as long as the plants are not yet decomposed.
Directions for use and dosage	Drink one part of the decoction (about 1 glass) twice a day until symptom free.
Precautions and toxicities	Not to be given to pregnant women as it can induce abortion.
Remarks	
Informant	Remo, Ruby; Remo, Marilou O.
Address	Barangay Tongko, Tayabas, Quezon
Interviewer	Quiogue Rowell S.; Reynaldo, Chris-Angelo R.
Date	2008Nov07

Indication	<i>Altapresyon</i> (Hypertension)
Scientific name	<i>Musa sapientum</i> Linn.
Family	Musaceae
Local name	Saba
Filipino	Saba
English	Banana
Part used	Leaf
Gathering and storing	Gather mature yellow leaves.

Preparation	Boil leaves in ample amount of water.
Directions for use and dosage	One may drink the decoction daily.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2008Nov06

INGUINAL HERNIA

Indication	<i>Loslos</i> (Inguinal hernia)
Scientific name	
Family	
Local name	Tagup-tagupan
Filipino	
English	
Part used	Leaves
Gathering and storing	No particular time of day, month, or seasonal preference.
Preparation	Leaves are taken and macerated to soften but not crushed.
Directions for use and dosage	The softened leaves are applied over the area of inguinal hernia.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.
Date	2008Nov04

JAUNDICE

Indication	<i>Naninilaw na mata at balat</i> (Jaundice)
Scientific name	<i>Arcangelisia flava</i>
Family	Menispermaceae
Local name	Marilao
Filipino	Abutra, Albotra, Galbutra, Suma
English	Yellow-fruited moonseed
Part used	Root
Gathering and storing	No particular time of day, month, or seasonal preference.
Preparation	Boil in two glasses of water.
Directions for use and dosage	Drink.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Rowena dela Cruz
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2008Dec28

KONTRA/PANGONTRA

Indication	<i>Kontra/Pangontra</i> . To counter negative words and actions directed at a person. By carrying this piece of wood (along with an orasyon), one won't have problems in dealing with people, wherever he/she goes.
Scientific name	
Family	
Local name	Sinukuan
Filipino	
English	
Part used	Wood
Gathering and storing	
Preparation	
Directions for use and dosage	This will only be effective if it comes with an <i>orasyon</i> .
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009March19

Indication	<i>Kontra/pangontra ng bata sa pitong sakit:</i> (To counter 7 children's illnesses) <i>Balis, tubo ng ngipin (nagtatae ang bata), tubo ng ngipin (naglalaway ang bata), nuno, kabag, uhiya (balis ng mga namatay) at sampal ng hangin</i>
Scientific name	1) <i>Zanthoxylum rhetsa</i> (Roxb.) DC. 2) -- 3) <i>Celtis philippinensis</i> Blanco 4) -- 5) -- 6) <i>Canarium luzonicum</i> (Blume) A. Gray
Family	1) Rutaceae 2) -- 3) Celtidaceae 4) -- 5) -- 6) Burseraceae
Local name	1) Kaytana 2) Kupang 3) Malaikmo 4) Karig (2 piraso) 5) Sagisi 6) Sahing
Filipino	6) Pili
English	6) Manila elemi
Part used	1) Seed 2) Seed

	3) Fruit 4) Wood 5) Seed 6) Seed
Gathering and storing	
Preparation	
Directions for use and dosage	Place the seeds, fruit and pieces of wood in a small cloth bag (1"x1"). Pin the cloth beneath the child's clothes.
Precautions and toxicities	
Remarks	To be efficacious, the pangontra must contain a total of 7 plants e.g. obtain 2 karig wood pieces to complete the 7 plants. This is the number that counters ailments. This is only effective for children. There is a different <i>pangontra</i> for adults.
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2009Feb20

TO EASE LABOR

Indication	<i>Para madaling lumabas ang bata</i> (To ease labor)
Scientific name	<i>Averrhoa carambola</i> Linn.
Family	Oxalidaceae
Local name	Balimbing
Filipino	Balimbing
English	Star fruit, Carambola
Part used	Bark
Gathering and storing	Obtain a piece of bark (1.5" x 1")
Preparation	Boil 1 piece in 1½ glass of water until color appears.
Directions for use and dosage	Drink as substitute for water when one feels one is about to go into labor in a few days. Drink decoction until day of labor.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2009Feb20

MALARIA

Indication	Malaria
Scientific name	<i>Ehretia microphylla</i> Lam.
Family	Boraginaceae
Local name	Tsaang gubat
Filipino	Tsaang gubat
English	
Part used	Leaves

Gathering and storing	No particular time of day, month, or season preferred
Preparation	Leaves are boiled in 1-2 cups of water and decoction is allowed to cool.
Directions for use and dosage	Drink the decoction 3 times a day for a week.
Precautions and toxicities	
Remarks	Leaves can be boiled repeatedly as long as it still produces taste. New leaves are used if previously boiled leaves no longer produce the desired color of decoction.
Informant	Magtibay, Cristina Conje; Lazado, Susan
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.
Date	2008Nov05, 2008Nov03

Indication	Malaria
Scientific name	
Family	
Local name	Saltiki
Filipino	
English	
Part used	Leaves
Gathering and storing	No particular time of day, month, or season preferred
Preparation	Leaves are boiled in 1-2 cups of water. Allow decoction to cool.
Directions for use and dosage	Drink the decoction.
Precautions and toxicities	May induce abortion.
Remarks	
Informant	Dela Cruz, Carmen Nadres
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb20

MEASLES

Indication	<i>Tigdas</i> (Measles)
Scientific name	1. <i>Pimpinella anisum</i> / <i>Foeniculum vulgare</i> Gaertn. 2. <i>Coriandrum Sativum</i> Linn.
Family	1. Umbeliferae 2. Umbelliferae
Local name	1. Anis 2. Kulantro
Filipino	1. Anis, Haras 2. Kulantro
English	1. Anise, Fennel 2. Coriander
Part used	1. Fruit 2. Fruit
Gathering and storing	¼ kilo of anis is bought in the market
Preparation	Boil 1 small packet of anis and kolantro in 1½ glass of water.
Directions for use and dosage	Drink as substitute for water.

Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb20

INDUCE MENSTRUAL FLOW

Indication	<i>Pampaagas, pamparegla</i> (Amenorrhea – induce menstrual flow)
Scientific name	1. <i>Artemisia vulgaris</i> 2. <i>Tinospora rumphii</i> Boerl 3. <i>Arcangelisia flava</i> 4. <i>Lunasia amara</i> Blanco
Family	1. Compositae 2. Menispermaceae 3. Menispermaceae 4. Rutaceae
Local name	1. Ka Maria 2. Makabuhay 3. Marilao 4a. Saltiki 4b. Apdong kahoi
Filipino	1. Damong Maria 2. Makabuhay 3. Abutra 4a. Saltiki 4b. Apdong kahoi
English	1. Chinese honeysuckle, Maiden wort, Motherwort, Felon herb, Mugwort, Wegwood, Wormwood 2.-- 3. Yellow-fruited moonseed 4. --
Part used	Leaves, shoots
Gathering and storing	No particular time of day, month or seasonal preference
Preparation	For inducing menstruation, a concoction of the woody parts of other herbal plants such as Marilao, Saltiki, Makabuhay and wine is made.
Directions for use and dosage	To induce menstruation, drink 3 times a day and take 2 gulps each measuring a shot glass (approximately 20-45 ml).
Precautions and toxicities	May induce abortion. Cold and sour foods should be avoided for better efficacy.
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.
Date	2008Nov05

Indication	<i>Pampaagas, pamparegla</i> (Irregular menstruation – induce menstrual flow)
Scientific name	<i>Artemisia vulgaris</i>
Family	Compositae
Local name	Ka Maria
Filipino	Damong Maria
English	Chinese honeysuckle, Maiden wort, Motherwort, Felon herb, Mugwort, Wegwood, Wormwood
Part used	Leaves, shoots
Gathering and storing	No particular time of day, month or seasonal preference
Preparation	Leaves are taken and mashed on a coconut shell, add ½ glass of lambanog. Another option is to place leaves on a cloth and pour wine over it. Squeeze the cloth to get the extract.
Directions for use and dosage	Drink the extract once a day for 4-5 days.
Precautions and toxicities	May induce abortion. Cold and sour foods should be avoided for better efficacy.
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.
Date	2008Nov05

Indication	<i>Pampaagas, pamparegla</i> (Induce menstrual flow)
Scientific name	<i>Swietenia macrophylla</i>
Family	Meliaceae
Local name	
Filipino	
English	Mahogany
Part used	Seed
Gathering and storing	
Preparation	
Directions for use and dosage	
Precautions and toxicities	May induce abortion. Previously banned to be sold because of cases of death due to overdose.
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb20

Indication	<i>Pampaagas, pamparegla</i> (Induce menstrual flow)
Scientific name	1. <i>Arcangelisia flava</i> 2. <i>Lunasia amara</i> Blanco 3. <i>Caesalpinia sappan</i> Linn.
Family	1. Menispermaceae 2. Rutaceae 3. Leguminosae

Local name	1. Marilao 2. Saltiki, Apdong kahoi 3. Sapang
Filipino	1. Abutra, Albotra, Galbutra, Suma 2. Saltiki, Apdong kahoi 3. Sapang, Sibukau
English	1. Yellow-fruited moonseed 2. -- 3. Sappan wood, Bukkum wood
Part used	Wood
Gathering and storing	No particular time of day, month, or seasonal preference.
Preparation	Obtain 1" x 2" of Marilao, Saltiki and Sapang wood. Chop into smaller pieces. Place in a bottle of lambanog or gin.
Directions for use and dosage	Take 1 spoon 3 times a day before meals, 4 days - 1 week or until one begins menstruating.
Precautions and toxicities	May induce abortion. Sapang is not to be given to those with hypertension since it can worsen their condition.
Remarks	The 3 plants are combined to hasten the expulsion of <i>lamig</i> (coldness) from the stomach. Avoid using beer because this adds to air in the body. The plant may be found in forests in the mountains. Saltiki is more potent than Mariang Diablo in inducing menstruation. Aside from Mariang Diablo, others also include Ka Maria, Makabuhay or Makaisa in the decoction. Makaisa is no longer being used. Cutting from the tree is already prohibited.
Informant	Magtibay, Ronnie Aguila; Magtibay, Rowena dela Cruz; Ferrer, Mylene Magtibay; Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2008Dec27, 2008Dec28, 2009March19

MENTAL ILLNESS

Indication	<i>Nasiraan ng ulo o bait</i> (Mental illness)
Scientific name	1. -- 2. <i>Cinnamomum mindanaense</i>
Family	1. -- 2. Lauraceae
Local name	1. Balayong 2. Kalingag
Filipino	1. -- 2. Kalingag
English	1. -- 2. Ceylon cinnamon
Part used	1. Fruit 2. Bark

Gathering and storing	Gather fruit during the dry season.
Preparation	Scrape off the skin of the fruit until one reaches the white interior. Scrape a small amount of the white interior. Put a small piece of kalingag bark and small amount of balayong in a red cloth (1"x1"). Sew the sides of the cloth to enclose the herbs. Prepare two of these.
Directions for use and dosage	Place the two cloth on the right and left side of the forehead. The cloth with herbs should only be used once.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb20

MYOMA

Indication	<i>Bukol sa sinapupunan</i> (Myoma)
Scientific name	<i>Nauclea orientalis</i> Linn.
Family	Rubiaceae
Local name	Bangkal
Filipino	Bangkal
English	Leichhardt tree
Part used	Roots
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Boil woody root parts in water. Cool the decoction.
Directions for use and dosage	Drink decoction.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.
Date	2008Nov04, 2008Nov06

PAMPAAMO

Indication	<i>Pampaamo</i>
Scientific name	
Family	
Local name	Tawa-tawa
Filipino	
English	
Part used	
Gathering and storing	
Preparation	Root
Directions for use and dosage	Use of the plant is confidential. Only known by the healer and her daughter.
Precautions and toxicities	
Remarks	

Informant	Lazado, Susan
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Nov03

TO TREAT POISONING

Indication	<i>Kontra sa lason</i> (To counter poisoning)
Scientific name	<i>Citrus microcarpa</i>
Family	Rutaceae
Local name	Kalamansi
Filipino	Kalamansi
English	Calamondin, Philippine lime
Part used	Fruit
Gathering and storing	
Preparation	Mix salt, oil, juice of 7 kalamansi, red egg, and puli.
Directions for use and dosage	Drink.
Precautions and toxicities	
Remarks	
Informant	Lazado, Susan
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Nov03

PURGATIVE FOR CHICKENS

Indication	<i>Pampurga sa bulate ng manok</i> (Purgative for chickens)
Scientific name	<i>Areca catechu</i>
Family	Palmaceae
Local name	Bunga
Filipino	Bunga
English	Areca Nut/ "Betel Nut"
Part used	Fruit
Gathering and storing	Gather ripe/mature nut.
Preparation	
Directions for use and dosage	Feed to chicken.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb21

RINGWORM

Indication	<i>Buni</i> (Ringworm)
Scientific name	<i>Solanum torvum</i> Sev.
Family	Solanaceae
Local name	Talong-talongan
Filipino	Tandang-aso
English	
Part used	Seed
Gathering and storing	
Preparation	
Directions for use and dosage	The seeds are rubbed on the affected area.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela Uy; Sia, Isidro C.
Date	2008Sept13

SCABIES

Indication	<i>Galis-aso</i> (Scabies)
Scientific name	<i>Tinospora rumphii</i> Boerl
Family	Menispermaceae
Local name	Makabuhay
Filipino	Makabuhay
English	
Part used	Stem
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Only clean utensils are used for preparing the medicine. Chop makabuhay stem into small pieces and cook in a pan with oil. Add <i>asupre</i> (sulfur) after cooking and place in a bottle.
Directions for use and dosage	The wound is washed before application of medicine. The topical medication is applied using a cotton tip applicator.
Precautions and toxicities	Decoction of makabuhay may induce abortion.
Remarks	
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.
Date	2008Nov03, 2008Nov07

SKIN IRRITATION

Indication	<i>Gamot sa halas ng bata</i> (Skin irritation due to sweat and/or skin to skin or skin to cloth friction)
Scientific name	<i>Areca catechu</i>
Family	Palmaceae
Local name	Bunga
Filipino	Bunga
English	Areca Nut/ "Betel Nut"

Part used	Fruit
Gathering and storing	Gather ripe/mature nut.
Preparation	
Directions for use and dosage	Chew the nut and apply the juice to the skin rash.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb21

SKIN ITCHES

Indication	<i>Pangangating sanhi ng kagaw o hanip</i> (Skin itches caused by mites called kagaw or hanip)
Scientific name	<i>Premna odorata</i> Blanco
Family	Verbenaceae
Local name	Alagaw
Filipino	Alagaw
English	Fragrant premna
Part used	Leaves
Gathering and storing	Young or mature leaves may be used, and may be obtained any season. 3 branches (7-8 leaves per branch) are needed.
Preparation	Boil for 2 minutes in 2 dippers of water. Add cold water until it is warm enough to use for bathing.
Directions for use and dosage	Bathe with decoction.
Precautions and toxicities	
Remarks	Plant known by Tagalog.
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb20

SORE EYES

Indication	<i>Masakit at namumulang mata</i> (Sore eyes)
Scientific name	
Family	
Local name	Pugad-pugad
Filipino	
English	
Part used	
Gathering and storing	
Preparation	
Directions for use and dosage	Apply a drop of the sap in the eye.
Precautions and toxicities	
Remarks	Pugad-pugad is more efficacious than 'Eye-mo'.
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon

Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec27

SORE THROAT

Indication	<i>Sakit sa lalamunan</i> (Sore throat)
Scientific name	<i>Citrus microcarpa</i>
Family	Rutaceae
Local name	Kalamansi
Filipino	Kalamansi
English	Calamondin, Philippine lime
Part used	Fruit
Gathering and storing	
Preparation	Prepare <i>apog</i> (lime - calcium carbonate) and kalamansi. Roast the fruit. Squeeze out the juice and mix with apog.
Directions for use and dosage	Apply on the throat/neck.
Precautions and toxicities	
Remarks	
Informant	Ferrer, Mylene Magtibay
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec28

SPRAIN

Indication	<i>Pilay</i> (Sprain)
Scientific name	<i>Piper betle</i> L.
Family	Piperaceae
Local name	Ikmo
Filipino	Ikmo
English	Betel Leaf Pepper
Part used	Leaves
Gathering and storing	Obtain a mature leaf.
Preparation	
Directions for use and dosage	Apply on affected area.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb21

Indication	<i>Pilay</i> (Sprain)
Scientific name	<i>Zingiber officinale</i> Rosc.
Family	Zingiberaceae
Local name	Luya
Filipino	Luya
English	Ginger

Part used	Rhizome
Gathering and storing	
Preparation	Roast the ginger. Mash it.
Directions for use and dosage	Apply over the inflamed area.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2008Nov28, 2009March19

Indication	<i>Pilay</i> (Sprain)
Scientific name	
Family	
Local name	Tuba
Filipino	Tuba
English	
Part used	Leaves
Gathering and storing	
Preparation	Heat the leaves until these are wilted.
Directions for use and dosage	Apply warm leaves with oil on affected area.
Precautions and toxicities	
Remarks	
Informant	Ferrer, Mylene Magtibay
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Apantado, Maria Gabriela U.
Date	2008Dec28

STROKE, THROMBOSIS

Indication	Stroke, Thrombosis
Scientific name	<i>Nauclea orientalis</i> Linn.
Family	Rubiaceae
Local name	Bangkal
Filipino	Bangkal
English	Leichhardt tree
Part used	Roots
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Boil woody root parts in water. Cool the decoction.
Directions for use and dosage	Drink decoction.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Apantado, Maria Gabriela U.
Date	2008Nov04, 2008Nov06

TINEA FLAVA

Indication	<i>An-an</i> (Tinea flava)
Scientific name	<i>Solanum torvum</i> Sev.
Family	Solanaceae
Local name	Talong-talongan
Filipino	Tandang-aso
English	
Part used	Seed
Gathering and storing	
Preparation	
Directions for use and dosage	The seeds are rubbed on the affected area.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela Uy; Sia, Isidro C.
Date	2008Sept13

TOOTHACHE

Indication	<i>Sakit sa ngipin</i> (Toothache)
Scientific name	<i>Canarium luzonicum</i> (Blume) A. Gray
Family	Burseraceae
Local name	Sahing
Filipino	Pili
English	Manila elemi
Part used	Tree sap
Gathering and storing	No particular time of day, month, or seasonal preference.
Preparation	Obtain clear to whitish sap from the tree bark.
Directions for use and dosage	Apply sap on tooth.
Precautions and toxicities	
Remarks	The sap is useful and effective as long as it is soft.
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.
Date	2008Nov03

Indication	<i>Sakit sa ngipin</i> (Toothache)
Scientific name	
Family	
Local name	Sangipin
Filipino	
English	
Part used	Vine
Gathering and storing	
Preparation	Peel off the dark exterior of the vine until one reaches the white interior. Scrape a small amount of the white interior of the vine.
Directions for use and dosage	Apply on affected tooth. Re-apply if ache returns.

Precautions and toxicities	
Remarks	
Informant	Magtibay, Ronnie Aguila
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aporentado, Maria Gabriela U.
Date	2008Dec27, 2008Dec28

Indication	<i>Sakit sa ngipin</i> (Toothache)
Scientific name	<i>Datura metel</i> Linn.
Family	Solanaceae
Local name	Talampunai
Filipino	Talumpunai, talongpunai
English	Thorn apple
Part used	1) Roots 2) Leaves
Gathering and storing	Roots and leaves may be gathered anytime when needed.
Preparation	1) Boil the roots in a pot of water. Using a strainer, separate the filtrate from the roots. 2) Obtain 1 leaf, a pinch of salt and pound these.
Directions for use and dosage	1) Drink the filtrate. 2) Apply on the affected tooth. Leave on the tooth until pain subsides.
Precautions and toxicities	This medication may cause psychosis-like symptoms. Can be addictive.
Remarks	
Informant	1) Remo, Marilou O.; dela Cruz, Carmen Nadres; 2) Magtibay, Rowena dela Cruz
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Quiogue, Rowell S.; Reynaldo, Chris-Angelo R.; Aporentado, Maria Gabriela U.
Date	2008Nov07, 2008Nov09, 2008Dec28

URINARY PROBLEM

Indication	<i>Sakit sa pag-ihî, Sakit sa bato</i> (Urinary tract infection, Kidney stones)
Scientific name	<i>Selaginella tamariscina</i>
Family	Selaginellaceae
Local name	Kayumkom
Filipino	Milagrosa
English	Resurrection fern
Part used	Whole plant, mature
Gathering and storing	The plants are harvested during the Holy Week, preferably on Good Friday. Plants are exposed under the sun for 3-7 days until dry and stored in a sack on a dry area. If plants start to blacken, re-exposure to sun is done to prevent further decomposition.
Preparation	Boil one pack (about 5 whole plants) in a pot with 3 glasses of water. Using a strainer, separate the plants from the decoction.

	Divide the filtrate in two. Let the plants dry. Store in a dry area. It can be boiled over and over again as long as the plants are not yet decomposed.
Directions for use and dosage	Drink one part of the decoction (about 1 glass) twice a day until symptom free.
Precautions and toxicities	Not to be given to pregnant women as it can induce abortion.
Remarks	
Informant	Remo, Ruby; Remo, Marilou O.
Address	Barangay Tongko, Tayabas, Quezon
Interviewer	Quiogue Rowell S.; Reynaldo, Chris-Angelo R.
Date	2008Nov07

Indication	<i>Masakit, mahirap umihi, sakit sa bato</i> (Difficulty urinating, urinary tract stones/obstruction)
Scientific name	<i>Imperata cylindrica</i> (L.) Raeusch
Family	Poaceae
Local name	Kogon/ Uten Kogon
Filipino	Kogon
English	Cogon grass
Part used	Roots, fresh
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Wash roots clean of dirt. Boil about ¼ kg of roots in a pot with 8 glasses of water. The roots can be boiled twice.
Directions for use and dosage	Drink 3 glasses of decoction a day after waking up, during lunch and before sleeping.
Precautions and toxicities	No known toxicities
Remarks	
Informant	Remo, Rodelito
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Quiogue, Rowell S.; Aparentado, Maria Gabriela U.; Reynaldo, Chris-Angelo R.
Date	2008Nov04

SPITTING UP BLOOD

Indication	<i>Kapag nalura ng dugo</i> (Spitting up blood)
Scientific name	
Family	
Local name	Panlaga
Filipino	
English	
Part used	Vine
Gathering and storing	Cut a long piece of vine.
Preparation	Cut vine into 5 pieces (1.5" long). Boil the chopped pieces until reddish color is obtained.
Directions for use and dosage	Drink as substitute for water.
Precautions and toxicities	

Remarks	The plant may be re-boiled until it loses its taste.
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009March19

WOUNDS

Indication	<i>Sugat (Wound)</i>
Scientific name	<i>Artemisia vulgaris</i>
Family	Compositae
Local name	Ka Maria
Filipino	Damong Maria
English	Chinese honeysuckle, Maiden wort, Motherwort, Felon herb, Mugwort, Wegwood, Wormwood
Part used	Leaves, shoots
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Pound the young leaves and squeeze out the juice.
Directions for use and dosage	Place any amount of poultice on affected area.
Precautions and toxicities	
Remarks	
Informant	Ferrer, Mylene Magtibay
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Dec28

Indication	<i>Sugat (Wound)</i>
Scientific name	<i>Tinospora rumphii</i> Boerl
Family	Menispermaceae
Local name	Makabuhay
Filipino	Makabuhay
English	
Part used	Stem
Gathering and storing	No particular time of day, month or seasonal preference.
Preparation	Only clean utensils are used for preparing the medicine. Chop makabuhay stem into small pieces and cook in a pan with oil. Add <i>asupre</i> (sulfur) after cooking and place in a bottle.
Directions for use and dosage	The wound is washed before application of medicine. The topical medication is applied using a cotton tip applicator.
Precautions and toxicities	Decoction of makabuhay may induce abortion.
Remarks	
Informant	Magtibay, Ronnie Aguila; Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Reynaldo, Chris-Angelo R.; Aparentado, Maria Gabriela U.
Date	2008Nov03, 2008Nov07, 2009March19

**AESTHETIC:
HAIR CURLER**

Indication	<i>Pangkulot ng buhok</i> (Hair curler)
Scientific name	<i>Gliricidia sepium</i> (Jacq.) Kunth ex Walt.
Family	Fabaceae
Local name	Kakawate
Filipino	Madre Kakaw
English	
Part used	Twig
Gathering and storing	
Preparation	
Directions for use and dosage	Curl the hair on the twig. Leave on hair overnight.
Precautions and toxicities	
Remarks	
Informant	Magtibay, Cristina Conje
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2009Feb21

ANIMAL PRODUCT:

RABIES

Indication	<i>Rabies mula sa kagat ng aso</i> (Rabies from dog bite)
Scientific name	<i>Cervus mariannus</i>
Family	Cervidae
Local name	Usa (sungay)
Filipino	Usa
English	Philippine deer (antler)
Part used	Antler
Gathering and storing	
Preparation	
Directions for use and dosage	Let the wound bleed. Place antler on the bite. If antler does not stick to the wound anymore/if it falls, this indicates rabies is gone.
Precautions and toxicities	
Remarks	
Informant	Lazado, Susan
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Interviewer	Aparentado, Maria Gabriela U.
Date	2008Nov03

Index of plants according to medical use

1. Alaala
Acne
Blurred vision
2. Alagaw
Skin itches/mites
3. Anis
Measles
4. Anonang
Binat ng bagong panganak/ Post-partum bath
5. Bagawak
Abdominal pain/ stomachache
6. Balayong
Kontra-balis/ To counter *balis*
Mental illness
7. Balimbing
To ease labor
8. Bangkal
Myoma
Stroke, thrombosis
9. Batibog
Arthritis
10. Bayabas
Diarrhea
11. Bayabasan/Bayabasin
Eczema
12. Bayati
Fish poison
13. Bignay
Diabetes
14. Bunga
Skin irritation
Purgative for chickens
15. Dalunot
Boils

16. Dita
Abdominal pain/ stomachache
17. Gumamela
Boils
18. Hawili
Headache
19. Ikmo
Abdominal pain/ stomachache
Sprain
20. Ka Maria
Abdominal pain/ stomachache
Flatulence
Ant bites
Wounds
Pampaagas/Induce menstrual flow
21. Kakawate
Eczema
22. Kalamansi
Binat ng bagong panganak/ Post-partum bath
To treat poisoning
Cough
Sore throat
23. Kalamias
Binat ng bagong panganak/ Post-partum bath
24. Kalingag
Abdominal pain/ stomachache
Flatulence
Mental illness
25. Karig
Arthritis
To counter 7 children's illnesses/ *Pangontra sa pitong sakit ng bata*
26. Katmon
Cough
27. Kaytana
To counter 7 children's illnesses/ *Pangontra sa pitong sakit ng bata*
28. Kayumkom
Asthma
Diabetes
Hypertension

- Urinary problem
29. Kogon
Urinary problem
30. Kulantro
Measles
31. Kupang
To counter 7 children's illnesses/ *Pangontra sa pitong sakit ng bata*
32. Lagundi
Cough
33. Lubigan
Flatulence
34. Lukban
Binat ng bagong panganak/ Post-partum bath
35. Luya
Kontra-balis/ To counter *balis*
Sprain
36. Mahogany
Arthritis
Diabetes
Pampaagas/ Induce menstrual flow
37. Makabuhay
Burns
Eczema
Scabies
Wounds
Diabetes
Pampaagas/ Induce menstrual flow
38. Makaisa
Pampaagas/ Induce menstrual flow
39. Malaikmo
To counter 7 children's illnesses/ *Pangontra sa pitong sakit ng bata*
40. Mamalis
Binat ng bagong panganak/ Post-partum bath
41. Mariang Diablo
Abdominal pain/ stomachache
Dysmenorrhea
Pampaagas/ Induce menstrual flow

42. Marilao
Diabetes
Pampaagas/Induce menstrual flow
Jaundice
43. Matang-Ulang
Cough
44. Nami
Fish poison
Induce dizziness and/or defecation
45. Nipay
Arthritis
Heaviness and pain in the legs
46. Oregano
Cough
47. Palo Santo
Cough
48. Pamagot
Arthritis
49. Panlaga
Cough
Spitting up blood
50. Pugad-Pugad
Sore eyes
51. Saba
Hypertension
52. Sagisi
To counter 7 children's illnesses/ *Pangontra sa pitong sakit ng bata*
53. Sahing
Backache
Binat sa trangkaso
Toothache
To counter 7 children's illnesses/ *Pangontra sa pitong sakit ng bata*
54. Saltiki
Pampaagas/Induce menstrual flow
Fever
Malaria
55. Sambong
Abdominal pain/ stomachache
Cough

56. Sampalok
Binat ng bagong panganak/ Post-partum bath
57. Sangipin
Arthritis
Toothache
58. Sapang
Anemia
Pampaagas
59. Sinukuan
Pangontra
60. Tagup-Tagupan
Inguinal hernia
61. Talampunai
Toothache
62. Talong-talongan
Ringworm
Tinea Flava
63. Tamla
Binat ng bagong panganak/ Post-partum bath
64. Tawa-Tawa
Pampaamo
65. Tsaang Gubat
Fever
Malaria
66. Tuba
Sprain
67. Tubli
Fish poison

TAYABAS AYTA TERMS

Animals

Alibuybuy – A small black ant with a painful bite.

Alimos – A wild cat that lives in the forest. Usually eats ripe bananas, papaya, avocado and lansones. In the past was part of the Ayta diet.

Alo / amo – Monkey. *Unggoy* (Tag.)

Aspin – Fleas. *Pulgas* (Tag.)

Balikasiyaw – A particular bird that accompanies the monkey. Chirps to warn the monkey of coming hunters.

Balubid – A reptile similar to *kunyapit* but with scales on its back.

Buot – Forest rat. Eaten by the Ayta.

Kapilo – Turtle. *Pagong* (Tag.)

Katang – River crab.

Kunyapit – Monitor lizard. *Bayawak* (Tag.)

Himimigtas – Large red ant.

Kato – Dog ticks. *Garapata* (Tag.)

Labuyo – A kind of bird.

Lawa – Spider. *Gagamba* (Tag.)

Lungos – A small shrimp.

Mamansiw – Bird commonly found near the river.

Payutyot – A kind of bird.

Tuak – Another term for monitor lizard. *Bayawak* (Tag.)

Tururukan – Large grasshopper. *Tipaklong* (Tag.)

Ulang – Red and blue colored shrimp.

Widwid – A long grasshopper which makes sounds at night. Onomatopoeic name. The Ayta describe its sound as “widwidwid.”

Objects

Alulod – A gutter placed on the side of a tree to collect rain water.

Alumigmig – Fresh moist wood which may not yet be used as firewood.

Bayainan – Container to store fishing bait such as worms.

Biwas – A hook used to catch fish. “*Mamimiwas kami.*” (We are going fishing.)

Bumbong – Water container made of bamboo.

Kalatong – Drum made of wood or bamboo. Once used to call people for gatherings or to announce the coming of hunters and their game.

Kaya – A woven bamboo basket to place fish caught in the *salakab*. This may be tied on the waist or hung on the shoulder.

Lalo – A decomposing bamboo.

Lombo – Water container, for drinking or bathing.

Malaawey – Fresh moist wood which may not yet be used as firewood.

Momo / moyang – A morsel of food.

Salakab – Woven bamboo fish catcher or cage.

Siid – Long rectangular shrimp catcher.

Sundang – Knife.

Tukil – Bamboo container for salt or to catch dripping water.

Spaces

Abuhanan – Indoor cooking area.

Anga-anga – House or habitat.

Gitingan – Rocky riverside where some medicinal plants grow.

Kulapihan – Grassy area.

Lawayi – Stream.

Pasunggab – Lean-to. Traditional Ayta dwelling place.

Tongko / tungko / tungkuan – Outdoor cooking area. May be composed of three large stones put together.

Table No. 4 Informant data

1

Name	dela Cruz, Carmen Nadres “Aya”
Gender	Female
Age	55
Date of birth	1953December29
Marital status	Married
Occupation/Livelihood	Healer, herbal medicine vendor
Educational attainment	None
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Religion	Catholic
Type of informant	Healer, herbal medicine vendor
Type of healing practice	Heals conditions such as <i>pasma</i> , and illnesses caused by wind entering the body
Length of experience	Started at the age of 15
Case history	
Names of immediate family members and the relationship	Spouse: Antonio dela Cruz Children: Rowena Magtibay, Victor, Armando, Enrico and Rodrigo

2

Name	Ferrer, Mylene Magtibay
Gender	Female
Age	25
Date of birth	1983July17
Marital status	Married
Occupation/Livelihood	Healer, herbal medicine vendor
Educational attainment	3 rd year high school
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Religion	Catholic
Type of informant	Healer, herbal medicine vendor
Type of healing practice	
Length of experience	Began as healer and vendor at the age of 19
Case history	
Names of immediate family members and the relationship	Father: Rodrigo Magtibay Spouse: Sammy Ferrer Children: Marvin, Maria, newborn baby

3

Name	Magtibay, Arnel Aguila
Gender	Male
Age	
Date of birth	
Marital status	Married
Occupation/Livelihood	
Educational attainment	
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Religion	Catholic
Type of informant	Healer, husband of herbal medicine vendor

Type of healing practice	<i>Orasyon</i>
Length of experience	
Case history	
Names of immediate family members and the relationship	Spouse: Rowena Magtibay Children: Arlinda, Alberto, Alvin, Angeline, Carlo, Angelo

4

Name	Magtibay, Cristina Cañete Conje “Tinag”
Gender	Female
Age	39
Date of birth	1970July24
Marital status	Married
Occupation/Livelihood	Healer, herbal medicine vendor
Educational attainment	Grade 1
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Religion	Catholic
Type of informant	Healer, herbal medicine vendor
Type of healing practice	Albularyo
Length of experience	Started at the age of 18
Case history	
Names of immediate family members and the relationship	Mother: Delia Cañete Spouse: Ronnie Magtibay Children: Ronel, Cristine, Carina, Rizza, Amado Nuevo and Carmela

5

Name	Magtibay, Ronnie Aguila
Gender	Male
Age	40
Date of birth	1968June8
Marital status	Married
Occupation/Livelihood	
Educational attainment	Grade 1
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Religion	Catholic
Type of informant	Ayta Chieftain
Type of healing practice	
Length of experience	Knowledgeable of medicinal plants starting from the age of 7
Case history	
Names of immediate family members and the relationship	Spouse: Cristina Magtibay Children: Ronel, Cristine, Carina, Rizza, Amado Nuevo and Carmela

6

Name	Magtibay, Rowena dela Cruz
Gender	Female
Age	40
Date of birth	1968May20
Marital status	Married
Occupation/Livelihood	Healer, herbal medicine vendor
Educational attainment	Grade 2
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Religion	Catholic
Type of informant	Healer, herbal medicine vendor
Type of healing practice	Heals those afflicted by <i>paraya</i> , <i>kulam</i> , and ‘infertile’ women
Length of experience	Started at the age of 16
Case history	
Names of immediate family members and the relationship	Mother: Carmen dela Cruz Father: Antonio dela Cruz Spouse: Arnel Magtibay Children: Arlinda, Alberto, Alvin, Angeline, Carlo and Angelo

7

Name	Remo, Marilou O.
Gender	Female
Age	39
Date of birth	
Marital status	Married
Occupation/Livelihood	Healer, herbal medicine vendor
Educational attainment	
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Religion	Catholic
Type of informant	Healer, herbal medicine vendor
Type of healing practice	
Length of experience	
Case history	
Names of immediate family members and the relationship	Spouse: Reynante Remo

8

Name	Remo, Rodelito “Undit”
Gender	Male
Age	
Date of birth	
Marital status	Married
Occupation/Livelihood	Barangay Kagawad
Educational attainment	
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Religion	Catholic
Type of informant	

Type of healing practice	Knowledgeable of medicinal plants
Length of experience	
Case history	
Names of immediate family members and the relationship	

9

Name	Remo, Ruby
Gender	Female
Age	28
Date of birth	
Marital status	Married
Occupation/Livelihood	Healer, herbal medicine vendor
Educational attainment	
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Religion	Catholic
Type of informant	Healer, herbal medicine vendor
Type of healing practice	
Length of experience	
Case history	
Names of immediate family members and the relationship	Spouse: Marcenio Landoy Children: Jenny Rose, Joanna Marie, Jemerson, Jim Rovic, Mark John

10

Name	Magtibay, Jaime Gadiola
Gender	Male
Age	39 (estimate)
Date of birth	Not known
Marital status	Married
Occupation/Livelihood	
Educational attainment	
Address	Balagtas, Batangas
Religion	Catholic
Type of informant	Knowledgeable of medicinal plants.
Type of healing practice	
Length of experience	
Case history	
Names of immediate family members and the relationship	

Name	Lazado, Susan
Gender	Female
Age	39
Date of birth	
Marital status	Married
Occupation/Livelihood	Healer, herbal medicine vendor
Educational attainment	
Address	Sitio Dos, Barangay Tongko, Tayabas, Quezon
Religion	Catholic
Type of informant	Healer, herbal medicine vendor
Type of healing practice	Hilot, illnesses caused by spirits, elementals
Length of experience	Accompanied her mother in selling and healing at the age of 17
Case history	
Names of immediate family members and the relationship	Spouse: Virgil Lazado Children: Virvian, Marlon, Virsan, Jimboy, Bernie, Babylyn and Babyjean

ENDNOTES

¹ Erni C, Padilla MTG, Padilla S, et al. *Country profile of the Philippines*. In: Erni C, editor. The concept of indigenous peoples in Asia: a resource book. Copenhagen/Chiang Mai: International Work Group for Indigenous Affairs; 2008; 427.

² Madulid DA, Gaerlan FJM, Romero EM, Agoos EMG. Ethnopharmacological study of the Ati Tribe in Nagpana, Barotac Viejo, Iloilo. *Acta Manilana* 1990; 38; 25-40.

³ Madulid DA, Gaerlan FJM. A bibliography on Philippine ethnobotany, ethnopharmacology, and related subjects. Manila: National Museum; 1994.

⁴ Sia IC, Mangonon MRF, Israel LV, et al. Ethnomedical documentation of selected Philippine ethnolinguistic groups: the Isnag people of Kabugao, Apayao, Philippines. DOH-PITAHC 2000.

⁵ Sia IC, Bagunu F, Bernardo AM, et al. Ethnomedical documentation of selected Philippine ethnolinguistic groups: the Sumadel Kalinga people of Tinglayan, Kalinga, Philippines. DOH-PITAHC 2000.

⁶ Sia IC, Finuliar VG, Israel LV, et al. Ethnomedical documentation of selected Philippine ethnolinguistic groups: the Ifugao people of Banaue, Ifugao, Philippines. DOH-PITAHC 2000.

⁷ Sia IC, de Costo C, Bernardo AM, et al. Ethnomedical documentation of selected Philippine ethnolinguistic groups: the Busaos Kankana-ey people of Besao, Mountain Province, Philippines. DOH-PITAHC 2000.

⁸ Sia IC, Sur ALD, Co LL, et al. Ethnopharmacological study of the Philippine ethnolinguistic groups: the Bugkalot people of Talbec, Dupax del Sur, Nueva Vizcaya. UPM-NIH 2002.

⁹ Rubite R, Sia IC, Ylagan R. Ethnomedical documentation of selected Philippine ethnolinguistic groups: the Tadyawan Mangyan people of Mindoro island, Philippines. UPM-NIH 2001.

¹⁰ Lacdan NF, Sia IC, Limpin J, et al. Ethnomedical documentation of selected Philippine ethnolinguistic groups: the Alangan Mangyan people of Mindoro island, Philippines. UPM-NIH 2002.

¹¹ Sia IC, Tempongko S, Israel LV, et al. Ethnomedical documentation of selected Philippine ethnolinguistic groups: the Pala'wans of Quezon and Sofronio Española, Palawan, Philippines. DOH-TMU 1998.

¹² Sia IC, Ramos TB, Manalo E, et al. Ethnomedical documentation of selected Philippine ethnolinguistic groups: the Bataks of Palawan, Philippines. DOH-TMU 1998.

-
- ¹³ Sia IC, Ong R. Ethnomedical documentation of selected Philippine ethnolinguistic groups: the Tagbanuas of Palawan, Philippines. DOH-TMU 1998.
- ¹⁴ Sia IC, Montiel C, Bonifacio JC, et al. Ethnomedical documentation of and community health education for selected Philippine ethnolinguistic groups: the Ata-Manobo people of Talaingod, Davao province, Philippines. DOH-PITAH 2000.
- ¹⁵ Sia IC, Geraldino J, Israel LV, et al. Ethnomedical documentation of and community health education for selected Philippine ethnolinguistic groups: the Bagobo people of Marilog, Davao City, Philippines. DOH-PITAH 2000.
- ¹⁶ Sia IC, Sioquin C, Bonifacio JC, et al. Ethnomedical documentation of and community health education for selected Philippine ethnolinguistic groups: the Mansaka people of Pantukan and Maragusan Valley, Compostela Valley province, Mindanao, Philippines. DOH-PITAH 2000.
- ¹⁷ Sia IC, Reyes A, Israel LV, et al. Ethnomedical documentation of and community health education for selected Philippine ethnolinguistic groups: the Mandaya people of Davao Oriental, Philippines. DOH-PITAH 2000.
- ¹⁸ Sia IC, Milgo R, Israel LV, et al. Ethnomedical documentation of and community health education for selected Philippine ethnolinguistic groups: the Dibabaon people of Laak, Compostela Valley, Philippines. DOH-PITAH 2000.
- ¹⁹ Maramba NPC. Medicinal plants in the Philippines. In: Tomlinson TR, Olayiwola A, editors. Medicinal plants: their role in health and biodiversity. Philadelphia: University of Pennsylvania Press; 1998.
- ²⁰ Maramba NPC and Dayrit C. Administrative and management aspects. In: Selection and scientific validation of medicinal plants for primary health care Technical report series No. 12. Philippine Council for Health Research and Development; 1991.
- ²¹ Jocano FL. Folk medicine in a Philippine municipality. Manila: National Museum; 1973.
- ²² Tamaki Y. City, civil society and minority: the case of the Aeta and the city of Tayabas and Lucena, Quezon, Philippines. In: Toh Goda (ed.), Urbanization and formation of ethnicity in Southeast Asia, Manila: New Day Publishers; 2009: 1-21.
- ²³ De Castro PJL, Aldovino RB. An ethnobotanical study of indigenous medicinal plants used by the Aetas of Barangay Tongko, Tayabas, Quezon. In: MSEUF Research Studies. Lucena: Manuel S. Enverga University Foundation; 10: 4-38, 2006.
- ²⁴ Languages of the Philippines. Gordon RG, editor. Ethnologue: Languages of the World, Dallas (TX): SIL International 2005; 15. Available from: http://www.ethnologue.com/show_country.asp?name=PH