

## Identification of the Herbal Wild Medicine of the Municipality of Mapimi, Durango, Mexico

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**Abstract:** The medicinal plants are an important source of many biological active products. The existence of the above-mentioned plants with therapeutic potential constitutes a pharmacological alternative in the treatment of one without number of diseases of there the importance of realizing studies on inventories, diagnosis and new medicaments. The aim of this study was to identify the medicinal wild plants used by the inhabitants of the municipality of Mapimi, Durango, Mexico. There were realized a total of 170 individual interviews to persons of both genus, 40 surveys to fieldworkers of Bermejillo's communities, The Victoria, Montes of Oca, Roma Texas, San José of Bellavista, San Isidro, Mapimí, Ceballos Yermo, The Porvenir, The Jaralito, and Santa Elena. 16 plants were identified by medicinal use, belonging to 14 genders and 8 families. There was identified the genders of the medicinal wild plants used by the inhabitants of the municipality of Mapimí, Dgo, inside the most common they find the kinds Agave, Opuntia and Euphorbia.

**Key words:** medicinal wild plants, Agave, Opuntia, Euphorbia.

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### I. INTRODUCTION

From the beginning of the civilization the people have used medicinal plants since they are an important source of many biological active products [1]. Many of the medicines used for the treatment of diverse diseases including the cancer, they are obtained of vegetable species. It is calculated that the medicinal Mexican flora is clear of between 3,000 and 5,000 plants that they have a therapeutic wide potential [2]. In agreement with the WHO [3] 80% of the population lives in underdeveloped countries and the majority they depend on the traditional medicine for the care of their health [4]. The traditional medicine, it has been for centuries, the only method used in the restoration of the health in current and past generations where the medicinal plants have expired and fulfill a fundamental paper to treat the diseases of the people. To treat the diseases with plants turns out to be very economic, so these remedies perform great importance for many rural communities of Mexico. Many of the drugs that exist nowadays have his origin in the plants [5]. The medicinal plants have been in use in traditional medicine for the treatment of a wide range of diseases from ancient times. In Durango's State, there are scanty the works realized on medicinal plants. The existence of the above mentioned plants with therapeutic potential constitutes a pharmacological alternative in the treatment of one without number of diseases of there the importance of realizing studies on inventories, diagnosis and studies of new medicaments. The aim of this study was to identify the medicinal wild plants used by the inhabitants of the municipality of Mapimi, Durango, Mexico.

### II. MATERIAL AND METHODS

#### Place of Study

Municipality of Mapimi locates 26°14'6" of latitude North and 104°29'14" of length West, to an altitude of 1,300 m on the level of the sea, the climate of this region is semiarid with an annual average temperature of 18°C and one rain rainfall of 263,1 mm (**Figure**). The agriculture, it is the principal economic activity. Mapimi, is integrated by 241 communities in an area of 7,126 km<sup>2</sup>, with a population of 22,940 inhabitants [6].



**Figure.**Mapimi, Durango. Mexico.

### **Compilation of information**

There applied 40 surveys to themselves to fieldworkers of Bermejillo's communities, The Victoria, Montes de Oca, Roma Texas, San José of Bellavista, San Isidro, Mapimí, Ceballos Yermo, The Porvenir, The Jaralito, and Santa Elena. There were realized a total of 170 individual interviews to persons of both sexes. In agreement with the obtained information one proceeded in company of the fieldworkers to identify *in situ* the medicinal plants mentioned in the interviews and the surveys and that are used as treatment for different personal and familiar diseases, the bushes were photographed and gathered, later they qualified.

### **III. RESULTS**

In agreement with the interviews and realized surveys 16 plants were identified by medicinal use, belonging to 14 kinds and 9 families. The medicinal plants used by inhabitants of municipality of Mapimi are listed in the **Table**, an example of the medicinal plants of the municipality. The most common genders were *Agave*, *Opuntia* and *Euphorbia* whereas the principal families corresponded to Leguminosae, Euphorbia, Agavaceae, and Cactaceae.

### **IV. DISCUSSION**

It has been demonstrated in several studies principally realized in Mexico, the medicinal properties that the prickly pear has. There is called the “medicinal properties” since they help to the control of the disease. *Origanum vulgare* indicated in the treatment of cough. When the fever and chest pain occurs, this decoction is mixed with cinnamon (*Cinnamomum zeylanicum*). It is for dysmenorrhea, abortion, postpartum, for good digestion and against colic in general, including menstrual colic [7].

The tea leaf *Agave* or tincture is used orally to treat constipation and excess gas. It is also used as a diuretic. Tea root or tincture is taken orally to treat arthritic joints. The use of this plant is common with diabetes; this is the disease through an infusion with maguey leaves and is taken fasting. For grains buried and lung pains. In both cases, the sheets are placed so poultice in the affected area. It is also used given to relieve cough, back pain, caries, gastritis, bile; it also is said to provide vitamins [7]. *Agave lechuguilla* is for internal and kidney pain hits, roasted and peeled stalk is applied to the painful area; roast stalk also squeezed, and the juice obtained fasting drink. The leaves macerated in water ingested to cure diabetes. A decoction of the leaves with avocado leaves (*Persea gratissima*) and juniper bark (*Astianthus viminalis*) is taken against bleeding. Even, it is used to treat ringworm and infections.

The nopal (*Opuntia ficus-indica*) is one of the principal horticultural species produced in Mexico. Their stems or cladodios (nopal vegetable) are commercialized and are consumed in fresh, generally for their food and medicinal properties [8]. There has been demonstrated that the nopal is effective for the treatment of diabetes,

high blood cholesterol, obesity, atherosclerosis, colitis, diarrhea, prostate benign hypertrophy, and in the reestablishment of the intestinal flora in the treatment of the alcoholism[9]. To treat diabetes, the leaf liquefies and is taken oreaten raw or cooked lemon accompanied by way of salad.It is usually given fasting. It is also used in digestive disorders. To remove a decoction with diarrhea following the country prepares tuna; with starch slurry with guava (*Psidiumguajava*) ground into water; both drinks are taken morning and evening. To cure indigestion, a decoction of hogadizogaumuchil (*Pithecellobium sweet*), following huizache (*Farnesiana acacia*), following the nopal is prepared, tomatillo(*Solanum*sp), root (*Menthapiperita*), root oregano (*Origanumvulgare*) and seed cobano (*Swieteniahumilis*) to drink in the morning. In addition,it is supplied with gastritis problems, intestinal colic and ulcersinternal. Get other less frequent, such as curing lung (including cancer), as an aid in childbirth and to relieve back coldly applications. They are attributed properties as a diuretic and cardiac tonic[7].

In Mexico, *Euphorbia*isdistributed in Durango, Nuevo Leon, San Luis Potosi, Tamaulipas, Zacatecas, Chihuahua and Coahuila..*Jatrophadioic*the medicinal use most frequently given to this plant is to prevent fallshair to which the stems or whole plant or crushed root cooked inwater, this liquid after washing hair rinsed every other day. Used in varicose veins and bruises, the plant is boiled and applied as a poultice,or cooked and canvases are made daily on the punches. The water resulting from thebaking is used as bath to remove scabies or washed to relievewound infection and grains previously grooming with soap pastaneutral. But for sore eyes, eye eliminates clouds and cure blindness, fruit dropping them two or three drops squeezed.It is also recommended to apply a drop of latex on the skin to remove thorns,chopped two drops in the teeth to cause its detachment, rub into the affected area to counteract the effect of ulcers hand, and chewing the roots or stems or both to hold the teeth[7].

Mexico, there has a great biodiversity of medicinal plants and a wide culture in the use traditional medicine based in above mentioned you plant nevertheless many of these plants they are not known since there have not developed the studies of identification, classification, quantification type of constituent phytochemicals, presence of toxic substances, etc. The medicinal plants brought in this study contribute to the knowledge of the medicinal plants used in Durango's State.

## V. CONCLUSION

There was identified the kind of the medicinal wild plants used by the inhabitants of the municipality of Mapimí, Durango, inside the most common they find the genders *Agave*, *Opuntia*, and *Euphorbia*.

## CONFLICTS OF INTEREST

The authors do not bring conflicts of interest with regard to the manuscript present.

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**Table.** Medicinal wild plants of the municipality of Mapimi, Durango, Mexico.

Commonname	Scientificname	Family	Medicinal use
Hojasen			
Oregano	<i>Origanum vulgare</i>	Lamiaceae	Stomachache, cooled Grains and wounds
Huizache	<i>Acacia farnesiana</i>	Leguminosae	Grains and wounds
Mezquite	<i>Prosopis glandulosa</i>	Leguminosae	Headache, dyspepsia
Chicalote	<i>Argemone</i> spp	Papaveraceae	Clouds in the eyes, cough, toothache
Gobernadora	<i>Larrea tridentata</i>	Zygophyllaseae	Rheumatism, renal, hepatic problems, badly smell of feet
Árnica	<i>Heterotecainuloides</i>	Compositae	Disinfectant of wounds, blows, twistings
Cadillo	<i>Xanthium strumarium</i>	Compositae	Pain of kidneys and stomach
Candelilla	<i>Euphorbia colorata</i>	Euphorbiaceae	Purgative
Epazote of zorrillo	<i>Chenopodium graveolens</i>	Chenopodiaceae	Cough, sedative, diarrhea
Hierba del golondrina	<i>Euphorbia</i> spp	Euphorbiaceae	To treat grains
Jarilla	<i>Baccharis salicifolia</i>	Compositae	Biliary problems, infections, stomachache
Lechuguilla	<i>Agave lechuguilla</i>	Agavaceae	Fall of the hair, against the dandruff, used as soap
Nopal	<i>Opuntia</i> spp	Cactaceae	Renal problems indigestion, diabetes
Sangre grado	<i>Jatropha dioica</i>	Euphorbiaceae	Varicose veins, blows for traumatism, toothache
Peyote	<i>Lophophora williamsii</i>	Cactaceae	Fever, rheumatism, pain of joints
Magüey	<i>Agave</i> spp	Agavaceae	Against prick of scorpion, infections in skin, toothache

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