

Daoas, S. A. (1984). *A survey and classification of commonly used medicinal plants found in Sagada, Mountain Province*. (Unpublished master's thesis). Baguio City: Baguio Colleges of Foundation.

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ABSTRACT

The main purpose of the study was to conduct a survey and classification of medicinal plants found in Sagada, Mountain Province.

The findings of the investigation answered the problems raised in Chapter which are as follows:

1. What are the plants being used by the people of Sagada, Mountain Province to treat various ailments?
2. What are the morphological characteristics of these plants?
3. What are the phonological characteristics exhibited by these plants?
4. How are these plants utilized by the people of Sagada, Mountain Province?
5. How are these medicinal plants administered by the people of Sagada?

In summarizing the findings, only the more if not most, relevant items are presented.

What are the plants being used by the people of Sagada, Mountain Province to treat various ailments? There are one hundred twenty plants mentioned by the mangag-agas of Sagada as valuable in the treatment of various ailments. These plants are classified under the family they belong to. The tracheophytes topped the list with sixty-four families containing nine families of

ferns and its allies, one family belongs to Gymnospermae and fifty-four families belong to Angiospermae. Two (2) representative genera of the Thallophytes were identified and classified. Under each grouping are the following plants:

I. Thallophytes: Fungi, *Auricularia* spp ; Lichen, *Usnea* spp

II. Pteridophyta: Family adiantaceae, *Onychium siliculosum* Desv. ; Family Equisetaceae, *Equisetum ramosissimum* dest. ; Family Lindsaceae, *Sphenomeris chinensis* (L) Maxon ; Family Lycopodiaceae, *Lycopodium Cernuum* L. ; Family Oleandraceae, *Nephrolophia cordifolia* L. : Family Polypodraceae, *Crypsinus taeiatus* (Sw.) Ching, *Pyrrosia* spp. ; Family Pteridaceae, *Pteris mutilate* L. ; Family Selaginellaceae, *Selaginella tamariscina* L.

III. Spermatophyta: Gymnospermae, Family Pinaceae, *Pinus Insularia* Endl. ; Andiospermae, Family Amaryllidaceae, *Agave cantula* Roxb. ; Family Araceae, *Cyrtosperma mekushii* (hassk.) Schott, *Pistia Stratiotes* L. ; Family Cannaceae, *Canna indica* L. ; Family Commelinaceae, *Commelina benghalensis* L., *Commelina diffusa* Burm. f. ; Family Cyperaceae, *Cyperus brevifolius* L., *Cyperus kyllingia* L., *Cyperus rotundus* L. ; Family Dioscoreaceae, *Dioscorea alata* L., *Dioscorea hispida* Dennst., *Dioscorea esculenta* (lour.) Burkill ; Family Graminae, *Cois lachrymal-jobi* L., *Themeda Triandria* Forsk., *Zea mays* L., *Eleusine indica* L., *Imperata cylindrical* (L.) Beau v. va. *Koenigii* (Retz.) Benth., *Saccharum officinarum* L. ; Family hydrocharitaceae, *ottelia alismoides* (L.) Pers. ; Family Liliceae, *Allium ascalonicum* L., *Allium odorum* L., *Allium sativum* L., *Dianella ensifolia* (L.) DC. ; Family Musaceae, *Musa paradisiacal* L., Family Poaceae, *Oryzawa sativum* L., Family Zingiberaceae, *Corcuma longa* L., *Hedychium coronarium* Koenig, *kaempferia galangal* L., *Zingiber officinale* Rosc. ; Family Agavaceae, *Cordyline fruticosa* L., Family Amaranthaceae, *Achyranthes aspera* L., Family Apocynaceae, *parameria barbata* (Blum.) k. Schum. ; Family Boraginaceae, *Ehretia microphyllia* Lam., *Symphytum officinale* L. ; Family Capriforiaceae, *Sambucus javanica* ; Family Caricaceae, *Carica papaya* L.;

Family Combretaceae, *Terminalia catappa* L. ; Family Compositae, *Agave conyzoides* L., *Artemisia capillaries* Thumb., *Artemisia vulgaris* L., *Bidens pilosa* L., *Blumea balsamifera* (L.) DC., *Centipeda minima* (L.) BA. Br. & Aschers, *Chrysanthemum indicum* L., *Elephantopus scaber* L., *Erigeron sumatrensis* Retz., *Helianthus annuus* L., *Pseudolenanthopus spicatus* (Juss.) Bohr., *Vernonia patula* (Dry.) Merr., *Wedelia chinensis* (Osbeck) Merss. ; Family Convulvaceae, *Ipomoea batatas* L.; Family Crassulaceae, *Kalanchoe pinnata* (Imk.) Pers. ; Family Cruciferae, *Nasturtium officinale* R. Br. ; Family Cucurbitaceae, *Curcuma maxima* Duchesne ; Family Druseraceae, *Drusera peltata* Sm. ; Family Ebenaceae, *Diospyros kaki* L. ; Family Ericaceae, *Gaultheria leucocarpa* Blm. Var/ . *leucocarpa* form *cumingiana* (Vid.) Sleum. ; Family Euphorbiaceae, *Euphorbia hirta* L., *Jatropha curcas* L., *Jatropha multifida* L., *Manihot esculenta* Crantz., *Ricinus communis* L. ; Family Labiatae, *Hyptis suaveolens* (L.) Poirr. ; Family Leguminosae, *Caesalpinia ceciparia* Roxb., *Cassia occidentalis* L., *Erythrina variegata* L. var. *Orientalis* (L.) Merr., *Gliricidia sepium* (Jaq.) Steud., *Glycine max* L. ; *Indigofera tinctoria* L., *Phaseolus lunatus* L., *Phaseolus radiatus* L. ; Family Loganiaceae, *Buddleja asiatica* Lour. ; Family Lythraceae, *Lagerstroemia speciosa* (L.) Pers. ; Family Malvaceae, *Hibiscus rosasinensis* L., *Urena lobata* L. ; Family Menispermaceae, *Arcangelisa flava* (L.) Merr., *Tinospora crispa* L. ; Family Moraceae, *Morus alba* L. ; Family Myristaceae, *Persea Americana* Mill., Family Myrtaceae, *Eucalyptus teretecorni* Sm., *Psidium guajava* L. ; Family Onagraceae, *Ludwigia adscendens* (L.) Hara. ; Family Passifloreaceae, *Passiflora edulis* Sims. ; Family Piperaceae, *Peperomia pellucida* (L.) HBK. ; Family Pittosporaceae, *Pittosporum pentandrum* (Blanco) Merr., *Pittosporum resiniferum* Hemsl. ; Family Polygonaceae, *Polygonum hydropiper* L., Family Pontederaceae, *Eichornia crassipes* (Mart.) Solm. ; Family Portulacaceae, *Portulaca olearacea* L. ; Family Rosaceae, *Eriobotrya japonica* L., *Rosa lucina*, *Rubus rosaefolius* Sm. ; Family Rubiaceae, *Gardenia jasminoides* Ellis., *Prenna odorata* L.; Family Rutaceae, *Citrus mitis* Blanco ; Family Scrophulariaceae, *Lindernia crustacea* (L.) F. Seull. ; Family Serraceniaceae, *hephrolepsis alata* L. ; Family Solanaceae, *Brugmansia*

suaveolens (Humb. Et. Bonpl.) Steud. Capsicum frutescens L., Solanum nigrum L., Solanum torvum Sor. ; Family Tiliaceae, Triumfetta bartramia L. ; Family Umbelliferae, Centela asiatica (L.) Urban ; Family Urticaceae, Memorialis hirta Wedd., Piptorus arboresces (Link.) C.B.Rob.

What are the morphological characteristics of these plants? What are the phonological characteristics exhibited by these plants? The answer to these two questions can be presented again at this point but to avoid duplication, the researcher feels it unnecessary to give morphological and phonological characteristics of these plants because they were completely presented in Chapter 4.

How are these plants utilized by the people of Sagada, Mountain Province? The study revealed six methods used by the mangag-agas in the preparation of the medicinal plants. These are decoction, infusion, poultice, cataplasm, extracts and syrups. The most common method employed by the mangag-agas in the preparation of the plant is decoction. Specific parts of the plants are utilized by the mangag-agas in the treatment of various ailments. These parts are the leaves, stems, bark, flowers, fruits, roots and seeds. Sometimes the whole plant is utilized in the preparation of the drug material. The most commonly used parts as revealed in the study are the leaves and roots of the plant.

How are these medicinal plants administered by the people of Sagada, Mountain Province? There are various methods in which the mangag-agas administered plant medicinal preparations. The medicinal preparation of the plant was administered by drinking the decoction and infusion, eating the medicinal preparation raw or cooked, applying directly as poultice or cataplasm on the part, chewing the drug preparation of the plant, and washing the area affected with the infusion or decoction of the drug material.

Conclusions

The identification of medicinal plant is very basic in the study of medicinal plants, or of any plant for that matter. Researches and experiments on the curative power of plants have to start from the identification of plants with purported medicinal value(s). A correct identification and classification of plants with medicinal value therefore, is valuable not only to ongoing researches but to the health and economic condition of the people.

It is important to the health of the people because a plant often has a various names and incorrect identification by the people might bring about serious illness or even death to those concerned. The economic value of this plant is obvious, since they grows almost everywhere. They are easily obtained and cultivated thereby giving an instant source of drug or medicine for treating various ailments.

The *mangag-agas*, too, may contribute new knowledge as to the value of some plants which are still unknown to some botanists of today.

In the light of the findings, the following conclusions were drawn:

1. That there are one hundred twenty identified and classified plants with medicinal value found in Sagada, Mountain Province. These plants are classified into their respective classes and families. There are sixty-four families of Tracheophytes and two genera of Thallophytes. That these plants are utilized by the *mangag-agas* and the residents of Sagada, Mountain Province in treating various ailments.
2. That there are more flowering plants than non-flowering plants identified in the collection
3. That these plants exhibit different flowering periods and most of them are distributed throughout the Philippines.

4. That the most commonly used method of preparing the medicinal plant is the decoction. These plant preparations are either taken orally or applied externally in their raw or cooked form and the most commonly used parts of the plant are the leaves and the roots.
5. That the medicinal administration is done by drinking, eating, chewing, rubbing and applying the medicinal preparation externally directly over the affected area.

Recommendations

Based on the finding and conclusion arrived at in this study, the following are highly recommended for consideration and implementation:

1. There must be a chemical analysis of the plants presented in this study to confirm or disprove the claims of the *mangag-agas* that such a plant or part of such plant is good for a particular ailment.
2. Further researches should be conducted on the preparation and administration of medicinal plants, their localization and distribution in the plant body.
3. Scientific experiments be conducted to determine the active constituents of the Philippine medicinal plants, their localization and distribution in the plant body.
4. The physical and chemical conditions favorable for the cultivation and propagation of medicinal plants be determined.
5. There must be a sustaining awareness and interest on the importance of medicinal plants among the people.
6. There should be no communication gap between scientific medicinal practitioners and herbal community healers on the proper and effective use of medicinal plants.
7. Local healers should be informed of the real and correct medicinal uses of plants and their proper methods of preparation and

administration to eliminate unfounded and ineffective methods adhered to by the local healers.

8. There should be more manuals and publications especially illustrated ones prepared and available to the masses.
9. The educational drive started by the Ministry of Health should continue and be intensified to cover all the areas of Sagada and the whole of Mountain Province.
10. Histochemical studies should be done to determine the localization of the medicinal principles of these plants and therefore establish the reason for a certain plant/part(s) being specifically effective for a certain ailment.
11. Finally, the study of Philippine medicinal plants should be incorporated in biological subjects, specifically Botany. In this way, the students could be instrumental in disseminating information concerning the use and importance of medicinal plants.