

Ethno-Botanical Survey of Medicinal Plants Used by the Talaandig of Lourdes, Valencia City, Buidnon, Philippines

Cababan, Mc Arthur L.*^{1,2}, Eslawan, John David C.³

¹College of Education, Central Mindanao University, Musuan, Maramag, 8714 Bukidnon, Philippines

²Teacher I, Lourdes Integrated School, High School Department, Barangay Lourdes, Valencia City, 8709 Bukidnon, Philippines

³Grade 12, Lourdes Integrated School, High School Department, Barangay Lourdes, Valencia City, 8709 Bukidnon, Philippines.

*Corresponding author: Cababan, Mc Arthur L. Email: mcarthurcababan15@gmail.com

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ABSTRACT:

Traditionally, plants have been used as a source of medicine in Mindanao by indigenous people inhabiting various terrains especially when there is absence of medicines. An ethno-botanical survey was done to Talaandig people of Barangay Lourdes. Specifically, it aims to identify and determine some weed species; determine some local names used by Talaandig and assess the weeds species preparation and its application. Data revealed a total of 28 species belonging to 10 families and 26 genera. Most of the species collected were processed through decoction, juice and soaked. Age and gender of the Talaandig does not correlated to medicinal plant usage. Weed species still plays a vital role in primary healthcare of Indigenous People in Mindanao, Philippines. Therefore, awareness about the conservation of medicinal flora should be raised among the local communities.

Keyword: *Ethno-botanical, Talaandig, Local Terms*

INTRODUCTION:

Weeds is the generic word for a plant growing in a spot where it is not wanted. The most prominent used of the world is in connection with farming where weeds may damage crops when growing in fields and poison domesticated animals when growing on pasture land. They are noxious and a serious threat to agriculture (Azuelo, 2007). Despite of the negative impacts of the weeds, some plants usually thought of a weeds may actually provide some benefits. As cited by Azuelo et al, (2007), weeds have some medicinal value. Some weeds can cure heart ailments, wounds or even skin diseases.

Talaandig Tribe is the one of the 110 groups of Indigenous People in the Philippines. It has a population of approximately 100,000 people and mostly concentrated in the northern and western part of the province of Bukidnon, Mindanao Island, Philippines. Certain classes of weeds share adaptations to rural environments that this is to say that gives advantages over Talaandig who believed that the forest was the source of their life because it serves all of their needs.

MATERIALS AND METHODS

Entry Protocol and Research Design

A letter request was submitted to Barangay officials, of Barangay Lourdes, Valencia City, Bukidnon, Philippines. Stating the purpose of the study and to conduct an interview to the Talaandig of Brgy. Lourdes, Valencia City, Bukidnon, Philippines.

Gathering of Data and Sampling Procedure

The collected weeds species were placed on the newspaper with the plant presser for classification and identification. Data was collected between July – October of 2018, each herbal practitioner was interviewed once. Information collected from herbal practitioner include; sex of the respondent, age, source of knowledge, vernacular names of plants, uses of the plants, method of preparation and also administration etc. Use of structured questionnaire and oral interview were adopted to gather ethno medicinal data. Questionnaire was administered directly (same word to the respondents) those who could read and write, while others were filled after being interview orally using an interpreter.

Data Analysis

Descriptive statistics was used in analysing the data collected, this include mean and tables were used to summarize the data.

RESULTS AND DISCUSSION

The weeds under study were classified, identified and described according to habit and morphological characteristics. A total of twenty-eight (28) species of weeds were collected. Of these, thirty (26) genera and twelve (10) families.

Table 1. List of family, genera and species collected in the area.

| No. | Family | Genera | Species |
|-----|------------------|----------------|---------|
| 1 | Asteraceae | Ageratum | 1 |
| 2 | | Chromolaena | 1 |
| 3 | | Conyza | 1 |
| 4 | | Crassocephalum | 1 |
| 5 | | Elephantopus | 2 |
| 6 | | Emilia | 1 |
| 7 | | Mikania | 1 |
| 8 | | Spilanthes | 1 |
| 9 | Commelinaceae | Commelina | 1 |
| 10 | | Murdannia | 1 |
| 11 | Covulvulaceae | Ipomoea | 1 |
| 12 | Cyperaceae | Cyperus | 2 |
| 13 | Fabaceae | Calopogonium | 1 |
| 14 | | Casia | 1 |
| 15 | | Mimosa | 1 |
| 16 | Malvaceae | Malvastrum | 1 |
| 17 | | Sida | 1 |
| 18 | | Urena | 1 |
| 19 | | Peperomia | 1 |
| 20 | Poaceae/Graminae | Axonopus | 1 |
| 21 | | Eleusine | 1 |
| 22 | | Sporobolus | 1 |

| | | | |
|--------------|--------------|----------------|-----------|
| 23 | Polygalaceae | Polygala | 1 |
| 24 | Rubiaceae | Borreria | 1 |
| 25 | Verbenaceae | Lantana | 1 |
| 26 | | Stachytarpheta | 1 |
| Total | 10 | 26 | 28 |

The demographic profile of some Talaandig of the area. A total of thirty (30) informants consisting of twenty-five (25) female and five (5) male. Most of the respondents were House keeper and Sumifru for Barangay Lourdes has plantation of Banana.

Figure 1. Distribution on the processing on weeds species applied by Talaandig.

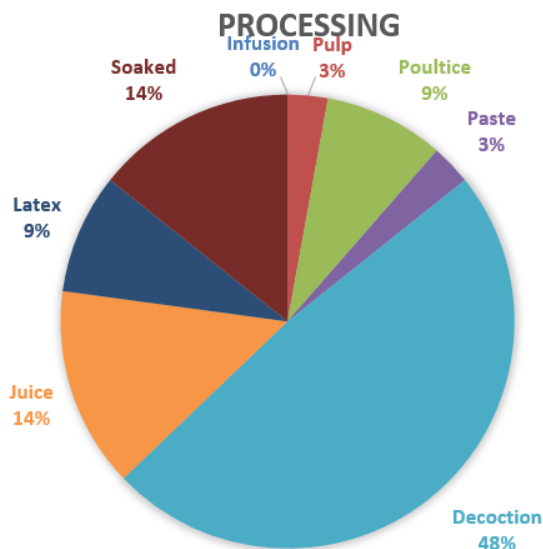


Table 2. Ailment Categories with respect to Biomedical and Local terms used by Talaandig.

| Ailment categories | Bio-medical terms | Local Terms |
|--|-------------------------|--------------------------|
| Gastro-Intestinal Disorder | Constipation | Gitubol |
| | Diarrhea | Kalibanga |
| | Dysentery | disenteriya |
| | Nausea | Panglipong |
| | Indigestion | Wala na hilisan/ Impatso |
| | Vomiting with blood | Sugpa |
| | Stomachache | Sakit sa tiyan |
| | Bloated Stomach | Butod sa tiyan |
| | Flatulence | Panohot |
| Dermatological Disorders and cosmetics | Cuts | Hagbas |
| | Wounds | Samad |
| | Boils | hubag |
| | Pimples | Bugas |
| | Skin rushes | Dupang |
| | Skin diseases | Sakit sa panit |
| | Body inflammation | Hisang |
| | Sore | Noka-noka |
| | Facial Fungal infection | Ap ap |
| | Swell | Hupong |
| Respiratory diseases and Fever | Twinge | sinda |
| | Common cold | Subaw |
| | Cough | Ubo |
| | Ordinary fever | Hilanat |
| Cardiovascular Diseases | Urinary Tract Infection | U.T.I |
| | High blood Pressure | |
| Muscular, Joint, skeletal and nervous diseases | Heartburn | Kabuhi |
| | Canker sore | Luas |

Table 3. Weeds species with respect to its life form, processing and plant parts used.

| Species | Life form | Processing | Parts of Plants Used |
|--|-----------|--|-------------------------------|
| <i>Amaranthus spinosus</i> L. | Herb | Decoction | Leaves |
| <i>Ageratum conyzoides</i> (L.) | Herb | Leaves are soaked in cold water for 3 days | Leaves |
| <i>Chromolaena odorata</i> (L.) R.M. King & Robinson | Shrub | Juice | Leaves |
| <i>Conyza Canadensis</i> (L.) Cronq. | Herb | Decoction | Entire Plant |
| <i>Crassocephalum crepidiodes</i> (Benth.) S. Moore. | Herb | Latex | Leaves |
| <i>Elephantopus scaber</i> L. | Herb | Decoction | Roots |
| <i>Elephantopus tomentosus</i> L. | Herb | Decoction | Roots |
| <i>Emilia sonchifolia</i> (L.) | Herb | Juice | Leaves/ shoots Tender |
| <i>Mikania cordata</i> (Burm f.) B.L. Robinson | Herb | Decoction | Leaves |

| | | | |
|---|-------|--|-----------------------|
| <i>Spilanthes uliginosa</i> Sw. | Herb | Juice | Flower or Leaves |
| <i>Synedrella nodiflora</i> (L.) Gaetrn. | Herb | Poultice | Flower |
| <i>Vernonia cineria</i> (Linn.) Less. | Herb | Soaked | Tender Shoot |
| <i>Wedelia trilobata</i> (L.) Hitchc. | Herb | Pulp | Leaves/ Entire Plant |
| <i>Commelina benghalensis</i> L. | Herb | Leaves are soaked in warm water. Decoction of roots. | Leaves/ Rhizome |
| <i>Murdannia nudiflora</i> (Linn.) Brenan. | Herb | Paste | Entire Plant/ Rhizome |
| <i>Ipomoea obscura</i> (L.) Ker. | Herb | Decoction or extract to get the latex | Leaves |
| <i>Cyperus compressus</i> L. | Herb | Decoction | Roots |
| <i>Cyperus kyllingia</i> Endl. | Herb | Soaked in the water | Entire plant |
| <i>Calopogonium muconoides</i> Desv. | Herb | Latex | Stem |
| <i>Cassia tora</i> L. | Herb | Decoction | Entire Plant |
| <i>Mimosa pudica</i> L. | Herb | Decoction | Roots |
| <i>Malvastrum coromandelianum</i> (L.) Garcke | Herb | If roots decoction is needed. If leaves poultice. | Roots/ Leaves |
| <i>Sida rhombifolia</i> L. | Herb | Decoction | Roots |
| <i>Urena lobata</i> L. | Shrub | Burning process | Leaves |
| <i>Peperomia pellucida</i> (L.) HBK. | Herb | Soaked in hot water | Entire Plant |
| <i>Axonopus compressus</i> (Sw.) Beauv | Herb | Decoction | Entire Plant |
| <i>Eleusine indica</i> L. | Shrub | Decoction | Entire Plant/ Rhizome |
| <i>Sporobolus indicus</i> (L.) R. Br. | Herb | Decoction | Entire plant |
| <i>Polygala paniculata</i> | Herb | If roots Decoction. Or Make leaves pliable by heating. If leaves poultice. | Roots/ Leaves |
| <i>Borreria hispida</i> (L.) K. Schum. | Herb | Decoction | Roots |
| <i>Lantana camara</i> L. | Shrub | Juice | Leaves |
| <i>Stachytarpheta jamaicensis</i> (L.) Vahl. | Herb | Juice of Leaves Decoction of Roots | Roots/Leaves |

Given the table on the common names used by the Talaandig on some ailments and its equivalent bio-medical terms. There were 6 categories of ailments of its 6 locally terms ailments were recognized and recorded. Further, the proper naming on species could greatly effect on the orientation and compatibility of herbal weeds to be used in a particular ailment.

CONCLUSION

The weeds were classified and described according to habit and morphological characteristics. A total of twenty-eight (28) species of weeds were collected. Local terms of some ailments were also gathered such as stomach ache “*Sakit sa tiyan*”, wound “*samad*”, Skin rushes “*Dupang*” and diarrhea “*Kalibanga*”. Further, for the processing method of medicinal weeds, Talaandig commonly used was decoction, soaked and juice. Leaf, roots or even the entire plant was commonly used by the Talaandig in applying to ailments. Furthermore, medicinal plants are continued to be used in medicinal practice based on a strong traditional belief in herbal medicine due to limited availability of modern machines and pharmaceutical services like the rural area of Talaandig.

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