

TRADITIONAL VETERINARY MEDICINE IN THE PHILIPPINES



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**TRADITIONAL VETERINARY MEDICINE
IN THE
PHILIPPINES**

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FOREWORD

This is one of the new FAO/APHCA publication series on Traditional Veterinary Medicine in Asian countries. The earlier series on the same subject was brought out between 1984 and 1986 and covered such countries as India, Nepal, Pakistan and Thailand. In this new series, the current publication, "Traditional Veterinary Medicine in the Philippines" is the fourth one. In 1991, three other publications i.e.those for Nepal, Indonesia and Sri Lanka were already brought out.

Animal health is a major concern for the small farmers of most Asian countries. In general, animal health and nutritional status are rather very poor in these countries. A large population of unproductive animals along with lack of pasture grazing land have compounded the problems facing the basic animal health care delivery system.

Ever since the human life started on this earth, disease and death co-existed with him and with his animals. Therefore, efforts have been made to get relief out of it using herbs in various forms as a medicine from the very beginning of the human civilization. From the time immemorial, the traditional system of medicine has been practiced in the Region. Most of the traditional practitioners are not trained and the practices which came down from generation to generation had, in fact, become a culture in socio-economic life of the people in countries of this Region.

Traditional veterinary medicines are the least expensive, can be locally prepared and traditionally rooted in the livestyle of the people. It should be decided to support them so that some positive steps be taken up into an integrated approach with other modern veterinary services.

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I. INTRODUCTION

Long before the introduction of modern medicine and westernized methods of medications, the Filipinos or the indigenous inhabitants of the Philippines, have widely used herbs in the treatment of animal and human disease conditions. Trial and error means of curing disease through the use of herbs was the main method by which "herbolarios" cured their patients. The knowledge and skills obtained on the curative application of any herb has since been handed down from practitioners to their offsprings or from generation to generation. Through these years, herbs that were effective were kept alive and used while the ineffective ones were soon forgotten.

In the days of our ancestors, herbolarios were well respected and enjoyed high social status in the countryside. They prescribed herbs and traditional practices and gave psychological comfort and moral support to their clients.

As modern drugs were increasingly available at much cheaper price, the use of herbal medicines waned. Human hospitals that sprouted in the provinces have in one way or another, contributed to the dying art of the indigenous (ayurvedic) system of medical treatment not only in animals but in human patients as well.

The herb "doctors" are sometimes called herbolarios or herboristas (herbmen, herbalists). They collect plants from forests or cultivate some of them in their yards. They are guided by tradition or are informed by some curanderos (mediquillos or quack doctors) of long experience as to the efficacy of these drugs. They prescribe for diseases and give advice as to cure and treatment. There is another herb "doctor" that specialize in certain afflictions, like the "anti-mangkukulam" (exorciser of bad spirits), (Quisumbing, 1978).

Traditional veterinary medicine has been practiced informally in the Philippine countryside. No local book or publication has ever been researched on the topic that gave extensive information on the same. There are five (5) veterinary colleges out of the ten veterinary schools in the country that have done researches on veterinary herbal medicine. These researches are exploratory and confirmatory in nature-- seeking to prove the usefulness of herbs in some disease conditions in animals.

Unlike the human counterpart of herbal medicine, veterinary herbal medicine is still in its infancy. The National Integrated Research Program on Medicinal Plants (NIRPROM) which was formed by the Philippine government in 1977, has for its goal, of making available to the public, alternative remedy through the use of scientifically tested medicinal plant preparations. Priority was given to those plants which could alleviate symptoms.

Prioritized symptoms are: fever, pain, cough, asthma, intestinal colic, high blood pressure, edema, skin ailments and intestinal parasitism (Cortes-Maramba, 1990).

On October 3, 1990, the Livestock Research Division of the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) located in Los Banos, Laguna, conducted a consultation workshop on "The Utilization of Herbal Medicine for Livestock and Poultry Production". The aims of the workshop were (i) to provide a forum for the exchange of information on the status of research and extent of use of herbal medicine in livestock production in the Philippines, and (ii) to develop a national integrated program on the utilization of herbal medicine in animal health care.

The government agencies that sent representatives to the consultation workshop were the Philippine Animal Health Center (PAHC), Bureau of Animal Industry (BAI), NIRPROMP-UP-College of Medicine, UP College of Veterinary Medicine, UP-Institute of Animal Science, Livestock Development Council (LDC), UPLBBiotech, Visayas State College of Agriculture (VISCA), Central Luzon State U.-College of Veterinary Medicine (CLSU-CVM) and PCARRD. A total of 24 participants attended the workshop. Since the first workshop, the group met for six times already. Around 15 research proposals were evaluated and are readied for funding.

II. A Short History of Herbal Medicine in the Philippines

According to E. Quisumbing (1951), the Philippines present a rich flora. Approximately 8000 different species are known in the country. With further exploration, it is estimated to reach 10,000 in number. Logically, a considerable number of species will be of medicinal value. Of the several thousand endemic plants found in the Philippines, very few are recognized in standard pharmacopeias. *Pepita de Catbalogan*, or *Pepita de San Ignacio* (*Strychnos ianatii*, Berg), however is found in pharmacopeias of the world, and the Philippines are the sole source of supply. Around 63 local medicinal plants are listed in various pharmacopeias.

In the Philippines, the practice of *mediquillos* (curanderos or quack doctors) is considered illegal. In remote areas or isolated villages or towns; they are the ones who treat the sick. Filipino herbalist cannot be compared with their Javanese, Malay, Indo-Malaysia, Chinese, Sinhalese or Indian counterparts. The latter not only sell drugs in shops but in addition, prescribe and even prepare the medicine. The semblance of a herbal drugstore in the Philippines is the push-carts managed by herbalist found mostly in the Quiapo district, the old business center of Manila. There are around 100 of these push-carts which display an average of 30 different kinds of plants, minerals, bottled concoctions, potions, lotions and animal parts believed

for their curative properties. One old woman that this author interviewed has been in the trade since 1935. By selling herbs and other preparations in push-carts, she was able to send her 4 children through college. She has 3 push-carts now and employs 5 sellers on full time basis°.

The development of our knowledge of medicinal uses of plants may be divided into five periods (Quisumbing, 1951): (1) PreSpanish (before 1521); (2) Spanish (1521-1898) (3) American (1898-1935); (4) Commonwealth (1935-1941); and (5) World War II (1941-1945)..

The pre-Spanish period showed no published record of the plants used. It is assumed that the plants used by aborigines are those handed down from the distant past, but the listing of these plants have been slow and difficult.

During the Spanish Period, Father Blas de la Madre de Dios, a Franciscan priest wrote a treatise on medicinal plants in 1611 (unpublished). In 1749, a Jesuit priest Tomas de Montoya was referred to in a book as the doctor and surgeon by the natives on account of his knowledge of medicinal herbs. Father J.G. Camel, in 1704, wrote a technical work entitled "Herbarium aliarumque stirpium in insula Luzone Philippinarum primaria nascentium,.. " published as an appendix to the third volume of Ray's "Historia Plantarum." The book by Dr. Pardo de Tavera entitled "Plantas Medicinales de Filipinas," published in Madrid in 1892, was the most complete when it came to treatment during this period. Included in the book are around 200 species of plants. Quisumbing stated further that during the Spanish period, the standard reference on plants was Father Blanco's "Flora de Filipinas" editions 1737, 1845 and 1883.

The American period saw publications on systematic and ecological papers about medicinal plants. The Bureau of Science was established and the University of the Philippines researched on the chemical constituents, pharmacology and therapeutics of our medicinal plants. During the period very limited studies was done on the therapeutics of medicinal plants.

During the Commonwealth period, surveys of medicinal plants were extended to the unsurveyed regions. Chemical and clinical investigations were also made during this period.

During the World War II period, emphasis was given to the cultivation of drug plants like the castor oil and coca plants. Japanese companies undertook the planting. Executive Order No. 14 was promulgated, creating a committee on Medicinal Plants. It aims to survey and study medicinal plants growing in the country and the methods and processes suited for the production and manufacture of medicinal drugs and other preparations.

From the World War II period up to the 1980's, different workers and scientists like Dr. Leon Ma. Guerrero surveyed the different medicinal plants and published a book in 1931 listing 592 species including their indications. Other contributors to this research were Maximo Ramos, Eugenio Fenix, E.D. Merrill several others and Dr. Eduardo Quisumbing.

The book, Medicinal Plants of the Philippines, first published in 1951, authored by Eduardo Quisumbing, *contains* 858 species of medicinal plants arranged alphabetically under their respective genera. Scientific and local names, botanical descriptions, chemical compositions and *indications are* incorporated on each species. Also included are indexes to local and common names and scientific names. It is designed to provide a source for intensive investigation of medicinal plants found in the Philippines, guide in selection -of plants, believed to possess some curative properties., The book, although extensively researched and scientifically correct, do not assert scientific validity on the medicinal properties of the plants. Thus, the necessity to further validate their indications.

III. THE IMPORTANCE OF HERBS AND TRADITIONAL PRACTICES IN ANIMAL HEALTH CARE

In isolated rural communities, livestock farmers suffer production losses caused by the consistent disease outbreaks due to lack of animal health personnel and medicines.

Familiarization and continuing education and training of villagers on the different medicinal plants and their uses will augment animal health care personnel in these areas.

Encouraging villagers to grow and use herbs in the treatment and alleviation of animal disease conditions and improve animal productivity and growth would, in the long run, contribute to the growth of the herbal industry in any country. This would not only help reduce importation of vital medicine but promote the veterinary pharmaceutical industry as well.

Local residents can avail of proven herbs for use in treating certain disease conditions in animals. Farmers will then be doubly benefited by using herbs. Firstly, as treatment for animal diseases and secondly, as source of extra income from the sale of locally grown herbs.

Juliette Levy (1984) who authored the book "The Complete Herbal Handbook for Farm and Stable", believes that it is the first veterinary herbal book for farm animals and horses written in the English language. She also believes that veterinary

herbal books should be published in order to reach livestock raisers, who, in spite of highly developed scientific medical treatments, lose a large proportion of their livestock due to disease outbreaks, and inability to use herbs in their animals. She further stated that natural diet and herbal treatments which are never destructive to the body tissues, are the simplest method of keeping disease away from all livestock and curing those which are diseased, (as so many farmers have proved or are proving now, as in many countries today, especially in America, where veterinarians use herbs successfully in their work).

According to C.D. Mateo (1986), some clinical signs of animal ailments where herbs are now being used as treatment are: depression, inappetence, diarrhea, colic, colds and cough. The report also said that medicinal plants were found to be effective regardless of the age of the animals treated.

Unlike human herbal medications which is now institutionalized, veterinary herbal medicine is still in its infant stage.

However, traditional veterinary medicine in the Philippines have been going on for decades as shown by the recent survey conducted by the author. Four of the respondents are aged 61 to 72 years old and have been using herbs in treating animals for the past 40 years.

The making of medicinal herbs into capsules, tablets, syrups and other stable preparations for animal prescriptions and dispensing, would greatly help in standardizing the use of herbal preparation for animals. Furthermore, this would encourage more research in animals by using standard preparations. Herbs for animal health and production is one way of returning to nature's way of healing disease, It is safe, cheap and natural.

Holistic approach in animal medicine involving more than just treating them with herbs may be resorted to similar to the Chinese empirical wisdom, a way of life associated with Oriental philosophy. The herbal aspect accounts for only about half the scope of Chinese medicine; the other half encompasses philosophy, nutrition and preventive medicine, among other subjects. It treats the body as a whole, only occasionally does it treat a particular disease - a distinct contrast to most modern Western medicine (Leung, 1984).

A veterinary pharmacologist, and college professor, Dr. E.F. Landicho stated, in a report during a workshop sponsored by PCARRD, that herbal medicinals may be useful and productive in small operations wherein the flock or herd health can be well guarded and maintained with good husbandary practice and minimum of medication. In bigger operations, greater stress is imposed

upon the animals, he added. Furthermore, stress of vaccinations, improper nutrition (mycotoxins, low quality ingredients, etc.) confined movement, overmedication with antibiotics, overproduction, etc. all make herbal medicinals (less potent as they are than the traditional treatments) less beneficial if at all. Good husbandry practice may greatly reduce if not eliminate the need for medication, or perhaps the only medication necessary is herbal medicinals.

IV. ON-GOING RESEARCHES TO IMPROVE ETHNOVETERINARY PRACTICES

The PCARRD through the facilities of different government institutions is coordinating a research program on "The Efficacy Trials of Selected Medicinal Plants Against Parasites of Poultry and Livestock and Plants Against Specific Bacteria."

It also coordinates people engaged in horticulture and pharmacology to make a protocol for propagation, production and preparation of medicinal plants.

Standard methodologies (protocols) in conducting animal parasite control experiments and bacterial and mycotic organisms researches have been formulated to guide all local scientists in their work in the study of herbs used in veterinary medicine.

Some researches being coordinated by PCARRD since 1990 are as follows:

I. Bacteria

1. Antibacterial Effects of Cassia alata, Persea americana, Allium sativum, Psidium gual ava, Moringa oleifera, Vitex nequundo and Pocqostemon cablin against Escherichia coli.
2. Preliminary evaluation of lagundi (Vitex nectundo) in Rabbits Inoculated with Pasteurella multocida.
3. Herbal Drugs Against Coryza.
4. The Medicinal Values of Some Local Plants Against Pasteurellosis.

II. Ectoparasites

1. Evaluation of the ectoparasiticial action of selected plants: Derris elliptica, Premna odorata, Gliricidia sepium and Nicotiana tabaccum, against lice and mites infesting poultry in the Philippines.

- 2 Efficacy trials of selected medicinal plants against ecto-parasites of swine.
- 3 Efficacy trials of selected medicinal plants against permanent ectoparasites of water buffaloes.
4. Field evaluation trials of selected medicinal plants against ectoparasites of sheep and goats.

III. Endoparasites

1. The use of Ouisqualis indica and Areca catechu fruits against Fasciola sp. in naturally infected goats.
2. Efficacy trials of selected medicinal plants against Ascaris suis of swine.
3. Efficacy trials of selected medicinal plants against Toxocara vitulorum of water buffaloes.
4. Herbal dewormers for livestock, using Leucaena leucocephala, Momordica charantia and Moringa oleifera for swine and Quisqualis indica, Chrysophyllum cainito and Tinospora rumphii for goats.
5. Further evaluation on the efficacy of powdered Leucaena leucocephala seeds against Ascaridia galli in White Leghorn cockerels.
6. Field evaluation trials of selected medicinal plants for gastrointestinal parasites of sheep and goats.

V. **RECOMMENDATIONS**

1. A national meeting should be convened. In attendance are ethnoveterinary practitioners and researchers to agree on the general objective or goal on the important role played by herbs in Philippine veterinary medicine.
2. Illustrations or pictures of common herbs and their claimed indications be printed and provided to government and non-government institutions for their reference and file. Such materials be kept in libraries as public reference and be updated regularly by a national committee.
3. Government livestock and poultry farms should be encouraged to propagate herbs common in their locality or propagate new ones in their respective farms. They

should be encouraged to do applied research using herbs on their animals.

4. Applied or exploratory researches be conducted on the common herbs to determine their efficacy in the treatment of animal diseases, their signs or lesions.
5. Regular consultative meeting or conventions should be held. This is to be attended by veterinary herbal practitioners or researchers to thresh out problems on the subject and formulate their solutions.
6. Collaborative and interdisciplinary approaches be determined to find ways and means to speed-up the herbal approach to veterinary medicine and animal production.
7. Government should set aside regular funds to develop this indigenous approach to veterinary herbology.
8. Government should regularly support research and trainings on veterinary herbology to accelerate field applications of herbs in veterinary medicine and animal production.
9. Indigenous herbs listed in pharmacopeias should be given priority in field applications. This would encourage the development of the Philippine local drug and pesticide industry.
10. Encourage local veterinarians to have herbal preparations ready in their offices or clinics and prescribe and sell same to livestock raisers in need of them.
11. Veterinary schools should be encouraged to teach herbology and traditional veterinary medicine to students to help prepare them in their practice after graduation.
12. International or regional conference be held regularly among interested nations to encourage development of expertise on traditional veterinary medicine.

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A. HERBS USED AND TRADITIONAL PRACTICES IN THE PHILIPPINES

The information provided are those summarized from replies received through the questionnaire entitled: "Traditional and present-day use of herbs and local practices in the alleviation or treatment of animal diseases, their signs (symptoms) and lesions in the Philippines:"

The plants used and practices varied from one region to another, though the diseases or conditions are the same. Generally, however, the principles behind their treatment are similar.

A. Classification of Disease Conditions

The different disease conditions mentioned by various herbal practitioners may be grouped into the following:

- I. Gastro-Intestinal signs and disorder**
 - 1.1 Diarrhe
 - a
 - 1.2 Colic, stomach pain indigestion
 - 1.3 Constipation
 - 1.4 Bloat
 - 1.5 Dysentery
- II. Respiratory Disorders**
 - 2.1 Cough, colds and nasal mucus discharge
 - 2.2 Epistaxis
 - 2.3 Asthmatic signs
- III. Reproductive Disorders**
 - 3.1 Infertility
 - 3.2 Agalactia
 - 3.3 Retained placenta
 - 3.4 Low egg production
- IV. Urinary Disorders**
 - 4.1 Urinary stasis
 - 4.2 Urinary incontinence
- V. Musculo-Skeletal Conditions**
 - 5.1 Sprain, fracture, rheumatism
 - 5.2 Swelling of foot

VI. Skin afflictions

- 6.1 Old wounds, infected woonds with maggots
- 6.2 Fresh wounds
- 6.3 Pox/wart lesions
- 6.4 Foot rot
- 6.5 Castration wounds
- 6.6 Boil/abscess/eczema
- 6.7 Scaly skin lesions
- 6.8 FMD skin lesions

VII. General Body Conditions

- 7.1 Fever
- 7.2 Inappetence
- 7.3 Dehydration

VIII. Parasitism

- 8.1 Roundworms, tapeworm, coccidia
- 8.2 Mange
- 8.3 Lice, ticks, flea

IX. Other conditions

- 9.1 Pink eye
- 9.2 Ear discharge
- 9.3 Eye inflammation
- 9.4 Piglet anemia
- 9.5 Bites of animals
- 9.6 Poisonings
- 9.7 Hemosep signs
- 9.8 Ephemeral fever signs

The different herbs used and practices are presented in the tabulated summary that follows according to the above classification of the various disease conditions, lesions and signs.

Abbreviations used for the different plant parts and selected terms often mentioned in the table are included and these are as follows

Seed	- Sd	Fruit	- Fr	Whole Plant - WP
Bark	- Bk	Leaf	- Lf	Horse - H
Rhizome	- Rh	Juice	- Ju	Cattle - C
Stem	- St	Tuber	- Tu	Carabao - Car
Flower	- Fl	Root	- Rt -	Chicken - Ck
Vine	- Vn	Bulb	- Bb	Sheep - Sp

Three times a day - tid

Two-times a day	-	bid
Four times a day	-	qid
Once a day	-	o d

Roman numerals I to XII and CAR (Cordillera Autonomous Region) represent the 13 administrative regions of the Philippines.

**B. TABULATED SUMMARY OF PLANTS USED, PRESCRIPTIONS
INDICATIONS AND REGIONS FROM WHERE
REPORTED OR PRACTICED**

I. GASTRO-INTESTINAL SIGNS AND DISORDERS -

Plants)/others	Plant Parts	Prescriptions	Region(s)
1.1 Diarrhea			
1. Psidium guajava	Lf	Prepare 12 leaves for decoction, with a glass of water, drench animal with two glasses, tid	all 13 regions
2. Psidium guajava	Lf	prepare 10-15 leaves	Regions I, 2, CAR, VIII, XI IX & IV
Persea americana	Lf	of each plant, decoc	
Chrysophyllum cainito	Lf	in 8 glasses of water drench animal 5 glasses, tid C. Car, Pig	
3. Psidium guajava	Lf	Chop 8 leaves of	CAR
Persea americana	Lf	each and mix with	
C. cainito	Lf	feeds of swine	
4. Musa sp. (Banana)	Lf	Chop young leaves and mix with feed or give as soilage to C, Car, Swine, Goat	I, II, CAR VIII, IX
5. Mangifera indica	Rt	Rt decoction in one glass water, drench animal tid	I
6. Cocos nucifera	Water	Drench animal tid or used as drinking water	IX, VI, V IV
7. Bambusa spinosa	Lf	Mix leaves with feeds ad libitum, C, Car., Pigs	VIII
8. Syzygium cumini	Ft	Decoction of bark,	XI, IV,

		Lf	leaves, drench	I, IX
		Bk	fruits given fresh	
		H, C, Car		
9.	Blumea balsamifera	Lf	Decoction of leaves	IX, I, V,
o		Bk & bark	given as drench	IV
10.	Vitex negundo	Lf	Decoc equal no.	IX, IV,
	P. americana	Lf	of leaves and give	V, I
	C. cainito	Lf	as drench	
11.	Zea mays	Gn	Boil grain to make gruel, mix with equal parts water, drench or feed to animal	II, V
12.	Charcoal of hard wood	Grounded finely	Mix with water drench animal	XI, IV, V I, IX
13.	Tinospora rumphii	Vn	Decoc vines and drench or feed vines to an.	I, XI
14.	Achras zapota	Bk	Decoction of bark drench, pig, Sp, Gt.	I, IV, III

1.2 Colic, Stomach pain, indigestion

1.	Solanum melongena	Lf	Decoc leaves, give as drench	I, II, VIII
2.	Nicotiana tabacum	Lf	Heat fresh leaves, apply on abdomen of Sp, Gt, C	I, II, III
3.	Pandanus odoratissimus	Lf	Decoction of leaves I, IV, given as drench to C, pig	V
4.	Tinospora rumphii	Vn Ju	Extract juice from vine by pounding, give juice extract, to pig C, Gt.	I, VIII

1.3 Constipation

1.	cos nucifera	Ju	Extract the milk from the meat of mature coconut, drench the animal, pig, C, Car.	IV, V, I IX
2.	Ipomoea aquatica	Lf	Give raw leaves to an	II
3.	Carica papaya	Ft	Feed fruit to animal as fresh soilage, pig, C.	IX, I, VII, VI

1.4 **Bloat**

1.	Cocos nucifera	Ju	Extract the juice from meat of mature coconut and give juice orally to affected animal, C, Car, Gt, Sp	I, V, XI IX
2.	Musa sapientum	F1	Chop and crush or ground the blossom, mix with salt to taste and feed to cattle mix in feeds	VIII, IV
3.	Cocos nucifera Carica papaya	Ju Ft	Mash papaya and mix with coconut juice or milk extracted from the mature coconut and give as drench to C, Car Sp & Gt	IX, IV I
4.	Cocos nucifera	Ju	Mix juice of coconut with equal parts of a carbonated drink, give as drench	IX, XII
5.	Zingiber officinale	Rh per orem	Crush rhizome and give	II, IV, V
6.	Zingiber officinale	Rh.	Mix decoction of ginger with vinegar and water give 1/4 cup of mixture to animal	II VI, IX

1.5 **Dysentery**

1.	Lagerstroema speciosa	Lf	Leaf decoction to be given as drench to animal Pig, Car, C	I, VIII
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2. Achras'zapota	Bk	Bark decoction give as drench daily	I, CAR
3. Euphorbia hirta	Lf	Infusion of plant is	I, Vi, V,
◦	St	drenched to animal tid	III
4. Imperata cylindrica	Rt	Root decoction given as drench tid	I, ii, VII
5. Rhoeo discolor	Lf	Leaf and flower	I, V, IX
	F1	decoction given as drench tid	VI
6. Bauhinia malabarica	F1	Fresh flowers infusion	I,
	Bk	bark decoction, give as drench	II, IV

II. RESPIRATORY DISORDERS

2.1 cough, colds and Nasal mucus discharge

1. Lantana camara	Lf	Flower and leaf	I, VIII,
	F1	decoction given as drench, C, Pig	II, V
2. Blumea balsa- mifera	Lf	Leaf decoction give as drench tid, Pig, C	I, II, IV viii, IX
3. Symphytum officinale	WP	Plant decoction given as drench, tid, Pig, C, Sp, Gt.	I, VI, IX
4. Momordica charantia	Lf	Extract fresh juice of leaves, give 1 teaspoonful tid for 3 days	ix, II
5. Eucalyptus tereticornis	Lf	Apply poultice of leaves on neck by bandage	I, V, VI
6. Mangifera indica Citrus microcarpa Lf	Lf	Leaf decoction of 12 leaves per cup of water, mix with	I, III VI

			equal parts vinegar, apply topically on body tid	
7.	Premna odorata	Lf	Leaf decoction given as drench tid for 1 week	I, VI, IX
8.	Capsicum frutescens	Ft	Roast dried siling labuyo Ft, give 5-8 pieces per adult chicken	VIII, I, IV, V
9.	Daucus carota	Sd	Give seeds daily to effect.	CAR
2.2 Epistaxis				
1.	Chromolaena odorata Tinospora rumphii	Lf	Fresh leaves juice- extract, apply with dropper fresh juice on nasal mucus membrane	IX, I
2.	Tagetes erecta	Lf F1	Poultice of leaf and flower applied topically VI on nasal area	I, VII
3.	Artemisia vulgaris Lf	WP	Juice expressed from plant is applied on mucus membrane to effect	I, IV, V, IX
2.3 <u>Asthmatic signs</u>				
1.	Euphorbia hirta	WP	Infusion of plant given as drink, 4-5 tablespoonfuls mixed with sugar to taste tid, for 5 days	I, VIII IX
2.	Imperata cylindrica	Rt	Root decoction given as drench, tid, for 14 days	II, III
3.	Lantana camara	F1 Lf	Leaf and flower infusion given as drench, bid , C, Car, Sp, Gt	I, IV XII

4.	Solanum melongena	Rt	Root decoction given as drench, bid, for 6 days	III, CAR
5.	ScheffZera odorata	Lf	Leaf and bark decoction	I, VI
		Bk	given as drench	

III. REPRODUCTIVE DISORDERS

3.1 Infertility

1.	Acorus calamus Cocos nucifera Zingiber officinale Rh	Rt Ft	Mix root, rhizome and coconut meat ground and give to animal 200 gm od for 3 weeks, C, Car	I, III IV
2.	Moringa oleifera Piper nigrum	Rt Sd	Mix equal part, ground to a paste and give to animal 10 gm. daily, od for 2 weeks, C, Pig, Car	IV? V
3.	Daucus carota	Lf Sd	Give leaf decoction and seeds od for 2 weeks, Pig, C	CAR

3.2 AQalactia

1.	Cocos nucifera	Ft	Ground meat of mature fruit, mix with feed of animal during lacta tion period, Pig	VIII V
2.	Ipomea batatas Carica papaya	Lf Ft	Feed leaves of camote and fruit of papaya to animals daily, Pig	I, IV, VIII
3.	Areca catechu Carica papaya Theobroma cacao	Rt Rt Rt	Decoction of roots, as drench or mix with feeds to animal, Pig, C	I, IX XI
4.	Moringa oleifera	Lf	Give both leaves and decoction to animal liberally daily, Pig	I, III IV

3.3 Retained Placenta

1.	Eleusine indica	Lf	Express juice from fresh leaves give 2-3 tablespoonful, tid, for 2 days, C. Pig	I
2.	Arcangelista flava	Rt St	Decoction of stem and root, given as drench,	I, HIV

or embers are placed
as poultice on bladder
area 4 hours a day

3.	Cucurbita maxima	Sd Lf	Give seeds of fruit daily, place leaves as poultice to bladder area.	I, IV, V
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V. MUSCULO SKELETAL CONDITIONS

5.1 Sprain. Fractures, Rheumatism

1.	Ficus elastica Jathropa curcas	Lf	Rt Heat root and leaves over embers and bandage to affected part and left for 4 hours daily	II, I, V, IV
2.	Cymbopogon citratius	oil	Mix oil extract with coconut oil and apply on affected area as liniment, tid	II, III, IX, VIII
3.	Lantana camara	Lf	Make poultice of leaves and apply on area 4 hours a day	II, I VII
4.	Eucalyptus tereticornis	Lf	Apply fresh leaves with a bandage on affected part	IX III
5.	Andropogon citratus Blumea balsamifera Ceiba pentandra	Lf Lf Lf	Take equal parts extract fresh juice and apply on body of animal	IX, VI I

5.2 Swelling of Foot

1.	Hibiscus rosasinensis	Lf	Crush leaf & apply poultice to area	I, XII
2.	Tinospora rumphi	Vn	Use whole vine as collar around neck of animal	IX

3.	Moringa oleifera	Lf	Poultice of leaf I, applied to affected area	V XI
4.	Solanum melongena	Lf	Heat leaves on embers and apply on part as a poultice V	I, CAR,
5.	Anona squamosa	Lf	Heat leaves on embers and apply warm leaves to swellings 4 hours a day	XI, IX

VI. SKIN AFFLICTIONS

6.1 Q1d_ Wounds, Infected Wounds, With Maggots

1.	Chromolaena odorata	Lf	Pound leaves & apply	I, XI
	Barringtonia racemosa.....	Lf	Juice or poultice on wound	XII,
	Capsicum frutescens	Lf		CAR
2.	Solanum melongena	Lf	Extract juice from fresh leaves and apply on wound	I, VI IV, V
3.	Moringa oleifera	Lf	Extract juice and apply on wound	I, IX
4.	Psidium guajava	Lf	Pound leaves and apply as poultice to wounds most regions	I, IV
5.	Cocos nucifera Allium sativum	oil B1	Pound garlic, mixI, coconut oil and apply on wound	IV, VI
6.	Euphorbia neriifolia	WP	Heat fleshy leaf & apply as poultice on wound	IX, I, III

6.2 Fresh Wounds

1.	Moringa oleifera	Lf	Pound leaves then add some coconut oil, apply to wound	I, IV, V
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2.	Chromolaena odorata Lf		Pound leaves, extract juice & put on wound	V, IV I
3.	Paspalum scrobiculatum	Lf	Chop or pound and put as poultice to wound	IX VIII
4.	Solanum melongena	Lf	Heat leaves on embers, squeeze juice on affected area daily	IX II, I
5.	Nicotiana tabacum	Lf	Pound one leaf and add equal part kerosene, apply on wound	IX, VIII
6.	Musa sapientum	Bk	Extract juice and put on the wound regularly	I, II IX
7.	Zingiber officinale Rh		Apply decoction on the affected part	CAR, I, II
8.	Euphorbia hirta	WP	Decoction of plant applied on wound regularly	CAR, I, VI
9.	Heliotropium indicum	Lf	Extract juice and put on fresh wound	V, I, II
10.	Portulaca oleracea WP		Extract juice, apply on wound	VIII, I, VI

6.3 Pox and Wart Lesions

1.	Capsicum frutescens Piper nigrum	Ft Powder 3 -5 fruits Sd	with seeds apply on wound, Ck	VIII CAR
2.	Capsicum frutescens Piper nigrum	Ft Sd	Give orally 3 pieces of fruit and seed for 3 days, Ck	I, II
3.	Momordica charantia	Lf	Extract juice of fresh leaves, apply on wart	I, III
4.	Tinospora rumphii Piper nigrum	Vn Sd	Mix, pound and apply as poultice on part affected	, IX, XII VITI

5.	Leucaena leucocephala anona muricata	Lf Lf	Pound leaves, mix with enough water and drench animal with the mixture	IX, V
6.	Zingiber officinale Rh Piper nigrum	Sd	Mix and pound and apply as poultice on wart	IX, X, I CAR
	Paspalum scrobiculatum	Lf	Apply leaf extract on part daily	VIII I
6.4	<u>Foo Rot</u>			
1.	Citrus microcarpa	Ft	Extract juice, apply on affected part tid until healed	II
2:	Formaldehyde	C	Mix 1 part with 2 parts tap water, apply on affected area daily, od for 3 days	I, vi III
3.	Cocos nucifera	Oil	Apply heated oil on part daily for 5 days	I, II IV, V
4.	Solanum melongena	Lf Rt, St	Make decoction of parts and wash sores with decoction regularly	I, II V
5.	Hyptis capitata	Lf	Pound and extract juice from leaves, apply juice on area affected	I, II CAR
6.5	<u>Castration Wounds</u>			
1.	Psidium guajava	Lf	Ground young leaves, apply as poultice on wound	I, II IV most of the regions
2.	Piper betle Areca catechu Nicotiana tabacum Lf mixture on wound	Lf Sd	Chew all of the three mixed with lime, apply	V, VI IV,
3.	Ocinum sanctum Areca catechu	Lf Sd	Macerate leaves and nut apply on affected part	V, VIII

6.6 Boil,-Abscess. Eczema

1.	Moringa oleifera Musa sapientum	Lf Lf	Pound moringa leaves, wrap with banana leaves, heat on ember until warm, apply on boil	VIII I
2.	Hibiscus rosasenensis	F1	Apply as poultice on boil daily	I IV
3.	Symphytum officinale	Lf	Apply leaf poultice on parts affected overnight	I, II XI
4.	Neem Tree	Lf	Pound leaves and soak in water overnight, apply infusion on affected part	I IV
5.	Gliricidia sepium	Lf	Pound leaf, extract juice and apply on lesion for 5 days od	IV
6.	Coleus blumei	Lf	Make poultice of leaves then apply on affected area	XI, I, IV, V
7.	Lantana camara	Lf St	Stem and leaf decoction applied as wash on abscess	XI, I

6.7 Scal Skin Lesions

1.	Gliricidia sepium	Lf	Pound leaves, extract juice, apply regularly on affected area	VIII VI I
2.	Tinosphora rumphii Vn		Pound vines, collect extracted juice and apply on affected area	VIII I
3.	Cucurbita maxima	Lf	Extract juice from leaves, apply on the affected area	VIII ii, IV

6.8 FMD Skin Lesions

1.	Citrus microcarpa	Ft	Apply juice extract daily on lesions until	II
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Psidium guajava	Lf	healed Apply leaf extract or decoction to area affected daily to effect	I, II V
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VII. GENERAL BODY CONDITIONS

7.1 Fever

1.	Alium sativum	Tb	Pound tuber, mix with vinegar & apply mixture to whole body of animal	II I
2.	Lantana camara	F1 Lf	Infusion of flowers and leaves, drench animal daily	II IV
3.	Buffalo horn	horn	Make decoction of horn give tid	CAR IV
4.	C. cainito	Lf	Leaf decoction is given as drench, 1 cup tid for 3 days	VIII IX II
5.	Symphytum officinale	Lf	Leaf decoction, drench animal, Pig, 1/2 cup tid	VIII VI V
6.	Bauhinia malabarica	Lf	Apply leaf poultice topically on head of animal 4 hours daily	I II
7.	Vitex negundo	Lf	Leaf decoction to be given tid III	I,
8.	Tamarindus indica	Lf	Give 4 glasses of leaf decoction qid	I, III, IX
9.	Coleus amboinicus	Lf	Leaf decoction mixed with coconut vinegar, apply mixture topically on body of animal tid	I, II
10.	Coconut vinegar		Apply vinegar on body of animal tid	VIII, I, III

11.	Allium ascalonicum Bb Cocos nucifers	oil	Pound bulbs & mix with coconut oil, give per os during fever, daily 5 teaspoonful, for Pigs	I, II
7.2	Inappetence			
1.	Cassia tora	Lf	Give one handful of the IX, chopped leaves with feeds or mixed with molasses, ad libitum per day	X VII
2.	Tinospora rumphii	Vn	Chop vine, extract juice and give as drench, od	IX, II, I
3.	Charcoal		Grind and mix with feeds and molasses, equal parts	IX I
4.	Honey		Give 1/2 cup honey mixed with food	IV, V
7.3	<u>Dehydration</u>			
1.	Cocos nucifera	water	Mix coconut water with feeds or give as drench or as the drinking water of animal ad libitum	VIII, II, IV, I V
VIII.	PARASITISM			
8.1	<u>Roundworms, Tapeworm, coccidia</u>			
1.	Leucaena leucocephala	Sd	Ground seed, mix with water and give as drench. Pig	VIII, II, I, IX
2.	Momordica charantia	Ft Lf	Ground fruit and leaves-, extract juice and give to animal with sugar or honey	V, VII, .VIII x

3.	<i>Phragmitis vulgaris</i>	St	Pound stem, extract juice, mix with sugar and drench animal, Car, C	VIII, II, CAR
4.	<i>Areca catechu</i>	Lf	Ground finely, give 3 teaspoonful per adult dog	VIII
5.	<i>Cucurbita maxima</i>	Lf	Give orally grounded or pounded leaves.	V, VIII
6.	<i>Ananas comosus</i>	Ft	Extract juice and drench animal od for 3 days	VIII, IX, I, II
7.	<i>Leucaena leucocephala</i>	Lf	Give fresh leaves ad libitum twice a week for 2 weeks	VIII, II, III
8.	Wood ash	ash	1 kg. of ash soaked in water overnight. Take supernatant water and give as drench	II, IV, I
9.	<i>Persea americana</i>	Lf bk	Decoction of leaf and bark given as Vm drench, tid	I, II IX
10.	<i>Tinospora rumphii</i> (for liverfluke)	Vn	Pound vine, extract juice, give as drench to animal, C. Car	I, IV, IX; V, XI
11.	<i>Tagetes erecta</i>	F1 Lf	Leaf and flower infusion, drench animal	IX
12.	<i>Oryza sativa</i>	Lf St	Stalk near grains is burned, collect ash mix with water, drench to animal	CAR, I
13.	<i>Carica papaya</i>	Sd	Give 50 pieces of seeds to Ck	CAR I, IX
14.	<i>Carica papaya</i>	Lf	Dried or fresh leaves infusion given as drench to animal	II

15.	Catharanthus roseus	Rt	Root decoction given as drench, to Pig, Gt	ii, I IV
8.2 Mange				
1.	Gliricidia sepium	Lf	Pound leaves, collect juice extract apply on body after bathing with soap, daily	XI, ix, III
2.	Cassia sophera	Rt Lf	Pound bark and leaves, mix with coconut oil as ointment, apply on affected areas	I
3.	Terminalia catappa	Lf	Extract juice of leaves, mix with coconut oil and apply as ointment to affected area	I, ii, IV
4.	Tinospora rumphi Cocos nucifera	Vn Lf	Pound vines and leaves into a paste and apply on affected parts of body	IX
5.	Plumiera acuminata Bk		Scrape bark, pound and mix with coconut oil, apply on affected part	ix, II
6.	Psidium guajava Nicotiana tabacum Chromolaena odorata Lf Cocos nucifera	Lf Lf Ft	Extract juices from leaves mix with coconut oil and rub on affected area	IX, X, II
7.	Carica papaya Cocos nucifera	Ft Ft	Mix papaya fruit and coconut meat, mash mixture apply on part affected	ix, ii, I VIII
8.	Nicotiana tabacum Cocos nucifera	Lf Ft	Chop and pound leaves and mix with coconut milk then apply on part	IX, IV, V
9.	Helianthus annuus	Lf	Poultice of leaves is applied on affected parts	CAR II
10.	Capsicum frutescens Cocos nucifera	Ft Ft	Ground pepper then mix with coconut oil,, apply as ointment	CAR, II

11, Sea water Bath animal in sea water I
daily for 1 week LIB y

8.3 Lice, Ticks, Flea

1.	Cucurbita maxima	Lf	Get juice extract & rub on animal with parasites	VIII III I .T
2.	Premna odo.rata	Lf	Crush leaves, rub on skin of animal II	VIII,
3.	Cocos nucifera	Ft	Extract oil of coconut mix with kerosene, apply	VIII, IX, II
4.	Petroleum		Mix, equal parts, bath vinegar animal and left over night, then rinse	VIII, II, ,
5.	Gliricidia sepium Lf		Mix extracted juice with coconut oil & rub on animal	XI, I II, IX
6.	Tinospora rumphii Cocos nucifera	Lf Lf	Pound leaves of both and apply as paste on part of affliction	IX
7.	Vitex negundo	Lf	Extract juice of leaves and apply on affected area	I, ii,

IX. OTHER CONDITIONS

9.1 Pink eye

1:	Capsicum frutescens	Ft	Pound fruit and drop extract on eye	VIII
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9.2 Ear discharge

1.	Musa sapientum sp.	Bk	Sap of rotting bark applied on affected part by means of a medicine dropper	II
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9.3 Eye inflammation

1.	Derris elliptica	Rt	Pound root, collect juice extract, apply on eye by means of medicine dropper	IX
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9.4 Piglet anemia

1.	Momordica charantia	Lf	Give five pieces of leaves with feeds daily to mother of pigs,	IX
2.	Moringa oleifera	Lf	Mix juice extract, mix with feeds give to piglets	IX

9.5 Bites of animals.

1.	Jatropha curcas	Bk	Pound bark place on bite wound of various animals	IV, I
2.	Catharanthus roseus Rt	Lf	Pound and extract juice & apply on bites of wasps, bees and others	I, II

9.6 Poisonings

1.	Stachytarpheta jamaicensis	Lf	Extract juice of fresh leaves, and give 4 teaspoonful to animal	I, IV
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9.7 Hemorrhagic Signs

1.	Ananas comosus	Lf	Heat leaves on embers, extract juice, give per orem 15 tablespoonful tid for 7 days	II, V
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9.8 Ephemeral fever signs

1.	Vitex negundo	Lf	Decoc 250 gm. leaves in 5 cups water, drench animal with decoction, bid, for 5 days	I, III
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other Traditional Practices:

1. When animals are sick the traditional healer burns lagtang or suma (*Arcangelisia f lava*) stem or roots and let its smoke permeate the area where the animal is confined. This is done every night until the animal's condition is cured.
2. The tying loosely of a red colored cloth to serve as a ribbon around the neck of the animal, ruminants especially, to ward off bad spirits. This red ribbon is left with the animal whether it is sick or not. If an epidemic is present in the area, farmers are more inclined to fasten this red ribbon.
3. The = verbal encantation performed in front of a sick animal and burning mineral stone "kamangyang" the purpose of which is to ward off or exorcise bad spirits. This practice is still popular in far-flung areas where medicine is not available.

C. BRIEF**SUMMARY OF THE SURVEY RESULTS
(WITH SIX TABLES).**

Questionnaires were sent through the mails to known people working in government as well as those in the private sector like the farmers. Out of the 250 questionnaires sent 150 were returned. Respondents were 102 males and 48 females. There were 9 DVM graduates, 121 BS graduates (agriculture, education, engineering), 2 are enrolled in MS courses, 4 are college undergraduates, 10 are high school graduates; 4 are elementary graduates.

As to the nature of work or present occupation the respondents are performing, 104 are agricultural technologists of the Department of Agriculture; 22 are farmers, 4 are veterinarians, 2 are Municipal Agricultural Officers (MAO); Barangay Captain: 2 government supervisors 1 YMCA Provincial Executive Officer: 5 livestock raisers, 2 Artificial insemination technicians, 2 are retired government employees while 5 did not indicate their occupation.

From the total of 150 respondents, 90.6% (136) have been using herbs, 12 are not using them while 2 did not give an answer.

Of those who used herbs since their first try, 37% (51) have been using them for 16 years or more: 20.6% (28) were using herbs for 11-15 years: 24.3% (33) used herbs for 6 to 10 years: while 17.6% (24) used them for the last 1 to 5 years.

The tables that follow are self explanatory.

Table I. Age (years) range of respondents.

No												
Age Range :20-25:26-30:31-35:36-40:41-45:46-50:51-55:56-60:61-70:71 : Ans. : Total												
Number . 5 : 12 : 43 : 30 : 13 . 7 . 9 . 19 : 8 : 3 : 2 . 150												

Table 2. Educational Attainment of Respondents.

DVM	Col. Under-graduate	BS Graduate	MS :Enrolled	High School	Elem. Graduate	Total
9	4	121	2	10	4	: 150

Table 3. Nature of work or occupation of respondents.

Veterinarian	:	4
Agricultural Technologists	:	120
Municipal Agricultural Officer	:	2
Barangay Captain	:	1
Gov't Agrl. Supervisor	:	2
Farmer	:	22
YMCA Executive Director	:	1
Livestock Raiser	:	5
A.I. Technician	:	2
Retired Gov't. Employee	:	2
No Answer	:	5
<hr/>		
Total	:	150

Table 4. Number of users of herbs in the treatment of animal diseases.

Number using herbs in treating animal diseases	:	138
<hr/>		
Not using herbs in animals	:	12
<hr/>		
Total		150

Table 5. Number (range) of different kinds of herbs being used by the respondents.

Number of herbs used.	:	20-18 : 17-15 : 14-12 : 11-8 : 7-5 : 4-1 : 0 . Total
<hr/>		
Number of Respondents		5: 20: 15 :31 : 26 : 41 : 12 : 150

Table 6. Number of responses to different questions asked in question Numbers" 7 ", " 8 " and 11 9 ".

Question o. 7.

If your answers is "Yes", please check the boxes below to further give light to your use of herbs in treating animal diseases.

	Using regularly	40
	Seldom	4
	Whenever there is an opportunity	66
4.	Not using since then	4
5.	other reasons;	
	a. When need arise	4
	b. depends on nature of disease	2
	c. no available medicine	4
	d. clients can't afford veterinary prof. fee	10
	e. shift to medicine if not effective	2
6.	No reason checked or given	22
7.	Once a month	0
8.	Six times a year	0

Question No. _____ 8 If your answer is "No" to question
Number 6, give your reasons.

	Unfamiliar about herbs	-	2
	Tedious to prepare herbs	-	1
	Little knowledge on herbs	-	5
4.	Other reasons;		
	a. Accurate dose not known	-	5
	b. Drugs are available	-	5
5.	No herbs are available	-	0
6.	Don't believe in use of herbs		0

Question No. 9.

Aside from using herbal medicine in animals, what other traditional practices or non-herbal treatment do you practice in animals.

°

1.	Rituals	-	2
2.	Prayer to spirits	-	2
3.	Encantation	-	2
4.	Prayer to God	-	35
5.	Minerals/chemicals	-	64
6.	Other answers;.		
	a. Vet. Medical drugs	3	
	b. Charcoal		2
	c. Urine		3
	d. Massage		3
	e. Antibiotics		2
	f. Fasting		2
	g. Used motor oil		3
	h. Human medicine		3
	i. antibiotics		
	vitamins, minerals		3
	j. rice or mongo wash		1
	k. sulfas		2
7.	No. Answer (blank)		10
8.	"None"		2

LETTER LkTTACHED TO QUESTIONNAIRE

August 1991

Dear Sir/Madam:

Attached is a blank questionnaire which the undersigned, in his desire to complete a study about ethnoveterinary practices in the Philippines, is sending you.

This survey is entitled : "Traditional and Present-day Use of Herbs and Local Practices in the Alleviation or Treatment of Animal Diseases, Their signs (symptoms) and Lesions in the Philippines."

Hoping that you would in one way or another help shed light on the traditional and present day use of indigenous plants, herbs and other practices in the alleviation or treatment of animal diseases in different regions in the Philippines.

Thank you very much for filling-up and sending back this questionnaire. Rest assured that any help that you may have extended or will be extending this researcher and to this research will be highly appreciated.

God's blessing be with you always.

Respectfully yours,

MARIANO LL. JOVELLANOS, DVM, DVPH Researcher

(P.S. Please return filled-up questionnaire to reach my office on or before October 20, 1991. Ditto)

SURVEY QUESTIONNAIRE

"Traditional and present-day use of Herbs and Local Practices in the Alleviation or Treatment of Animal Diseases, Their signs (Symptoms.) and Lesions in the Philippines."

1. Name of Respondent _____ Age _____
- Address _____
- | | | | |
|--------|----------|------|----------|
| Street | Barangay | Town | Province |
|--------|----------|------|----------|
3. Highest Educational Attainment _____
4. Nature of Work or Occupation _____
5. When did you first use herbs in treating animal diseases ? _____
6. Have you been using herbs since then? ☐ Yes ☐ No
7. If your answer is " Yes ", please check the box(es) below to further give light to your use of herbs in treating animal diseases:
- | | |
|---|---|
| <input type="checkbox"/> regularly | <input type="checkbox"/> whenever there is an opportunity |
| <input type="checkbox"/> once a month | <input type="checkbox"/> other reasons : _____ |
| <input type="checkbox"/> 6 times a year | _____ |
| <input type="checkbox"/> seldom | _____ |
8. If your answer is "no" to question No. 6, give your reasons. Please check one or more boxes below (that may be applicable) as your reason/s:
- | | |
|--|--|
| <input type="checkbox"/> unfamiliar about herbs no herbs available | <input type="checkbox"/> hesitant to use because of little knowledge |
| <input type="checkbox"/> don't believe in usage of herbs | <input type="checkbox"/> Other reasons: _____ |
| <input type="checkbox"/> tedious to prepare the berbs | _____ |
9. Aside from using herbal medicine in animals, what other traditional practices or non-herbal treatment do you practice in animals
- | | |
|--|---|
| <input type="checkbox"/> rituals | <input type="checkbox"/> minerals/chemicals |
| <input type="checkbox"/> prayer to spirits | <input type="checkbox"/> others : _____ |
| <input type="checkbox"/> encantation | _____ |
| <input type="checkbox"/> prayer to God | _____ |

10. Enumerate the common names of plants (trees, herbs, vines, shrubs, etc.) that you have used in treating animal ailments or disease.

- | | | |
|----------|----------|-----------|
| 1. _____ | 5. _____ | 9. _____ |
| 2. _____ | 6. _____ | 10. _____ |
| 3. _____ | 7. _____ | 11. _____ |
| 4. _____ | 8. _____ | 12. _____ |

11. Enumerate the ailments or diseases or signs you treated with the use of plant parts of trees, herbs, vines, shrubs, etc.:

DISEASES/SIGNS/LESIONS	PLANTS AND PLANT PARTS	HERBAL PREPARATION AND METHOD OF APPLI CATION
1. _____ _____	_____	_____
2. _____ _____	_____	_____
3. _____ _____	_____	_____
4. _____ _____	_____	_____

(Note : Please use a separate sheet if space is not sufficient)

FOR YOUR REFERENCE ONLY

- A. Examples of signs (symptoms) of diseases: diarrhea, constipation, weakness, no appetite, no milk or lacks milk secretion, dysentery, itchiness, sterility, nasal discharge, fever, colic (stomach pain), bloat, eye discharge, poor growth, stunting, ear discharge, throat conditions, poor growth, infertility, etc.
- B. Examples of lesions on skin : pox, warts, old infected wounds, fresh wounds, eczema, boils, abscess, wounds with maggots, mange (galis aso) lesions, scratches, scaly skins, etc.
- C. Examples of parasitic diseases: fungus, lice, fleas, ticks, mange, mites, malaria, roundworms, foot rot, bacterial infection, liverfluke, tapeworm, coccidiosis, surra, etc.
- D. Musculo-skeletal conditions - sprains, fractures, Paralysis rheumatism, etc.

SCIENTIFIC NAME	FAMILY	LOCAL NAME/ COMMON NAME	REPORTED ACTION
Achras zapota	sapotaceae	Chico, Chiku tree, Sapodilla	Aperient, diuretic, tonic febrifuge, astringent
Acorus calamus	Araceae	Acoro. bueng, dalau. darau. dengau lubiggn, sweet flag	Stimulant. carminative. antirheumatic tonic, emetic, nauseant, sedative
Aium ascalonicum	Uliaceae	Sibuyas tageiog, lasona, pug bawang, baker's garlic, shallot	Anthelmintic, stomachic. tonic. emmenagogue, -sntiderrhsic, aphrodisiac
Mlium ceps	Uliaceae	Lasona, sibuyas, sibuyas bombay, the true onion	Febrilugue, antitussive, antioolk:, diuretic emmenagogue. demulcerN
Alfum sadwm	Uliaceae	Ajoa, bawang. garlic	SVmulant, carminative, diaphoretic expectorant, diuretic, antiseptic
Ananaa comosus	Bromeliaceae	Pina: pineapple, apagdan	Anthelmindc. vermicide. aboNfacient diuretic, aperient, daphoratic, styptic emmena
Andropogon citratus	Gramineae	Tangled. salay, barani lemon grass, zacate lemon, salai	diuretic emmenagogue stomachic tonic, cauminativs: antiemetic. anddiartbssl
Anona muricata	Anonaceae	Guayabano, aid. labanus. Soursop	Antiscorbutic, febrifuge, astringent. antispasmodic. sudorific, heart depressant
Anona squamosa	Anonaceae	Ates, atis, yet-, sugar apple	Vemuddsl. insecticidal, abortifacisrk, astrigent, tonic, purgative
Arcangelista flava	Menispermaceae	Abustra, abutra, albotra. bud, lagtal, lagtang, sums, uplig	Germicide. febrifuge, stomachic. diaphoretic emmenagogue. abortifacient expectorant
Areca catechu	Palmaceae	Boa. bus, bungs, lugos, va, &roe& nut, betel-nut palm	Anthelmintic, sialagogue, stimulant. astringent, taeniatuge, emetic, aborbfacient
Artemisia vulgaris	Compositae	Damong mania, arbaaka, giibas, kamaria, mania, maidenwort, worm wood	Vulnerary, expectorant. emmenagogue. stomachic, tonic, carminative. andspasrtadic. . hemostatic
Averrhoa bilimbi	Oxalidaceae	Iba, ibag, kaiaimas, kamias, pies, kiting iba, ibe, pule	Expectorant, astringent stomachic, refrigerant febrifuge, antirheumatic
Azadrachta indica		Nerm tree	Autiseptic, insecticide, vernitugs
Bambusa spinosa	Gramineae	Betaken, kawayan, kawayan-tinik, paua, rugian, spiny bamboo	Emmenagogue, anthelmintic, stimulant, astrigent, tonic aphrodisiac, styptic
Barringtonia racemosa	Lecythidaceae	Putat, kuitcut-timbaton. tuba-tuba muting, pfd	Fish poison, antirheumatic expectorant, andasthmatic, antidiarrhea, vulnerary
Bauhinia mafabarica	Leguminosae	Alibangbang, Kalibangbang, baiibamban	Antidyaenteric
Boca orellana -Bixaceae		Atsuwite, achoete, achuete, annatto	Antipyretic, hemostatic, diuretic. astringent, emollient
Blumea balsamifera	Compositae	Sambong, alimon. lakadbulan, sobosob, gitin-gitin, dalapot, blumea camphor	Sudorific, stomachic, antispasmodic, emmenagogue, astringent
Capsicum frutescens	Soianaceae	Siling labuyo, sili, siling palai rimorimo. red pepper, chilli	Rubefacient, stomachic
Canca Papaya	Caricaceae	Papaya. lapaya. tapayas, spay-Papaw tree, melon tree. papu	Digestive tonic, laxative, diuretic anthelmintic
' Cassia sophera	Leguminosae	Andadasi, senna sophera	Expectorant anthelmintic, febrifuge
Catharanthus roseus	Catharantheae	Chichirica, alai-bia, kantotan, sirsirika, pink periwinkle	purgative. emmenagogue, vomifire
Cassia Tora	legumipotae	Katanda, baho-baho. bsatong-aso monggo-monggohan, foetid cassia	Aperient, purgative
Ceiba pentandra	Bombacaceae	Kapok, boboi, bulak, doldol, kapea, bulak, sangiai, white silk cotton tree	Aphrodisiac, styptic, laxafrve diuretic - -

SCIENTIFIC NAME	FAMILY	LOCAL NAME COMMON NAME	REPORTED ACTION
Chrysophyllum cainito	Sapotaceae	Caimito, . star apple	Tonic. Antimicrobial. febrifuge
Chromolaena odorata	Compositae	Hagonoy, sagonoy. slam weed tiger's odor	Emmenagogue. styptic. antiseptic. diuretic, virbrary
Citrus microcarpa	Rutaceae	Kalamansi, kalamondin, alondis Ismon	Refrigerant, deodorant Antidyspeptic
Cocoa ruxifera	Palmaceae	Niyog, cow, lubi, ngot-ngot, ongot, ponlaing, coconut	Antiseptic. astringent, diuretic, an emmenagogue: vernicifluore. styptic
Coleus amboinicus	Labiatae	Oregano, suganda, bildu. WW Torongii de fimon, marjoram	Carminative. Yrve febrifuge, analgesic
Coleus blumei	Labiatae	Mays, lapuwya. rya. selmayu, malaina, taponaya	Febrifuge, w/
Corchorus olitorius	Tiliaceae	Saluyot, paseu, tagaba, take. yaks	Demulcent, tonic, diuretic, purgative
Cucurbita maxima	Cucurbitaceae	Calabaza, kalabasa, kumbasa, squash	styptic, tonic, vermifuge antihelmintic
Derris elliptica	Leguminosae	Tubli, Lapak, tibanglan, tugli tuba	Insecticidal, abortifacient, amv poison
Ehretia philippinensis (Cenchrus setosus)	Boraginaceae	Tsang-gubat, alibungog, ludungla talibong, tea plant	Counterirritant, emollient, analgesic anti diarrheal, antispasmodic, anti-colic, insect repellent
Eleusine indica	-Gramineae	Paragis, apidan, barangan, bile- bile, tagabutan, dogs tail, wire grass	Diuretic, emmenagogue. antihelmintic sudorific
Daucus cerota	Umbelliferae	carrot, remolacha	antiseptic, antihelmintic, refrigerant aphrodisiac
Eucalyptus tereticornis	Myrtaceae	gum eucalyptus, eucalyptus	Antiseptic. anesthetic, stimulant
Euphorbia nerifolia	Euphorbiaceae	Soro-soro, kngua de perm, bait sudu-sudu, common milk hedge	Cathartic, antispasmodic, diuretic, antiseptic, rubefacient, purgative
Euphorbia hirta	Euphorbiaceae	Gates-gates, bolobotonis, malla- malla. patik-patik, tam -taw, snake wood, cat's hair	Antispasmodic, diuretic, hemostatic, sudorific, sedative, antihelminthic fungicidal galactagogue, antipyretic
Ficus elastica	Moraceae	Sahsi, baleta, Indian rubber tree	Vulnerary, antihelmintic, astringent, Styptic
Glycine max	Leguminosae	Kakauate, matke cacao, man'kakau	insecticide, acaricide, fungicide
Helianthus annuus		Wrasot, 9irasol, sunflower	Expectorant, febrifuge, antispasmodic diuretic
Heliotropium indicum	Boraginaceae	Trompa ng elepante, buntot-loon higad-hgamr, kambra-kambra, indan tomsole, erysipela plant	Diuretic, styptic, emmenagogue stomachic
Hibiscus rosasinensis	Malvaceae	Gumameia, antoiangan, kayanga, tapolanga, hibiscus, .haefower	Emollient, antitussive, emmenagogue, emollient anodyne, purgative expectorant
Hyptis capitata	Labiatae	Botonesan, long-lenga, tarotabaku	Tonic, stimulant, antiseptic, emmenagogue - - - -

SCIENTIFIC NAME	FAMILY	LOCAL NAME/ COMMON NAME	REPORTED ACTION
<i>Impatiens cylindrica</i>	Gramineae	Kogon, buchid. goon. parrang. gogon, ilib	Antitussive, expectorant winerary, sedative duretic, restorative, tonic astringent
<i>Ipomea aquatics</i>	Convolvulacsa	Kangkong. balangog, tangkong, galatgat p cabbage, potato vine	E, antidiabetic, purgative, febrifuge fungicidal
<i>Ipomea batatas</i>	Convolvulacsa	Kamote, lapni, tigsí, sweet potato	Laxative. anti-diabetic
<i>Jatropha curcas</i>	Euphorbiaceae	Xubang-bakod. tagumbao, taua-taua, galumbang, kasla, purging nut tree	Emetic, purgative, antidiarrheal, antitussive, vulnerary, rubefacient, galactagogue, styptic
<i>Lantana camara</i>	Verbenaceae	Lantana, bahug-bahug, boho-boho, coronitas, kantutay	Antidysentheric, antiseptic, and-rheumatic, emetic, febrifuge, diaphoretic
<i>Leucaena kucocephala</i>	Leguminosae	ipii-ipil. palomaria, kariskis, agho. loyloi	emollient, emmenagogue, anthelmintic
<i>Loganum s-ecioSa</i>	Angiospermaceae	Bensba, agaro, duguam, makablos, mite, kauilan	Anti-diabetic, febrifuge, anti-diarrheal diuretic, purgative
<i>Luffa cylindrica</i>	Cucurbitaceae	Patolang bibig, kabati, Pte. sponge gourd, gourd towel	Diuretic, febrifuge, cathartic, hydragogue emetic, antiseptic, anthelmintic, tonic
<i>Mangifera indica</i>	Anacardiaceae	Mangga, paho, pao, mangang-kalabao, mangka, mango	Diuretic, astringent, styptic, antidiarrheal antitussive, laxative
<i>Mimosa pudica</i>	Leguminosae	Makahiya, babain, huya-huya, sipug-sipug. torog-torog. tuyag-huyag. sensitive plant	Aphrodisiac, diuretic, alterant, antiasthmatic emetic, antiseptic, emollient
<i>Moringa oleifera</i>	Moringaceae	Malungal, arunggay, kalungai, dool, Kokompilan, horse-rash tree	Galactagogue, antiseptic, rubefacient, antiscorbutic, purgative, diuretic, stimulant
<i>Momordica charantia</i>	Cucurbitaceae	Ampalaya, amargoso, palia, paria apalaya, saligun, balsam apple, bitter gourd	Astringent, antitussive, vulnerary, parasiticide, emetic, purgative, vermifuge
<i>Musa sapientum</i>	Musaceae	gaging, platano, banana	Demulcent, astringent, antiscorbutic, laxative styptic, emmenagogue, cardalgic
<i>Nicotiana glauca</i>	Solanaceae	Tabako, tobacco	Sedative. antispasmodic, insecticide, emetic, purgative
<i>Ocimum sanctum</i>	Labiatae	Sulasi, balanoi, kolokoko, kolan-kogon, lalui, malinau, sacred basil bode, kalu-ui. bonak	Antitussive, stomachic, emetic, vermifuge, galactagogue, demulcent
<i>Oryza sativa</i>	Gramineae	Palsy, ammai. pagai, pal, rice paid, pagey	Antitussive, demulcent. diuretic, carminative, dentrifice, tonic
<i>Pandanus odoratissimus</i>	Pandanaceae	Pandan mabango. fragrant screw pine	Stimulant, diuretic antispasmodic, cardiostimulant, aphrodisiac, styptic
<i>Paspalum acrochaetum</i>	Gramineae	C-b-bubulis, sabung-sabungen	Alterative, corneal opacity
<i>Persia americana</i>	Lauraceae	Avocado, alligator pear	Astringent, aphrodisiac, emmenagogue, rubefacient, antispasmodic, stomachic
<i>Phragmites vulgaris</i>	Gramineae	Tams bang. lupi. uba-uba, tanobong. tantanubong. common reed	diuretic, coolant
<i>Piper betle</i>	Piperaceae	ikmo, buyo, gaoed, kanisi, samat. mamin, betel leaf pepper	Stimulant, antiseptic sialagogue, carminative-astringent, febrifuge, aphrodisiac
<i>Piper nigrum</i>	Piper	-Paminta. malisa, pepper, pimienta	rubefacient, counterirritant. fungicide febrifuge, astringent
<i>Pueraria lobata</i>		ApocYuchsWasasi, temple flower	Cathartic, laxative, purgative, diuretic
<i>Portulaca oleraceae</i>	Portulacaceae	01" alusiman. golasiman-bato dupdupil, kolasiman. makablang sabitan. ulisiman, rslane	Tonic. febrifuge antidysentery, diuretic, vermifuge, constructive
<i>Premna odorata</i>	Verbenaceae	Alagao, abgao, udgau, agdau argau, duragau, pcmuhah, tangli	Antitussive, expectorant, diuretic, carminative, Parasiticide, sudorific

SCIENTIFIC NAME	FAMILY	LOCAL NAME) ' COMMON NAME	REPORTED ACTION
psidium guajava	Myrtaceae	Bayabas. bayawas. bayabo, tayabas gaiyabal, guys. gL--	Astringent, vuibrary, antirfieumatic. antispasmodx;, febrifuge, Ionic, antidmbsfic
Rhoeo discolor	Commelinaceae	Banks-bangkaan, boat lily	Expectorant, styptic. aMidyseraery, astringent
Sacharum officinarum	Gramineae	Tubo, agbo, cane, duke, una, unas, unat, sugar cane	Antiseptic, febrifuge, expectorant, laxative, demukxnt, diuretic, stimulant
Scheffiera odorata	Araliaceae	Lima-fima, arasagot, galamay-amu, Karangkong. kayangkang, tughik	Anfitussive, antisoorbatic, vulnerary
Solanum melongena	Solanaceae	Talong, berengena, tolung. eggplant	Audasthmatic, stimulant, astringent, anodyne, antiphlegmatic purgative.
Stachytarphete jamaicensis	Verbenaceae	Kandikandiaan, albaka, bilu-bilu, bola-moms. limbagat, Brazilian tea, devils' coach whip	Vermifuge, anti-rheumatic, abortive, emetic cardxxsstorativs
Symphytum officinale	Boraginaceae	Comprey, knit-bone comfrey	Tonic. vulrerary, astringent, styptic antirheumatic, heels bone and ukers
Syzygium cumini	-.Mpuce	dungboi, lumboy. dual-nasi black plum, java plum	antidarrheel, diuretic
Tagetbs erects	Composites	Amarillo, ahito, marigold, French marigold. African marigold	Laxative, antitussive, vermiluge, carminative diuretic, vulnsrary
Tamarindus indica	Leguminosae	Sampaloc, salomagi, salamagi, tamarindo, asam, sambagi, tamarind	Anti-emetic, astringent, tonic, digestive, febrifuge, vermicial, laxative
Terminalia catappa	Combretaceae	Talisay, aimendras, dalosai, kalisai, hitam, logo, talisi, savidu	Sudorific, vermifuge, purgative, astringent, antidysenteric, analgesic
Tinospora rumphi	Menispermaceae	Makabuhay, paliaban, panauan, pangiawan, tagahag tagua	Tonic, febrifuge, vulnerary, antimalaria, parasiticide
Theobroma Cacao	Sterculiaceae	Cacao	Emmenagogue, ecbolic, diuretic
Vitex negundo	Verbenaceae	Lagundi, dangle, dabtan, lingei Sagaray, five -leaved chaste tree	Vuinsrary, lactagogue, emmenagogue antigastralgie, antiseptic, analgesic, tonic. . demuk~rrc, vertnifu ,
Zee mat's	Gramineae	Mais, tigi, mail, igi, com maize	Stomachic, diuretic, smolient, antierrbtic
Zingiber officinale	Zingiberaceae	Luya, agat, baseng, lajya, lays, ginger	Revulsive, antfheumatic, stomachic, anti- colic, rubefacient, dgestive, diaphoretic, stimulant, verm'rfuge.

**PICTURES OF SOME PHILIPPINE PLANTS USED IN
VETERINARY HERBAL MEDICINE**

1.	<i>Achras zapota</i>	chico, sapodilla
2.	<i>Allium ascalonicum</i>	lasona, baker's garlic
3.	<i>Allium cepa</i>	sibuyas, true onion
4.	<i>Allium sativum</i>	bawang, garlic
5.	<i>Ananas comosus</i>	pina, pineapple
6.	<i>Andropogon citratus</i>	tanglad, lemon grass
7.	<i>Arcangelista flava</i>	abustra, suma
8.	<i>Areca catechu</i>	bunga, betel-nut
9.	<i>Artemesia vulgaris</i>	damong maria, maidenwort
10.	<i>Averrhoa bilimbi</i>	kamias, iba
11.	<i>Azadirachta indica</i>	neem tree
12.	<i>Bambosa spinosa</i>	kawayan, bamboo
13.	<i>Bixa orellana</i>	alibangbang
14.	<i>Bauhinia malabarica</i>	atchuete, annatto
15.	<i>Blumea balsamifera</i>	sambong, blumea camphor
16.	<i>Capsicum frutescens</i>	sili, red pepper, chilli
17.	<i>Carica papaya</i>	papaya, papu
18.	<i>Catharanthus roseus</i>	chichirica, periwinkle
19.	<i>Chromolaena odorata</i>	hagonoy, siam weed
20.	<i>Citrus microcarpa</i>	kalamansi, lemon
21.	<i>Coleus blumei</i>	mayana, malaina
22.	<i>Cucurbita maxima</i>	kalabasa, squash
23.	<i>Ehretia philippenses</i>	tsang-gubat, tea plant
24.	<i>Daucus carota</i>	carrot, remolacha
25.	<i>Eucalyptus tereticornis</i>	eucalyptus
26.	<i>Euphoria hirta</i>	gatas-gatas, snake weed
27.	<i>Gliricidia sepium</i>	kakauate
28.	<i>Helianthus annus</i>	mirasol, sunflower
29.	<i>Hibiscus rosasensensis</i>	gumamela, hibiscus
30.	<i>Imperata cylindrica</i>	kogon
31.	<i>Ipomea aquatica</i>	kangkong, swamp cabbage
32.	<i>Ipomea batatas</i>	camote, sweet potato
33.	<i>Lantana camara</i>	lantana
34.	<i>Leucaena leucocephala</i>	ipil-ipil
35.	<i>Luffa cylindrica</i>	patola, sponge gourd
36.	<i>Mangifera indica</i>	mangga, mango
37.	<i>Mimosa pudica</i>	makahiya, sensitive plant
38.	<i>Moringa oleifera</i>	malungal, horse radish
39.	<i>Momordica charantia</i>	ampalaya, bitter gourd
40.	<i>Musa sapientum</i>	saging, banana
41.	<i>Oryza sativa</i>	palay, rice
42.	<i>Pandanus odoratissimus</i>	pandan, fragrant screw pine
43.	<i>Paspalum scrobiculatum</i>	carabao grass
44.	<i>Plumiera acuminata</i>	kalachuchi, temple flower
45.	<i>Portulaca oleracea</i>	olasiman-bato, purslane
46.	<i>Premna odorata</i>	alagao
47.	<i>Psidium guajava</i>	bayabas, guava

48.	<i>Rhoeo discolor</i>	banka-bangkaan, boat lily
49.	<i>Sacharum officinarum</i>	tubo, sugar cane
50.	<i>Schefflera odorata</i>	lima-lima
51.	<i>Solanum melongena</i>	talong, eggplant
52.	<i>Stachytarpheta</i> <i>jamaicensis</i>	kandi-kandilaan, devil's horse whip
53.	<i>Tagetes erecta</i>	amarillo, marigold
54.	<i>Tamarindus indica</i>	sampaloc, tamarind
55.	<i>Theobroma cacao</i>	kakaw, cocoa
56.	<i>Tinospora rumphi</i>	makabuhay
57.	<i>Vitex negundo</i>	lagundi, five-eaved chaste tree
58.	<i>Zea mays</i>	mais, maize, corn
59.	<i>Zingiber officinale</i>	luya, ginger



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2. *Allium ascalonicum* (lasona, baker's garlic)



3. *Allium cepa* (sibuvus, true onion)



J. Allium ,ativurv IhannnX. Rnrle)

5. *Ananás comosus*
(pina, pineapple)



6.. *Andropogun citmrus*
(angled, lemon grass)



7. *Arcangelisia flava* (abustra, suma)



8. *Areca catechu* (bunga, betel-nut)



9. *Artemisia* ~'ulgaris (damong maria, maidenwort)



10. *Averrhoa bilimbi* (kamias, iba)



11. *Azadirachta indica* (neem tree)



12. *Bambusa spinosa* (kawayan bamboo)



13. *Bixa orellana* (alibangbang)



14. *liauhinia malabarica* (atchuete, annatto)



15. *Blumea balsamifera* (sambong, blumea camphor)



16. *Capsicum frutescens* (sili, red pepper, chilli)



17 *Carica papaya* (papaya, papu)



14. *Catharanthus roseus* (chichirica, periwinkle)



19. *C. flronio1aen~ odoruti*. (hagono~.. siam weed)



20. *Citrus microcarpa* (kalamansi, lemon)



21. *Coleus blumei* (mayana, malaina)



22. *Cucurbita maxima* (kalabasa, squash)



23. *Ehretia philippines* (tsang-gubat, tea plant)



24. *Daucus carota* (carrot remolacha)



25. *Eucalyptus tereticornis* (eucalyptus)

26. *Euphorbia hirta*
(gatas-gatas, snake weed)



27. *Gliricidia sepium* (kakauate)



28. *Helianthus annuus* (mirasol, sunflower)



29. *Hibiscus rosasannensis* (gumameln, hibiscus)



30. *Imperata cylindrica* (kogon)



31. *Ipomea aquatica* (kangkong, swamp cabbage)



32. *Ipomea batatas* (camote, sweet potato)



33. *Lantana camara* (lantana)



34. *Leucaena leucocephala* (ipil-ipil)



35. *Luffa cylindrica* (patols, sponge gourd)



35. *Mangifera indica* (mangga, mango)



37. *Mimosa pudica* (makahlyu, sensitive plant)



38. *Moringa oleifera* (malungal, horse radish)



39. *Momordica charantia* (ampalaya, bitter melon)



40. *Musa sapientum* (saging, banana)



41. *Oryza sativa* (palay, rice)



42. *Pandanus odoratissimus* (pandan, fragrant screw pine)



43. *Paspalum merobieulalum* (ear~hao gr~s~)



44. *Plumiera acuminata* (kalachuchi, temple flower)



45. *Portulaca oleraces* (olasiman-bato, purslane)



46. *Premna odorata* (alagao)



47. *Psidium guajava* (bayabas, guava)



48. *Rhoeo discolor* (banka-bangkaan, boat lily)



49. *Ananas officinarum* (tubo, sugar cane)



50. *Schefflera odorata* (aima-lima)



51. *Solanum melongena* (lalong, eggplant)



52. *Strobilanthes tenuifolia* (kandi-kandilaan, devil's horse whip)



53. *Tagetes erecta* (amarillo, marigold)



54. *Tamarindus indica* (sampaIoc tamarind)



55. *Theobroma cacao* (kakaw, cocoa)



56. *Tinospora rumphi* (makabuhay)



57. *Vitex negundo* (Mgundi, five-leaved chaste tree)



58. *Zea mays* (mais, maize, corn)



59. *Zingiber officinale* (luya, ginger)



x;.msn .vendors of herbs arid other traam,ional preparations in pushcarts located in historical Plaza Miranda in Quiapo District, Manila, Philippines