

1972

# Ethnobotanical Studies on Selected Plants of Northeastern Mexico

Wayne M. Pichon

*Eastern Illinois University*

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Nov. 9, 1972

Date

ETHNOBOTANICAL STUDIES ON SELECTED

PLANTS OF NORTHEASTERN MEXICO

(TITLE)

BY

WAYNE M. PICHON

B. S. in Education, Eastern Illinois University, 1968

**THESIS**

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF

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CHARLESTON, ILLINOIS

1972

YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING  
THIS PART OF THE GRADUATE DEGREE CITED ABOVE

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## INTRODUCTION

Early studies in the ethnobotany of Northeastern Mexico have been of the market plants or of the plants collected and utilized in the field by the Indians of the region. These studies have included medicinal as well as consumable plants. Several of the plants have been incorrectly identified by earlier workers in the field. These errors are, in part, a result of the problem of finding market specimens with complete plant parts. Many of the specimens contain only the leaves, roots, flowers, or other isolated organs.

Specimens were obtained from the brujos, who are also referred to as herbalists, witch doctors, or medicine men by the local people. The brujos usually set up a side walk or roadside market, and now and then set up shop in the larger markets of the region. Their shops or stores are often referred to as Herbarios. Occasionally a brujo peddles his products from town to town or carries a bag full of herbs on his back dispensing them to people along the way.

In some cases brujos buy plants from field collectors who collect in various areas where the plants are plentiful. Only after one has gained the confidence and trust of the brujos or field collectors may he accompany them on a herb collecting foray. Brujos are reluctant to accept one at face value, probably because of the emphasis placed on drugs by the foreigner, and also they are usually wary about revealing the sources of their herbs to strangers who might buy up or collect the material putting him out of business. This reaction is also evident

among the brujos who operate very small Herbarios and wish to keep the sources of their plant material secret.

Only plants collected in the Herbarios and in the field were incorporated into this study. Fresh specimens of the plants can only be obtained when one goes with the brujo to his collecting areas. Only then can the collector be assured of obtaining a "complete botanical specimen." In addition to those plants obtained from known brujos in the Herbarios, as well as the field, several ethnobotanicals were collected from individual Mexican citizens. All specimens were identified with the corroboration of Dr. Marshall C. Johnston, University of Texas, Austin, Texas. Specimens which could not be identified to species were not included.

Ethnic information was derived from four major sources. The primary source of information was obtained by word of mouth from the brujos. Private collectors, as well as individual Mexican citizens, provided important information regarding the folklore names and the uses of the plants. Ethnobotanical literature was used in the identification of the plants, as well as a source of information related to their common or everyday uses. Specimens of all plants studied are deposited in the Ernest L. Stover Herbarium, Eastern Illinois University, Charleston, Illinois, and the University of Texas Herbarium, Austin, Texas.



## LITERATURE REVIEW

Publications related to the ethnobotany of Northeastern Mexico are very limited. Rose (1899) listed several economically important plants of Mexico and included a brief summary of their general uses. Further work in the field was done by Castetter (1935). His work centered around various Indian tribes found in Mexico, as well as in the Southwestern United States.

As a result of the acute drug shortages during World War II, research into alkaloid-yielding plants increased. The majority of these studies were concerned with Central and South American plants. Bishop and McDonald (1950) studied several of these plants for the antibacterial substances they produce. Frisby et. al. (1953) conducted further experiments with possible antibacterial plant substances, placing special emphasis on substances which would inhibit Mycobacterium tuberculosis (Zopf) Lehm. & Neum. Further work with antibacterial substances in higher plants was published by Nickell (1959). Willaman and Schubert (1960) compiled an index of plants listing their respective alkaloids. Schertz et. al. (1960) examined several seed extracts as possible agglutinates for human blood. Several reputed medicinals of Mexico were tested by Jiu (1966). The extracts of these medicinals were tested for physiological effects on the nervous system of mice, rats, and dogs, as well as for anti-antherogenic effects on cockerels and for anti-microbial effects on selected bacteria. The reaction of these extracts upon the endocrine glands of rats was also observed.

Native food plants of Mexico were studied for their nutritive value by Munsell (1950). Whitaker and Cutler (1966) listed the common market plants which are utilized as everyday foodstuffs by the local population.

A compendium of medicinal and poisonous plants of Texas was published

by Burlage (1968), who listed several species which occur in Northeastern Mexico. In addition, his work serves as a valuable bibliographic source. Martinez in 1969 published the second edition of Plantas Medicinales de Mexico. Although several of the species cited do not occur in Northeastern Mexico, it serves as a valuable aid in identification and gives the folklore names of many of the specimens studied.

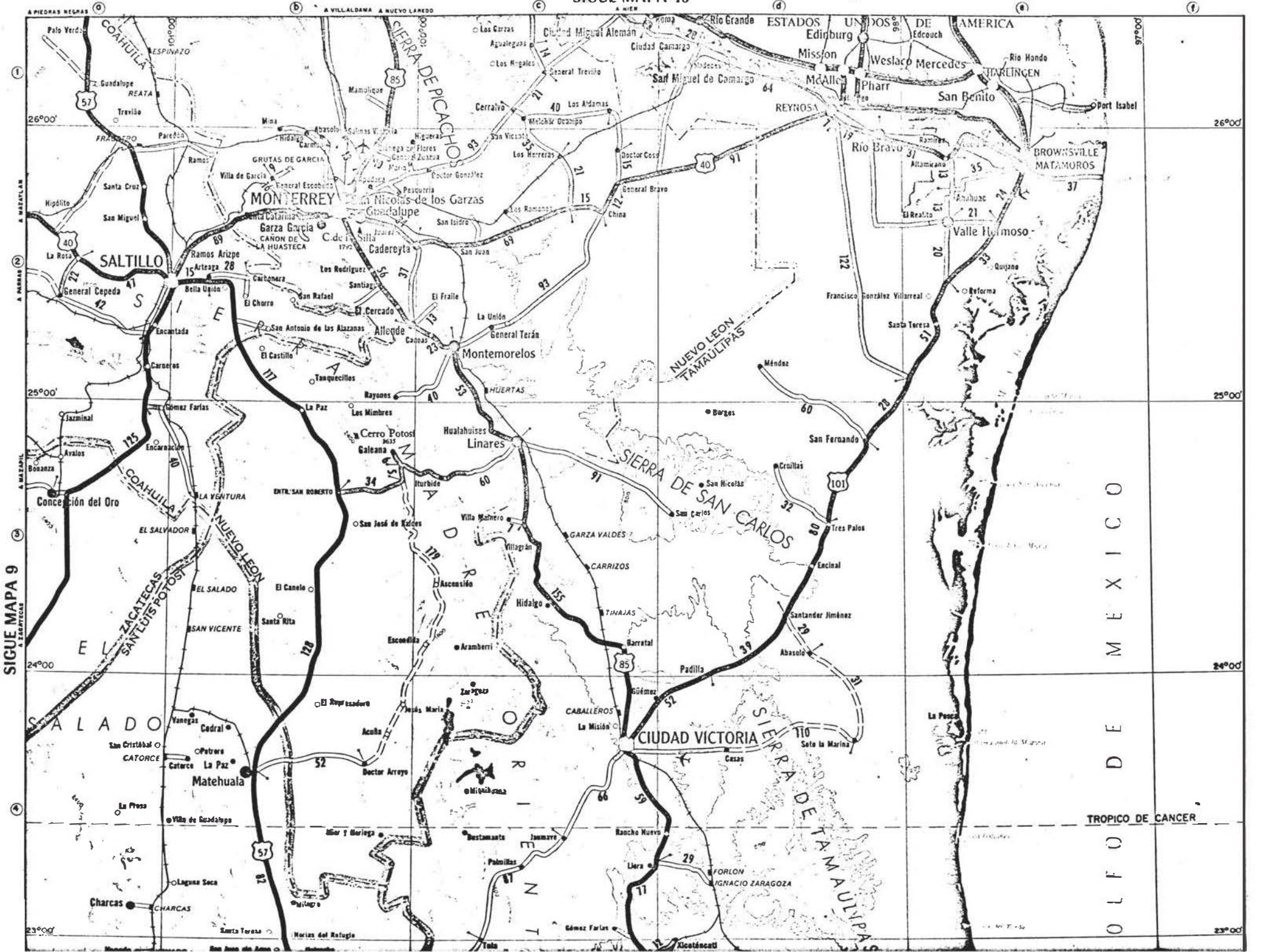
## DESCRIPTION OF THE AREA

Plants used in this study were collected between 100-102° West Longitude and 25-27° North Latitude. The majority of the specimens were collected in Northeastern Mexico in the states of Nuevo Leon and Coahuila.

There are two major ecological areas within these states. The eastern-most region is referred to as the Mesquite-Grasslands. An annual rainfall of from 12-20 inches is average for this region. The predominant vegetation of the area includes Prosopis juliflora (Torr.) Coult. (Honey Mesquite), Ostrya sp. (Ironwood), Vauquelinia sp. (Palo Verde), Opuntia sp. (Prickly Pear Cactus), and Celtis sp. (Hackberry). Bouteloua sp. is the dominant species in the open, arid areas.

Monterrey and Saltillo are in the Pine - Oak Forest. To the north of these cities the scrub oaks occur in great numbers. South of the scrub oak zone a Pinyon - Juniper woodland zone occurs. To the south of the Pinyon - Juniper zone several species of Quercus (Oak) occur. Few shrubs are found in the oak forest. The rainfall in the area under consideration averages from 18 inches in the north to 70 inches in the south.

SIGUE MAPA 10



SIGUE MAPA 9

O L F O R D E M E X I C O

TROPICO DE CANCER

## ETHNOBOTANY OF THE AREA

The family names and taxonomic classification of the plants having ethnobotanical uses follow Correll and Johnston (1970). Folklore names were obtained from the following sources, and the appropriate number or numbers follow each folklore name:

- 1----Martinez (1969).
- 2----Burlage (1968).
- 3----Personal conversation with brujos, field collectors, or individual Mexican citizens.
- 4----Kalsi et. al. (1969).

Short taxonomic descriptions of the leaves and stems are given as those are the plant organs most often used. These descriptions follow Correll and Johnston (1970), as well as Martinez (1968).

Those ethnic remarks not cited represent ethnic uses obtained from personal conversation with brujos, field collectors, or individual Mexican citizens.

## EUPHORBIACEAE (Spurge Family)

Acalypha lindheimeri Muell.

Folklore name: Yerba del Cancer (1, 2, 3)

Mostly erect herb, branching, 2-5dm. tall.

Leaves: Blades thin, rhombic to ovate-rhombic, serrate, 20-60mm. long, 10-30mm. wide, both surfaces moderately pubescent.

## ETHNIC REMARKS

Yerba del Cancer is found in the markets packaged in small dried bundles which contain leaves and stems. The leaves and flowers are sometimes obtained in powder form which may be applied to open wounds and sores. Rose (1899), states "a tea of the aerial organs of the plant has been extracted in water and used to alleviate itching."

Plate 2

Acalypha lindheimeri Muell.





## AMARANTHACEAE (Amaranth Family)

Amaranthus spinosus L.

Folklore names: Spiny Amaranthus (2), Thorny Amar (2), Spiny Pigweed (2), Quelite Espinosa (2)

Erect, branched herb, 3-12dm. tall.

Leaves: Alternate, ovate-lanceolate to ovate, glabrous to sparingly pubescent, 3-10cm. long.

## ETHNIC REMARKS

Although Quelite Espinosa is not common in Monterrey markets, every cattle breeder realizes the danger of this plant. If eaten by cattle it will cause internal mechanical injury and eventual bloating which may or may not result in death. For this reason ranchers often walk through their pastures cutting out the troublesome weed.

Plate 3

Amaranthus spinosus L.



## ARISTOLOCHIACEAE (Birthwort Family)

Aristolochia marshii Standl.

Folklore name: Guaco (1, 3)

Herbaceous twining vine, simple or branched.

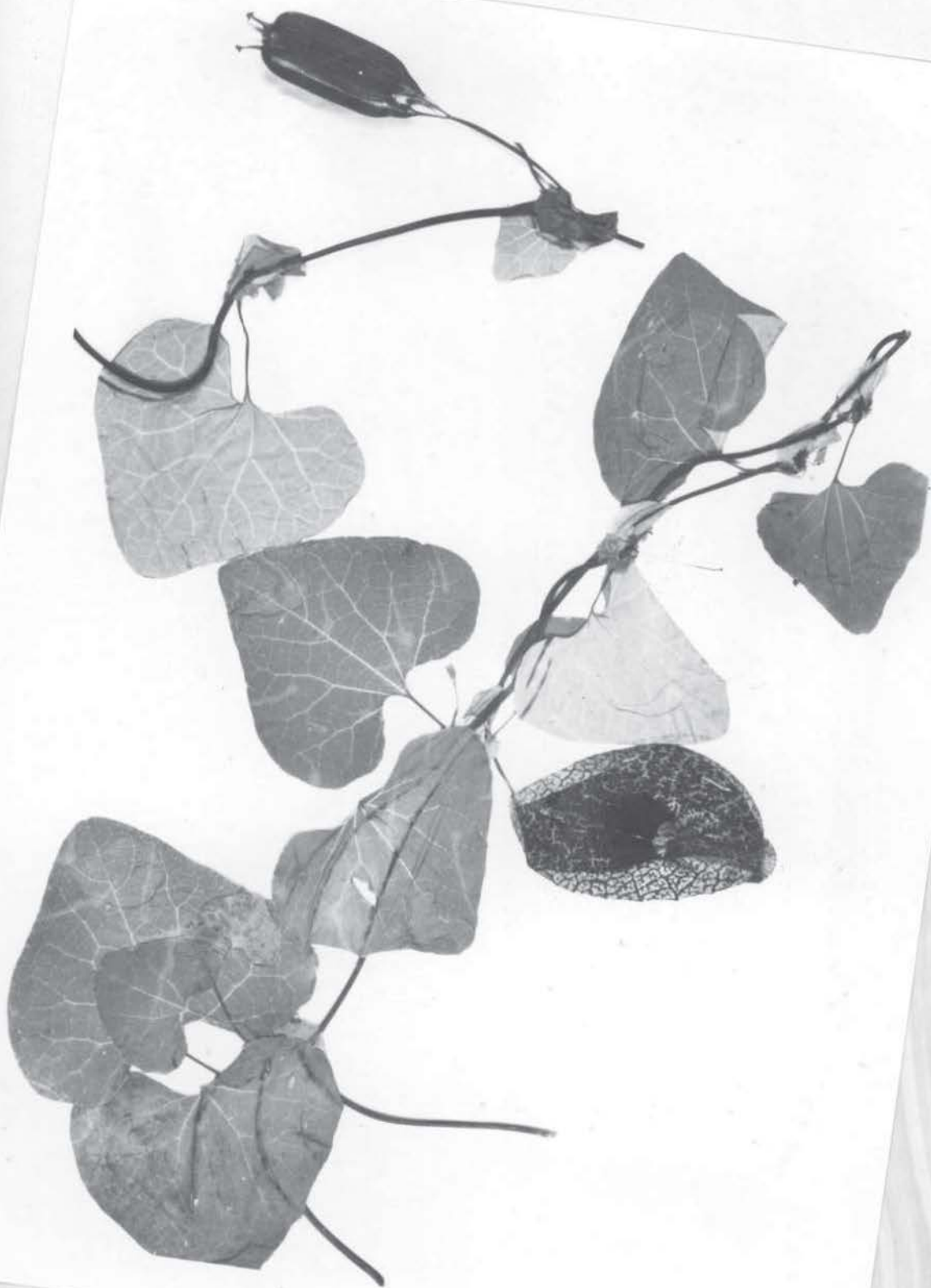
Leaves: ~~Triangular~~ ovate and entire to deeply 3-lobed almost to the base, to 9cm. long and 7.5cm. wide, deeply cordate at the base.

## ETHNIC REMARKS

Guaco is reported to be useful as a sudorific and stimulant (Martinez, 1969). The most important use of Guaco is as a palliative in poisonous snake bites. If the wound is first incised and blood allowed to flow freely, Guaco may be applied as a poultice. The Guaco poultice will force the remaining poison to the surface. Martinez (1969) also states "Guaco has been reported to be used as an emmenagogue, tonic, and febrifuge."

Plate 4

Aristolochia marshii Standl.



## ASCLEPIADACEAE (Milkweed Family)

Asclepias linearis Scheele.

Folklore names: Slim Milkweed (3), Venenillo (1, 3)

Perennial herb, stems slender, 2-5dm. tall, usually branched only at the base.

Leaves: Opposite, sessile or subsessile, linear, 3-9cm. long, 1-4mm. broad, membranaceous, glabrous or minutely puberulent along the midrib beneath.

## ETHNIC REMARKS

Venenillo has been reported as having purgative properties as have several North American species of the genus Asclepias. However, as a purgative it may be dangerous and unreliable because of the varying concentrations of alkaloids within the plant.

Burlage (1968), reported Venenillo to be effective as a diuretic and diaphoretic. He also reported that it was rarely used because of the unpleasant flavor.

Plate 5

Asclepias linearis Scheele.





## CHENOPODIACEAE (Goosefoot Family)

Chenopodium ambrosioides L.

Folklore names: Mexican Tea (2), Wormseed (2), Ipazote (1), Epazote (2), lukum-xiu (in Yucatan) (1, 2)

Annual or perennial herb, stems erect or ascending, 3-10dm. tall.

Leaves: Oblong to ovate or lanceolate, 2-12cm. long, 15-55mm. broad, sinuate-dentate or sinuate-pinnatifid, puberulent to glabrous.

## ETHNIC REMARKS

Ipazote is frequently used as a tonic, antispasmodic, in chorea, and as a lumbrici in infants. When used as a tea it promotes lactation, blood flow, and eases post-parturition pains. The leaves are ground to form small suppositories termed calillas which serve as an emmenagogue. The seeds as well as the oil derived from the seeds are reported to be important as a vermifuge, diaphoretic, diuretic, and expectorant. The seeds when eaten ease painful and profuse menstruation (Burlage, 1968).

In Monterrey markets Ipazote is often purchased as a cure-all for superstitions and fears. Young children who suffer from severe nightmares are given an alcohol extract of 2 to 4 grams before each meal.

Ipazote has also been reported as useful in improving digestion and as an anti-helminthic when taken before each meal. Excessive coughing accompanied by severe "side pains" can be relieved by taking 3 to 30 drops of an alcohol extract after each seizure (Martinez, 1969).

Ipazote contains the volatile oils ascaridol and chenopodin (Burlage,

1968). According to Munsell (1950), it also contains an extremely high percentage of calcium (342 milligrams per 100 gram edible portion).

The Chinantec Indians of Oaxaca use the plant as a condiment mixed with beans. The seed is powdered and used medicinally against intestinal worms (Lipp, 1971).

Plate 6

Chenopodium ambrosioides L.



## COMPOSITAE (Sunflower Family)

Cirsium texanum Buckl.

Folklore name: Southern Thistle (2)

Biennial or weak perennial herb, 10-20dm. tall.

Leaves: Slightly auriculate-clasping, narrowly obovate to lance-obovate, long tapered basally, each side 3 to 9 triangular or rounded lobes, lobes irregularly spiny-denticulate.

## ETHNIC REMARKS

A juice extracted from the leaves and stems is often used to aid in hair growth (Burlage, 1968). The entire plant may be mixed with vinegar and placed on sores to encourage healing.

**Plate 7**

**Cirsium texanum Buckl.**





RANUNCULACEAE (Crowfoot Family)

Clematis drummondii Torr. and Gray.

Folklore names: Curly Columbine, Blue Jasmine, Marsh Clematis, Curled Virgin's Bower, Old Man's Beard (2), Barbos de Chivo (1, 3), Barbas de Chivato (1, 2, 3)

Twiny, cinereous-pubescent herb.

Leaves: Mostly pinnately 5- or 7-foliolate, uppermost simple and 3-cleft; leaflets 12-25<sup>mm</sup>. long, mostly divergently 3-cleft or sometimes parted.

ETHNIC REMARKS

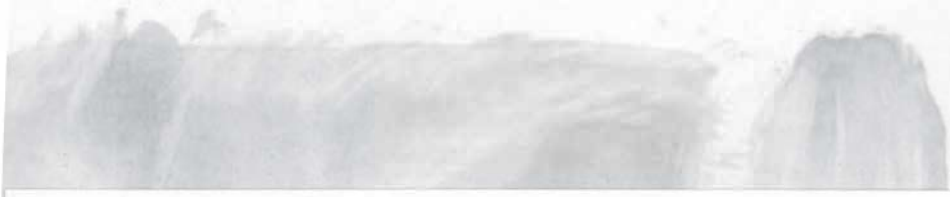
The fresh leaves of Clematis are applied on acne by rubbing over the affected area. They may also be used on freckles or blemishes of the skin causing all of the above to fade and eventually disappear. A poultice of the fresh leaves is often applied to scar tissue, after which the scars are said to heal. An infusion of flowers is prepared as a skin lotion and perfume.

Some brujos claim the plant to be useful as a diuretic. Martinez (1969) quotes Dr. Ximenez, as far back as 1615, that the plant will also "rid the kidneys of gravel." Dr. Ximenez (1615) also stated that the plant is valuable in the treatment of cancer of the transverse and descending colon, tongue, esophagus, and kidneys. In all other organs it proved to be ineffective against cancer.

Barbos de Chivo has also been used to relieve tightness of the urethra. When used as an infusion, there is no need for a catheter to relieve the tension and pressure within the urethra (Martinez, 1969).

Plate 8

Clematis drummondii Torr. & Gray.



## COMMELINACEAE (Spiderwort Family)

Commelina erecta L.

Folklore names: Erect Dayflower (2), Hierba del Pollo (1, 3)

Quesadillas (2)

Perennial herb, stem up to 3m. long, usually decumbent.

Leaves: Linear to ovate-lanceolate, to 15cm. long and 14-35mm. wide, leaf sheath to 25mm. long, white pubescence on margins.

## ETHNIC REMARKS

The entire plant is administered as an infusion to relieve sharp pains and subsequent bleeding during childbirth. After birth, the infusion may be taken internally to inhibit bleeding. Burlage (1968) cites the plant as being a refrigerant, relaxant, and stranguary, and claims the plant to be effective in cases of extreme constipation.

Plate 9

Cosmelina erecta L.



## CONVOLVULACEAE (Morning Glory Family)

Convolvulus equitans Benth.

Folklore name: Horse-Tail Morning Glory (3)

Perennial herb, stems prostrate or twining, to 2m.

Leaves: Petioles  $\frac{1}{2}$  the size of the blades; leaves extremely variable, usually strongly indented at the base, densely pubescent on both surfaces.

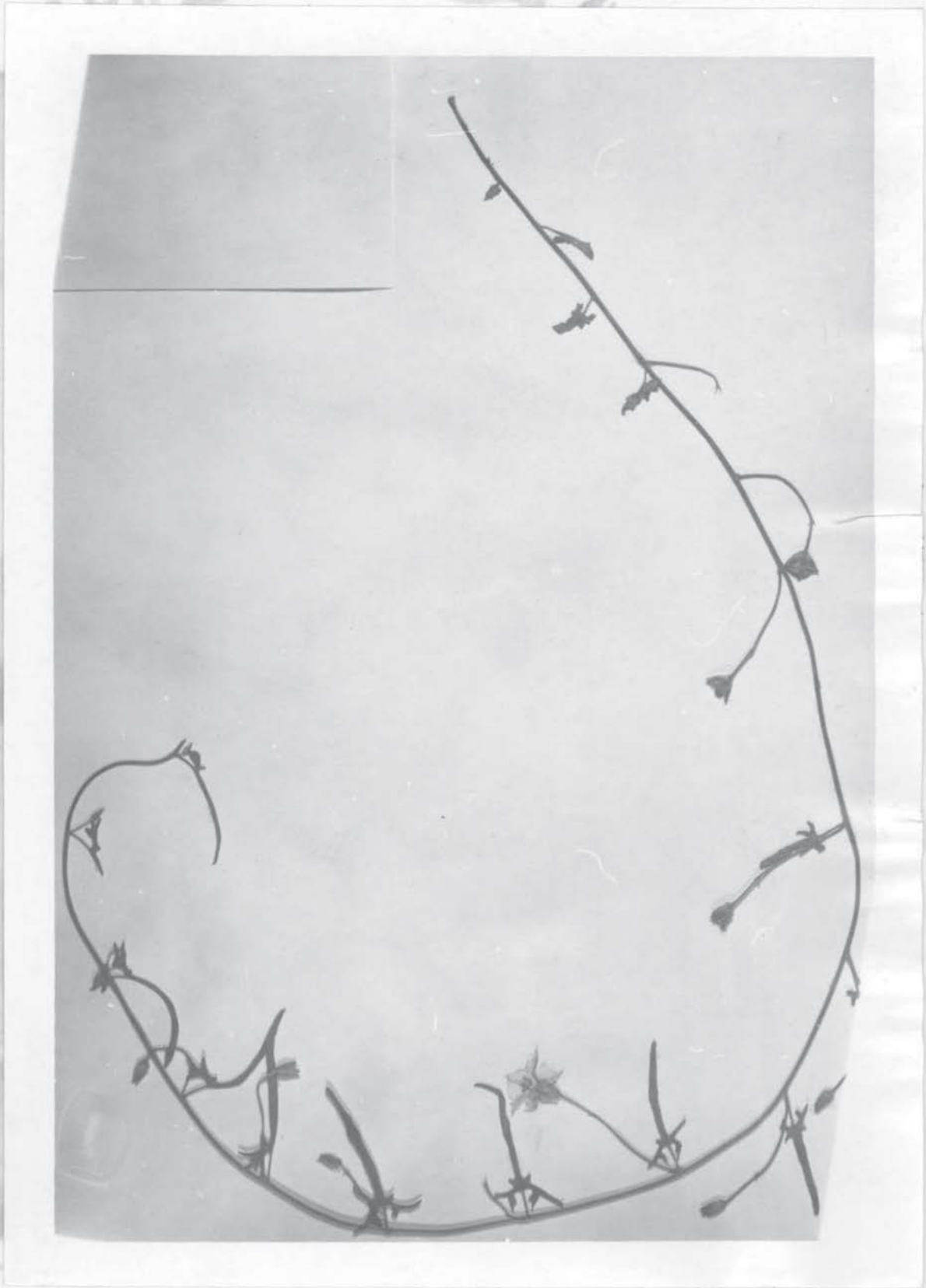
## ETHNIC REMARKS

In Monterrey markets the root is sold as a purgative and diuretic. When purchased, a warning was given that excessive ingestion of the root would result in severe diarrhea. A decoction of the root was the prescribed method of ingestion.

## Plate 10

Convolvulus equitans Benth.





## COMPOSITAE (Sunflower Family)

Conyza canadensis (L.) Cronq.

Folklore names: Horse-Weed (2), Simonillo, Zacachichi (1, 2, 3)

Robust annual, virgately erect, 1-2m. tall.

Leaves: Linear-lanceolate, those of the upper half of the stem 4-10cm. long and 3-6mm. broad, often toothed, pubescent, not clasping.

## ETHNIC REMARKS

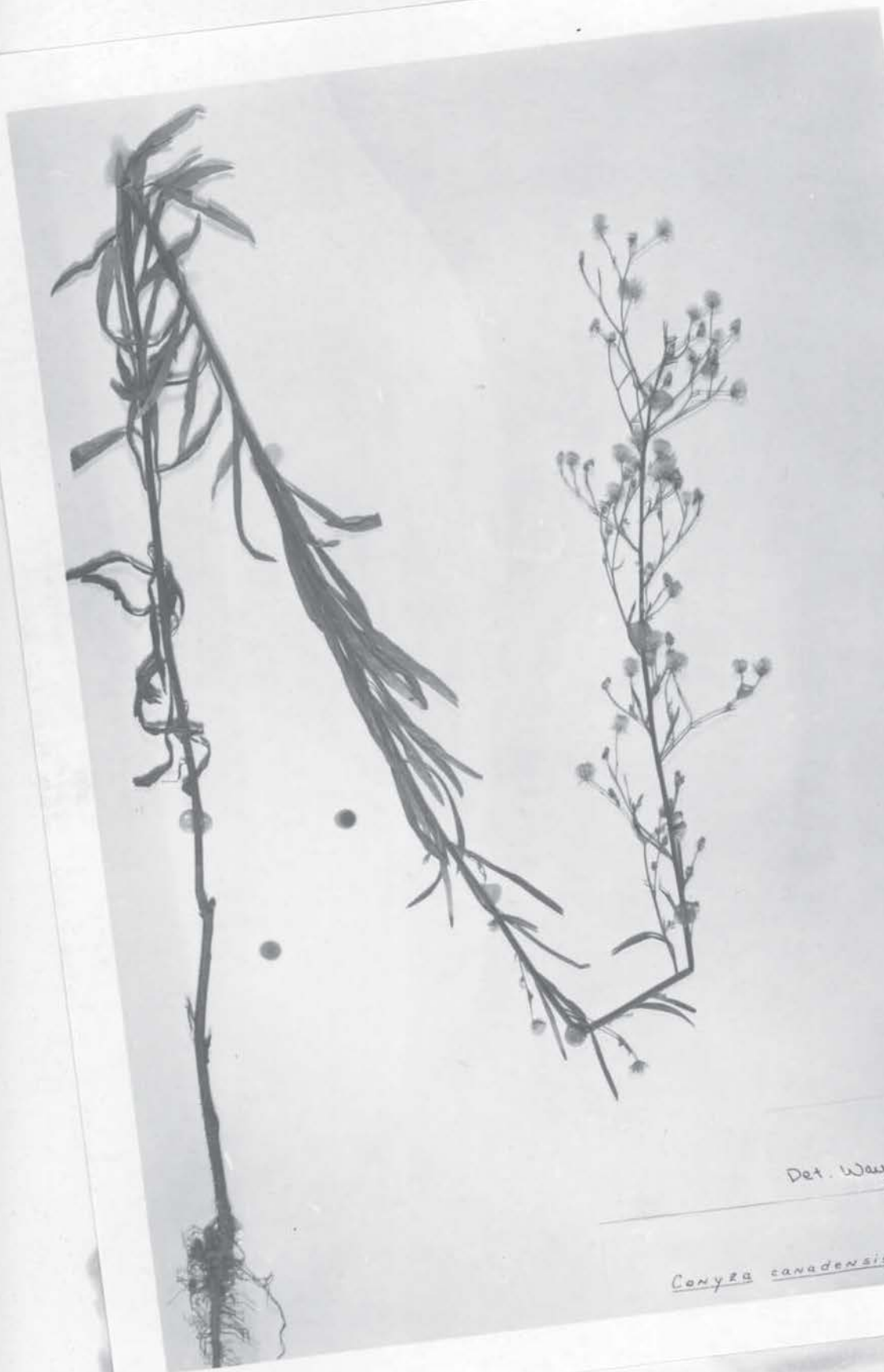
Simonillo, which is found in almost all markets of Northern Mexico, is administered as an infusion to persons suffering from cholera. It was first used by the Indians of Northern Mexico as a cure for this disease. Because drinking Simonillo results in almost immediate vomiting, the Indians thought this would rid the body of cholera (Martinez, 1969).

Simonillo has also been used in the treatment of depression, indigestion, loss of appetite, and to increase body heat. Some Herbarios in Northern Mexico also recommend the plant for the treatment of bile duct obstructions.

An infusion of 180 grams of fresh plant material administered in the morning and at night is said to aid peristaltic movement. If vomiting occurs, the infusion should be weakened (Martinez, 1969). When Simonillo is inserted into the nostrils, immediate sneezing results, which aids in the cure of rhinitis (Burlage, 1968).

Plate 11

Conyza canadensis (L.) Cronq.



Det. Wayne M. Pichon  
6/21/1972

*Conyza canadensis* (L.) Cronq.

## EUPHORSIACEAE (Spurge Family)

Croton ciliatoglandulifer Ort.

Folklore names: Mexican Croton (2), Dominguilla, Enchiladora,  
Palillo, Picosa (1, 2, 3)

Taprooted weak-stemmed shrub, 5-10(-20)dm. tall.

Leaves: Ovate, widest about a third the length from the base  
and long-tapered to the acute or slightly acuminate apex,  
basally rounded, margin densely glandular-ciliate-fringed.

## ETHNIC REMARKS

The leaves of Picosa were found in the markets of Monterrey and  
Saltillo. The entire plant is used to settle intermittent fevers, as an  
antithermic, purgative, analgesic, and to ease the pain of scorpion bites.

Jiu (1966) using an 80% extract of the leaves and stems, found it  
to be an active anti-atherogenic and androgenic, in addition to being  
toxic.

Plate 12

Croton ciliatoglandulifer Ort.



## CYPERACEAE (Sedge Family)

Cyperus rotundus L.

Folklore names: Montha Sedge (4), Nut Grass (2), Peonia (1, 2, 3)

Tolpatli, Tulillo (2)

Perennial herb, forming colonies with creeping rhizomes about  
1mm. thick.

## ETHNIC REMARKS

In the Mercado Colon in Monterrey, Tulillo was obtained in a small bundle which contained Cyperus articulatus L. (Chintul), C. esculentus L. (Tolpatli), as well as C. rotundus L. The dominant plant in the package was C. rotundus L. In the Mercado Juarez, which is also found in Monterrey, Tulillo also contained C. ochraceus Vahl., as well as the above species. In both cases the package was tied with what appeared to be the stems of Bouteloua sp.

Tulillo is reported to be effective as a diuretic, diaphoretic, and emmenagogue when used as a decoction (Martinez, 1969). No alkaloids were found in the rhizome (Willaman and Schubert, 1961), but Kalsi et. al. (1969) isolated an essential oil.



Plate 13

Cyperus rotundus L.



## COMPOSITAE (Sunflower Family)

Dyssodia pentachaeta (DC.) Robins.

Folklore name: Parralena (1, 2, 3)

Small shrub, stem 1-2dm., glabrescent to puberulous

Leaves: Opposite, pinnately parted into 9-10 linear lobes,  
entire plant rigid.

## ETHNIC REMARKS

Martinez (1969) identified Parralena as Dyssodia setifolia (Lag.) Rob. However, further critical examination of the Parralena purchased in the Herbarios at the Mercado Colon and the Mercado Juarez proved to be D. pentachaeta (DC.) Rob. A small portion of D. tenuiloba (DC.) Rob. was found with D. pentachaeta (DC.) Rob. in the material obtained at the Mercado Juarez.

A decoction of Parralena was prescribed by the brujos as a cure-all for any pain or discomfort of the stomach.

## Plate 14

Dyssodia pentachaeta (DC.) Robins.



## COMPOSITAE (Sunflower Family)

Erigeron philadelphicus L.

Folklore names: Fleabane Daisy (2), Philadelphia Fleabane (2),  
Margarita (2, 3)

Erect perennial herb, 2-7dm. tall.

Leaves: Basal leaves oblanceolate to suborbicular, shallowly toothed above the middle; stem leaves lanceolate or oblong to ovate, entire.

## ETHNIC REMARKS

In Monterrey and Saltillo markets Margarita is prescribed for stomach pains, running nose, and swellings of the nose and throat. When used for these ailments, it should be prepared as an infusion. It can be used in this manner as a diuretic, tonic, and general astringent.

Bishop and McDonald (1950) found that macerated plant parts yielded an antibacterial agent specific against Gram positive and Gram negative bacteria.

## Plate 15

Erigeron philadelphicus L.





## UMBELLIFERAE (Parsley Family)

Eryngium yuccifolium Michx.

Folklore names: Bristleleaf, Button Snake-root, Rattlesnake-master  
(2), Eryngo (1, 3), Hierba del Sapo (1, 2, 3)

Perennial herb from a fascicle of tuberous woody roots, stems slender, solitary, branching above, 3-18dm. tall.

Leaves: Basal leaves rigid, broadly linear, to 10dm. long, 1-3cm. wide, acute, bristles few, the venation parallel; sheaths short; cauline leaves similar to the basal.

## ETHNIC REMARKS

A tincture of the root is used as a stimulant, diaphoretic, sialagogue, expectorant, diuretic, and alterative. In addition to the beneficial properties of Eryngo, it produces undesirable side effects, such as depression of the spirit, vertigo, headache, constipation, and a slight increase in heart beat (Burlage, 1968).

Martinez (1969) describes Eryngium comosum Delar. as the dominant medicinal species of Eryngium in Mexico. He states that the juice of the root is useful as a diuretic, aphrodisiac, and aids contractions of the womb. This species was not collected in Northeastern Mexico nor was it found in the markets of Monterrey or Saltillo.

Collections both in the markets, as well as in the field, were of E. yuccifolium Michx. It was prescribed as a cure for poisonous snake bites of the extremities and could be used internally as a tea and externally as a poultice.

## Plate 16

Eryngium yuccifolium Michx.



## EUPHORBIACEAE (Spurge Family)

Euphorbia villifera Scheele.

Folklore name: Likintan (1, 2, 3)

Ascending or erect herb, stems few to many from the crown, 5-25cm. tall.

Leaves: Opposite; blades ovate to ovate-oblong, 1 to 2 times as long as broad, rounded at apex.

## ETHNIC REMARKS

This ~~small~~ Euphorbia was not collected in the markets of Monterrey or Saltillo. It is found as a frequent weed throughout Northeastern Mexico, usually appearing in the cracks of sidewalks. Some of the inhabitants of an impoverished section southwest of Monterrey occasionally use the weed as an infusion for gastric bleeding and bloody nose. These folklore uses are in contrast to the findings of Schertz et. al. (1960) who reported no agglutinating principles in an extract of the seeds.

Plate 17

Euphorbia villifera Scheele.



## GERANIACEAE (Geranium Family)

Geranium lentum Woot. & Standl.

Folklore names: Mano de Leon (1, 2, 3), Pata de Leon (1, 2, 3)

Perennial herb, stems ascending or spreading, to 5dm. long.

Leaves: Blades to 5cm. wide, orbicular in outline, divided into 5 rhombic to ovate-obtuse lobes.

## ETHNIC REMARKS

Small children who may be afflicted with a skin rash are often bathed in a liquid decoction of the entire plant. It may be also used to wash wounds. In addition, a syrup of boiled roots and leaves, macerated, is also recommended as a cure for skin problems (Martinez, 1969).

## Plate 18

Geranium lentum Woot. & Standl.





## POLEMONIACEAE (Phlox Family)

Gilia incisa Benth.

Folklore names: Gilia (1, 3), Standing-Cyperus (2)

A minutely glandular firm-textured herb, to 5dm. tall.

Leaves: 6cm. long and 15mm. wide, long-petioled, blade unsymmetrically incised, often pinnate at base and reduced up the stems.

## ETHNIC REMARKS

Although not a common plant in Monterrey markets, Gilia was collected in the field and prescribed by brujos for severe stomach pains. The leaves are first ground in a mortar, then taken as an infusion for the pain. The infusion may be stored in a tightly stoppered bottle for future use.

The Zuni Indians of the Southwestern United States use an infusion of the leaves to reduce throat swellings and fevers (Castetter, 1935). An infusion of the leaves will also produce mild vomiting and promote action of the kidneys and bowels (Burlage, 1968).

Plate 19

Gilia incisa Benth.



## AMARANTHACEAE (Amaranth Family)

Gombrena lanuginosa Span.

Folklore names: Prostrate Gombrena (2), Cabezona (1, 2, 3), Chak-moltmuul (in Yucatan) (1), Inmortal (1, 2, 3)

Perennial herb, stems branched at base, branches procumbent or ascending, 104dm. tall.

Leaves: Opposite, blades oblong to spatulate-oblong, 2-4cm. long, acutish or obtuse and mucronulate, entire.

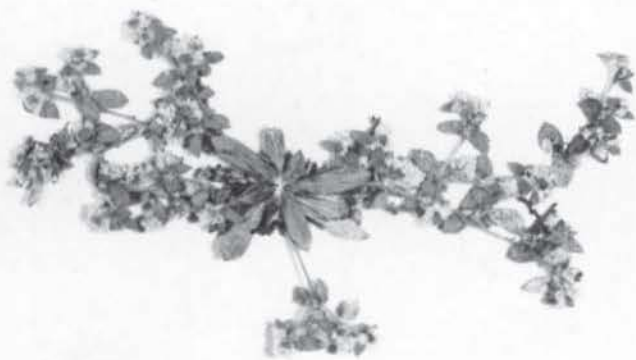
## ETHNIC REMARKS

The root is used as a tonic, astringent, and sudorific. An infusion of the root has been reported useful in dyspepsia, dysentary and for the alleviation of pain in the intestines (Martinez, 1969).

Martinez (1969), as well as Burlage (1968), reported Inmortal as Gombrena decumbens Jacq.; however, the specimen obtained from a field collector in Monterrey for subsequent sale in the Mercado Colon was G. lanuginosa Span.

Plate 20

Gompbrena lanuginosa Span.



## LYTHRACEAE (Loosestrife Family)

Heimia salicifolia (H. B. K.) Link & Otto.

Folklore names: Anchinol, Anchinoli, Hachinal, Huachinol, Huauchinal, Sinicuiche, Sinicuilche, Sinicuil, Xonecuili (in Morelos) (1, 2, 3)

Shrub to 3m. high, glabrous throughout.

Leaves: Opposite, sessile to short-petioled, linear-oblongate to lanceolate, about 5cm. long and 1cm. wide, obtuse to acute at the apex.

## ETHNIC REMARKS

An infusion of the leaves aids digestion, stimulates the appetite, and alleviates the pain and profuse diarrhea associated with dysentery. A decoction of the plant is used as a wash to calm the itching which accompanies exposure to mala mujer (bad woman or Rhus toxicodendron L.) in Tamaulipas.

A decoction of the juice will produce psychomimetic yellow images when drunk. These images are followed by "the sounds of bells, human voices, and other noises reaching the ear as if they are from afar" (Martinez, 1969). Post-parturate mothers use the juice of the plant internally and externally to decrease the pain and inflammation of the womb. Before drinking the decoction, the plant is ground and mixed with water and sugar. It may also be used as a powder in water baths to combat vaginal infections.

When Hachinal is boiled with small quantities of Copal (Bursera jorullense Engl.), it relieves bronchitis and cures virtually all infec-



tions of the throat (Martinez, 1969). Standley (1924) stated, "the plant is used as an emetic, anti-syphilitic, hemostatic, febrifuge, diuretic, laxative, and vulnerary."

## Plate 21

Heimia salicifolia (R. B. K.) Link. & Otto.



## COMPOSITAE (Sunflower Family)

Helenium microcephalum DC.

Folklore names: Sneezeweed (2), Chapuz, Cabezona (1, 2, 3)

Taprooted annual 2-8dm. tall, usually simple-stemmed basally, bushy-branched above, the stems winged.

Leaves: Narrowly elliptic or narrowly oblong-elliptic, usually serrate or undulate-serrate-margined, blunt, ascending, decurrent.

## ETHNIC REMARKS

When a patient wants to sneeze but cannot, a small amount of powder made from the flowering heads of Cabezona may be placed in the nostrils. The resulting sneeze will be much more gentle than a sneeze provoked by pepper or some other nasal irritant. An aqueous solution containing powder from the flowering heads may be used to kill head or body lice, or it may be applied to dirty, external ulcers.

Plate 22

Helenium microcephalum DC.



## COMPOSITAE (Sunflower Family)

Helenium quadridentatum Labill.

Folklore name: Rosilla (1, 2, 3)

Herb, 2-3dm. tall, single-stemmed basally, bushy-branched above, the stems winged.

Leaves: Lanceolate to linear.

## ETHNIC REMARKS

The leaves and flowers are made into a decoction to control temperature fluctuations. The plant is often collected and sold with Helenium microcephalum DC. A decoction of eight grams of the leaves and flowers boiled in 500cc. of water is reported to relieve nausea (Martinez, 1969).

Plate 23.

Helenium quadridentatum Labill.





## COMPOSITAE (Sunflower Family)

Helianthus annuus L.

Folklore names: Common Sunflower (2), Chimalatl (2), Girasol (1, 2),  
Maiz de Texas (2), Mirasol (1, 2, 3)

Taprooted annual herb, stems 5-25dm. tall.

Leaves: Alternate, blades ovate, obtuse, or less commonly acute, basally truncate to cordate, dentate, scabrous-setose above, hispid beneath, 10-30cm. long and nearly as broad.

## ETHNIC REMARKS

Girasol can be purchased in several forms in the markets of Monterrey and Saltillo. The leaves are usually dried, powdered and sold to be mixed with water as a cough syrup. This mixture may be used to treat pulmonary infections, dysentary, malaria, and inflammation of the kidneys and bladder. The fresh leaves are used as an additive to wash water to treat rheumatism and troublesome warts. Occasionally the juice of the root is used for the same purpose (Burlage, 1968).

The seeds are sold in small plastic bags that range in price from two to twenty cents depending upon the amount needed. Children, as well as adults, purchase the seeds as a candy. The seeds are often given to older children and adolescents, who chew them as a cure for acne.

The American Indians used the leaves to grease the hair, the roots for snakebite and as a dye, the seeds as an aphrodisiac, and the juice from the seeds mixed with alcohol to relieve colds. The seeds taken in excess are reported to result in severe headaches (Burlage, 1968). The seeds contain a bland fixed oil, as well as a large amount of calcium

(Munsell, 1950). When tested for agglutinating properties by Schertz et. al. (1960), the seeds showed very weak agglutination with type "O" blood and no agglutination with the three other blood types.

Plate 24

Helianthus annuus L.



## COMPOSITE (Sunflower Family)

Heterotheca latifolia Buckl.

Folklore names: Achual, Arnica (1, 2, 3)

Annual herb, reaching 2m. in height.

Leaves: Ovate to elliptical, sharply toothed, serrate to strongly dentate.

## ETHNIC REMARKS

A decoction of the flowers is applied to contusions. When an alcoholic tincture is applied topically over contusions, it does not heal as rapidly as when a decoction of this plant is used. The decoction may also be applied to cutaneous infections and used as a wash on external wounds.

Plate 25

Heterotheca latifolia Buckl.





## UMBELLIFERAE (Parsley Family)

Hydrocotyle umbellata L.

Folklore names: Floating Marsh Pennywort (2), Floating Pennywort (2), Floating Water Cup (2), Ombigo de Venus, Sombrerillo de Agua (1, 2, 3)

Perennial herb, glabrous, floating or creeping.

Leaves: Orbicular-peltate, to 75mm. in diameter, crenate or crenately lobed.

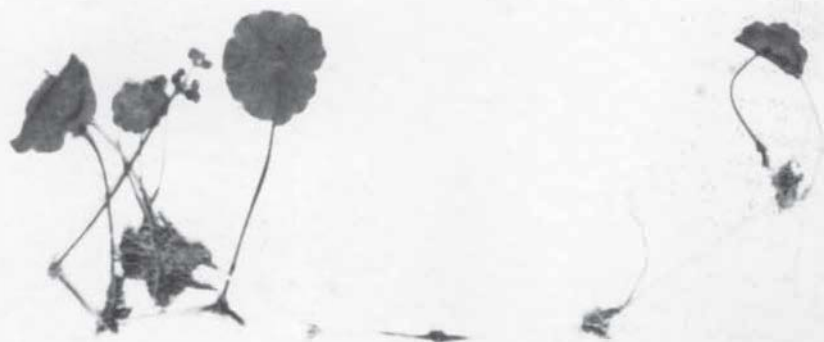
## ETHNIC REMARKS

The leaves are considered to be useful as an alterative, emetic, and narcotic. The leaves are also applied as a poultice in the treatment of cutaneous diseases (Surlage, 1968).

The fresh leaves of Pennywort are often eaten raw by native workers. Occasionally the fresh leaves are mixed in a salad with the leaves of Dandelion (Taraxacum officinale Wiggers).

Plate 26

Hydrocotyle umbellata L.



## JUNCACEAE (Rush Family)

Juncus scirpoides Lam.

Folklore name: Small Spike Rush (2)

Perennial herb, from whitish rhizomes 3-15mm. long, flowering culms 20-45cm. long, erect.

Leaves: Few, scattered along the flowering culm, blades with strong complete septa, mostly 1mm. thick near the middle.

## ETHNIC REMARKS

The leaves, flowering culms, and rhizome act as an emetic, diuretic, and cathartic. Occasionally small bundles of herbs will be tied together with this plant. Juncus scirpoides Lam. was collected only once in the Mercado Juarez. It was not found in the Mercado Colon nor was it carried by any of the street vendors contacted.

Plate 27

Juncus scirpoides Lam.



## VERBENACEAE (Vervain Family)

Lantana achyranthifolia Desf.

Folklore names: Brushland Lantana (2), Caraquito Blanco, Cariaco de San Juan, Frutilla Blanca, Marjorana, Oreganillo Cimarron, Sonorita (1, 2, 3)

Shrubby, to 2m. tall; stem unarmed; branches slender elongated. Leaves: Ternate; leaf blades narrow-lanceolate to broadly ovate, 2.5-8cm. long, 15-53mm. wide.

## ETHNIC REMARKS

The leaves of Sonorita are given as an infusion to relieve indigestion. The leaves are also boiled with barley and given to women during childbirth (Rose, 1899).

Burlage (1968) reported Sonorita toxic to cattle even though the plant possesses low toxicity.

Plate 28

Lantana achyranthifolia Desf.





## CRUCIFERAE (Mustard Family)

Lepidium virginicum L.

Folklore names: Lentejilla (1, 3), Panalillo (3), Put xiu, Put kan  
(in Yucatan) (1, 3)

Annual or perennial herb, usually pubescent, somewhat erect,  
to 7dm. tall.

Leaves: Basal, 15cm. long, lyrate-pinnatifid; mid-cauline to  
4cm. long, oblong-lanceolate to lanceolate, usually serrate;  
upper-cauline to 2cm. long, linear to linear-lanceolate, usually  
entire.

## ETHNIC REMARKS

A decoction made from the leaves may be used for stomach aches,  
scurvy, and nervous afflictions. A strong decoction of the leaves and  
flowers is useful in cases of severe gastroenteritis. However, an injec-  
tion of the decoction caused respiratory paralysis in frogs and lizards,  
but the same injection had no affect upon dogs and rabbits (Martinez,  
1969).

Willaman and Schubert in 1961 found no alkaloids in the leaves,  
stems, or flowers. However, Liegey (1953) found the entire plant had  
an antibacterial effect on Gram positive and Gram negative bacteria when  
tested as an ether extract.

Plate 29

Lepidium virginicum L.



## LEGUMINOSAE (Legume Family)

Medicago lupulina L.

Folklore names: Black Medicago (2), Black Medwick (2), Nonesuch (2), Hop Medwick (2), Hop Clover (2), Spanish Clover (2), Medicago (3)

Annual herb, stems and branches usually decumbent, 1-4(-6)dm. long.

Leaflets: Broadly obovate or nearly orbicular to almost elliptical, pubescent, 1-2cm. long, 3-10mm. broad.

## ETHNIC REMARKS

Burlage in 1968 reported that Medicago has lenitive properties. Frisby et. al. (1953) found the entire plant placed in an aqueous solution had an antibacterial effect on certain *Mycobacteria*.

The plant was not collected in the Herbarios of Monterrey nor was it collected in Saltillo, but was a frequent weed in and around Monterrey. Some local inhabitants of Monterrey were observed using the small leaflets as a condiment in tea.

Plate 30

Medicago lupulina L.



## LABIATAE (Mint Family)

Monarda pectinata Nutt.

Folklore names: Plains Beebalm (2), Pony Beebalm (2), Oregano del Campo (1, 3)

Annual herb to 3dm. high, usually branched several times from the base, often spreading and globose.

Leaves: Oblong to oblong-lanceolate, with petioles to 15mm. long, the largest 2-5cm. long and 6-12mm. wide.

## ETHNIC REMARKS

The leaves are often used as a flavoring in many dishes and is similar to oregano. An infusion of the leaves relieves stomach pains, headaches, and fever (Burlage, 1968). An aqueous solution of the root has an antibacterial affect on certain Mycobacteria (Frisby et. al., 1953). The Acoma and Laguana Indians of the Southwestern United States grind and mix the leaves to add flavor to foods. The leaves may be dried and stored for winter use (Castetter, 1935).



Plate 31

Monarda pectinata Nutt.



## OXALIDACEAE (Wood Sorrel Family)

Oxalis dillenii Jacq.

Folklore names: Creeping Oxalis (2), Yellow Wood Sorrel (2)

Annual or perennial herb, branching at base, stems usually densely strigose with nonseptate hairs.

Leaflets: Palmate and very dark green.

## ETHNIC REMARKS

The entire plant is used to treat scurvy and scorbutic conditions. An infusion of the plant acts as a refrigerant and may be used as a cooling drink in febrile conditions (Burlage, 1968).

Plate 32

Oxalis dilleni Jacq.



## COMPOSITAE (Sunflower Family)

Parthenium hysterophorus L.

Folklore names: False Ragweed (2), Feverfew (2), Circuitilla (1, 2, 3), Santa Maria (1, 3)

Hirsute herb, paniculately branched above, longitudinally striate, 3-10dm. tall.

Leaves: Lower leaves from a basal rosette, upper leaves entire to slightly lobed.

## ETHNIC REMARKS

The fresh juice, when injected in a concentrated or dilute form intravenously in lower animals such as pigeons, has proven fatal in doses as low as 1cc. However, when injected into the digestive tract of higher animals such as rabbits or dogs, no toxic symptoms were observed (Martinez, 1969). Other experiments on higher animals have resulted in the destruction of hemoglobin content in the blood. This is followed by a decrease in albumen content as well as decreased coagulation time.

The juice of Santa Maria has analgesic properties which have proven effective in the treatment of severe headaches and arthritis. Santa Maria has been reported to be useful in cases of neuralgia (Martinez, 1969).

Plate 33

Parthenius hysterochorus L.





## COMPOSITAE (Sunflower Family)

Perezia wrightii Gray.

Folklore names: Brownfoot (2), Pink Perezia (2), Espantavaqueros (2), Pipitzahuac (1, 3)

Erect leafy herb, 6-13dm. tall.

Leaves: Obovate-elliptic to oblong-elliptic, 2-7cm. long, not lobed.

## ETHNIC REMARKS

The Indians of Northern Mexico are reported to have used the roots of the plant as a purgative (Martinez, 1969). An aqueous solution containing ground and strained root may be used as a refrigerant, sudorific, and aperient. The same solution may be used to ease the pain of urination that accompanies prostatitis. When used in this way, the urine takes on a green color. One should continue use of the plant until the urine becomes light green. This indicates that the poison from prostatitis has dissipated.

Plate 34

Perezia wrightii Gray.



## VERBENACEAE (Vervain Family)

Phyla strigulosa var. sericea (O. Ktze.) Moldenke.

Folklore names: Frog-Fruit (2), Diamond-Leaf (2), Turre Hembra (1, 3), Hierba Buena Montes (1, 3)

Perennial procumbent herb, branches rooting from basal nodes, to 2m. long.

Leaves: Broadly ovate or triangular ovate to rhomboid or ovate-elliptic, widest below the middle, to 15mm. long and 1cm. wide.

## ETHNIC REMARKS

An infusion of the leaves acts as a demulcent for rashes or other skin ailments in the pectoral region. It may also be used as an emmenagogue. A decoction of the leaves is used to ease the pain and swelling of bronchitis, as well as any resulting acute coughing. The sweet-tasting leaves of the fresh plant are often chewed as gum.

Plate 35

Phyla strigulosa var. sericea (O. Ktze.) Moldenke.



## PLANTAGINACEAE (Plantain Family)

Plantago major L.

Folklore names: Common Plantain (2), Largeleaf Plantain (2), Way Bread (2), Whiteman's Foot (2), Lanten (1, 2, 3)

Glabrous to minutely pubescent perennial herb.

Leaves: Thick, strongly ribbed, spreading, ovate to broadly elliptic, rounded at the apex, broadly cuneate to subcordate at the base, to 3dm. long.

## ETHNIC REMARKS

Lanten is one of the most frequent plants in Mexican Herbarios.

Lanten has been reported to have several medicinal uses. As an infusion the entire plant acts as a diuretic, astringent, antiseptic, and anti-syphilitic. A decoction of the leaves is useful in the treatment of dysentary, burns, and mouth ulcers. The leaves may be mixed with rose water and applied as an ointment for sore eyes. They are also used as a poultice for swellings, especially swellings that are a result of poisonous insect bites. As a vulnerary the leaves are used to treat diarrhea, ulcers, tumors, and leucorrhea. The natives south of Monterrey often make a poultice of the leaves and bind them to their foreheads for headaches.

The plant contains sugars, flavonoids, alkaloids, essential oils, and resins. A flavanoid similar to rutin has been identified by thin-layer chromatography (Rudolph, 1968).

Plate 36

Plantago major L.





## PORTULACACEAE (Purslane Family)

Portulaca mandula I. M. Johnst.

Folklore names: Hairy Purslane (2), Shaggy Portulaca (2), Chisme  
(1, 2, 3)

Leafy perennial herb with 3-6 stems, prostrate, to 5-15cm.  
long.

Leaves: Alternate, very numerous and congested, wooly, often  
white.

## ETHNIC REMARKS

The leaves in both infusion and decoction form are antiseptic, diuretic, aperient, and vulnerary (Burlage, 1968). The leaves are sometimes cooked with meat or eaten like spinach by the Hopi Indians (Castetter, 1935). This plant was not collected in the Herbarios of Monterrey nor Saltillo but was frequent in the Acacia-Cordia communities around Monterrey.

Plate 37

Portulaca mundula I. M. Johnston.



## COMPOSITAE (Sunflower Family)

Ratibida columnaris (Sims) D. Don.

Folklore names: Upright Prairie-Coneflower (2), Ya' konakia (bile vomit) (2, 3)

Perennial herb, from 2-12dm. tall.

Leaves: 3-15cm. long, pinnately cleft to the midrib into 5 to 13 linear, narrowly lanceolate, oblong or oblong-lanceolate divisions.

## EMETIC REMARKS

The entire plant is soaked or steeped in water and the infusion is drunk as an emetic (Burlage, 1968). In the Mercado Colon of Monterrey, where the plant was collected, the brujo prescribed a decoction of this plant as a cure for sour stomach.

Plate 38

Ratibida columnaris (Sims.) D. Don.



## ACANTHACEAE (Acanthus Family)

Ruellia runyonii Tharp & Barkl.

Folklore names: Hierba de Chivo (1, 3), Violetita (1, 2, 3)

Perennial herb, to 75cm. tall, branches ascending.

Leaves: 3cm. long, lanceolate to spatulate, margins finely undulate-serrate, acute to obtuse at apex, cuneate and decurrent at base.

## ETHNIC REMARKS

Violetita was collected in Monterrey, as well as in Saltillo. It was also found as a cultivated herb in the backyards of three houses where known brujos of the area lived. They recommended a poultice of ground leaves as treatment for burns. A decoction of the leaves is used as an aphrodisiac.

Martinez in 1969 cited Ruellia albicaulis Bert. ex Spreng. as being employed for similar uses in Chiapas.



Plate 39

Ruellia runyonii Tharp. & Barkl.



## POLYGONACEAE (Knotweed Family)

Rumex crispus L.

Folklore names: Curly Dock (2), Yellow Dock (2), Canagria (1, 2)

Perennial herb, stems straight, erect.

Leaves: Cuneate at base, wavy-margined.

## ETHNIC REMARKS

Castetter in 1935 reported that the roots were eaten by the Pima Indians, while the Cochiti Indians used the leaves as greens. The inhabitants around, as well as in, the cities of Monterrey and Saltillo were found to use the plant in the same manner.

The root may be used as an astringent, gentle tonic, laxative, refrigerant, and alterative in syphilis and chronic skin diseases. It may be used as an ointment to ease itching and indolent glandular tumors. When the powdered root is mixed with milk, it may be applied to slow-healing scabs.

When the juice of the root is applied to ringworm it is rubefacient, discutient, parasiticidal, and stimulating. The pulped root may be applied as a palliative in rheumatic swellings, whereas the raw root may be used as a poultice for the same ailment. The pulped root may also be used in the form of a poultice applied to bruises and burns. A tea from the root is said to be drunk to counteract the pain of venereal disease, or used as a general tonic, or a physic. The ripe seeds may be ground, boiled, and mixed with the resin of Pinus monophylla Torr. & Frem. and eaten to inhibit diarrhea (Burlage, 1968). The seeds, when boiled in an ethanol extract, inhibited the growth of Gram positive

bacteria (Frisby et. al., 1953).

In addition to the folklore uses of Canagria, Burlage in 1968 listed several harmful side affects which result from the use of this plant. An infusion may cause nausea, watery movements of the bowels, copious urination, dry and spasmodic coughs, sores, burning and aching pains in the chest, increased heart action, restlessness, itching skin, sleeplessness, chills, and excessive perspiration. The plant contains chrysophanic acid, rumicin, and tannin (Burlage, 1968).

Plate 127

Rumex crispus L.



## LABIATAE (Mint Family)

Scutellaria drummondii Benth.

Folklore name: Agrimonia (3)

Annual herb, 2-3dm. tall.

Leaves: Basal leaf blades ovate, with subequal petioles, sub-  
crenate; median leaves similar but petioles reduced, entire;  
uppermost leaves sessile, entire.

## ETHNIC REMARKS

A decoction of Agrimonia is used for backache and as a general tonic (Martinez, 1969). In Northeastern Mexico the plant is also used as a febrifuge and stimulant. The upper leaves are used as a refrigerant while the basal leaves may be chewed because they possess a sweet taste.

Plate 41

Scutellaria drummondii Benth.





## MALVACEAE (Mallow Family)

Sida filicaulis T. & G.

Folklore names: Guinar, Huinar, Malva, Malva de Platanillo (1, 2, 3)

Perennial herb, to 5dm. tall or more.

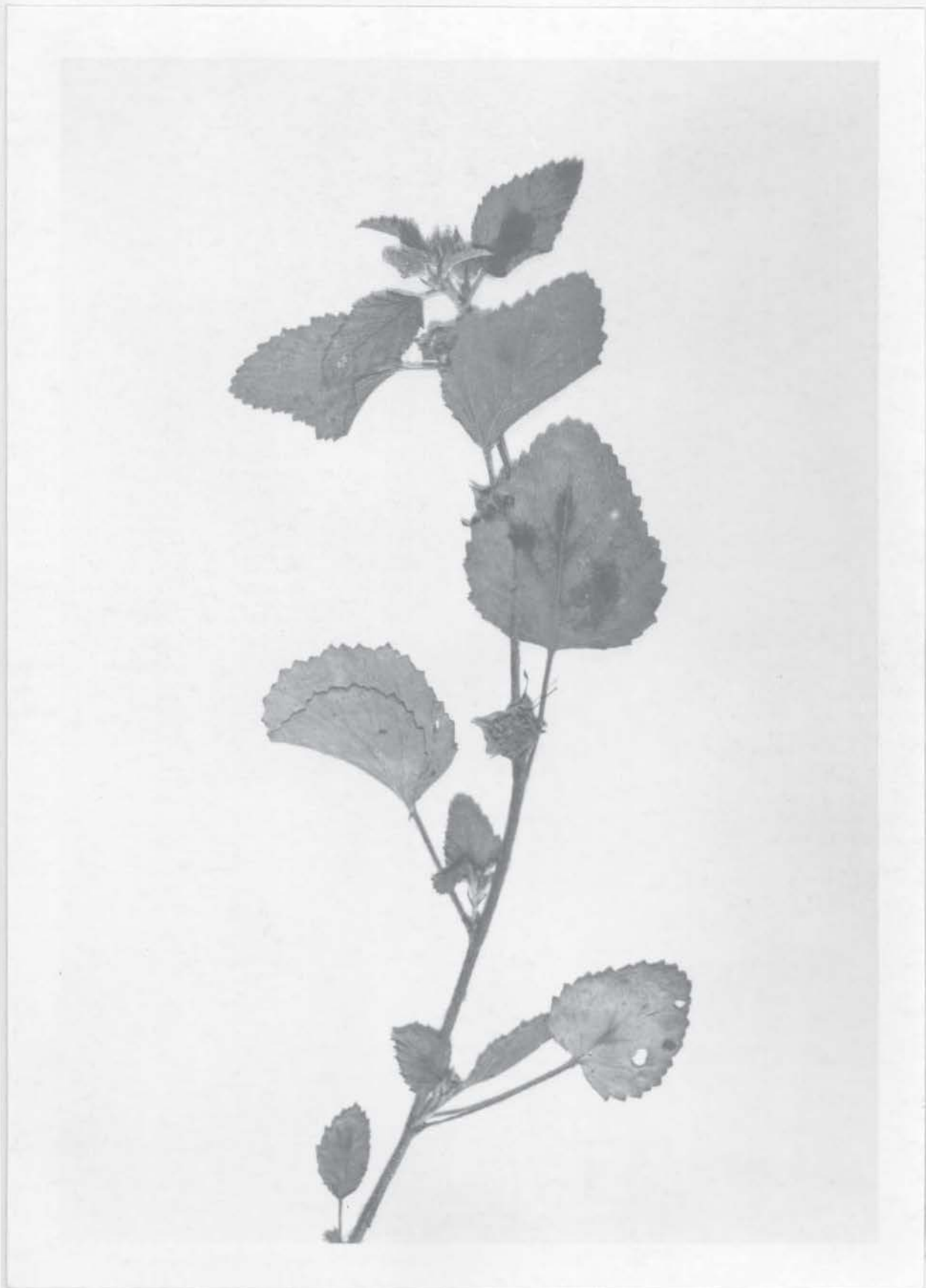
Leaves: Broadly ovate to lanceolate, subtruncate to cordate at base, rounded to bluntly obtuse at apex, to 35mm. long.

## ETHNIC REMARKS

When the leaves and young shoots are macerated with water, a foam results which is used as a shaving cream for persons having tender or delicate skin (Martinez, 1969). A decoction of the leaves is used as a febrifuge. Gastric bleeding may be slowed by drinking a decoction of the root.

Plate 42

Sida fillicaulis T. & G.



## SOLANACEAE (Potato or Nightshade Family)

Solanum eleagnifolia Cav.

Folklore names: Bull-Nettle (2), Silver-Leaf Nightshade (2), White Horse-Nettle (2), Buena Mujer, Tomatillo del Campo, Tomatillo Peloni, Trompillo (1, 2, 3)

Perennial herb, to about 1m. tall.

Leaves: Oblong to linear or oblong-lanceolate, to about 15cm. long, usually tapered at base, mostly obtuse, entire to sinuate-repand.

## ETHNIC REMARKS

Castetter in 1935 observed that the plant was used as a substitute for rennet in curdling milk among the Indians of the Southwestern United States. The Zuni Indians chew the root and place a portion in the cavity of an aching tooth. The Navajo use a decoction of the root as a remedy for sore eyes (Burlage, 1968).

The entire plant may be crushed and mixed with salt and bound to the throat for swollen tonsils. The fruits are often dried, ground into a powder, and used as a gargle for tonsillitis. The medicinal benefits of Buena mujer would appear to be merely psychological because the herb contains none of the alkaloids such as solanidine and demissidine normally associated with the genus Solanum (Willaman and Schubert, 1961). The leaves of Buena mujer are mixed with water and used in Monterrey as a wash for rashes and open wounds of the extremities (Rojas, 1970).

Plate 43

Solanum eleagnifolia Cav.



## SOLANACEAE (Potato or Nightshade Family)

Solanum nodiflorum Jacq.

Folklore names: Common Nightshade (2), Black Nightshade (2),  
Hound's Berrey (2), Hierba Mora (1, 2, 3)

Annual or perennial slender herb.

Leaves: Entire to sparsely sinuate-dentate, acuminate.

## ETHNIC REMARKS

Hierba Mora has an impressive list of ethnic uses in Mexico. The flowers have been reported as having diaphoretic, narcotic, anodyne, and discutient properties. A decoction of the leaves is used as a diuretic and purgative. The leaves as an infusion may be useful in dropsy, gastritis, glandular enlargements, nervous afflictions, general inflammation of the mucous membranes, and in hepatic, scorbutic, and syphilitic eruptions. The entire leaf or several leaves may also be used as a vaginal suppository where it has sedative and vulnerary properties.

Burlage in 1968 stated that the plant can sometimes cause poisoning, for it acts as an irritant to the brain and spinal cord and has detrimental effects on the circulatory system through the vasomotor nerves, with irritation especially severe on the sensory nerves. Willaman and Schubert (1961) state the alkaloid salasodine is found in the flowers.



Plate 44

Solanum nodiflorum Jacq.



## SOLANACEAE (Potato or Nightshade Family)

Solanum rostratum Dun.

Folklore names: Buffalo Bur (2), Kansas Thistle (2), Mala Mujer (3)

Hierba del Sapo (1, 2, 3)

Annual herb, to about 7dm. tall.

Leaves: Mostly once- or twice-pinnatifid, similar and often confused with the leaves of Solanum citrullifolium A. Br.

## ETHNIC REMARKS

A small amount of the root may be ground and mixed with water and drunk to relieve an upset stomach. When used in this manner, it will not act as an emetic (Burlage, 1968). A decoction of the flowers may be used as a remedy for coughs (Martinez, 1969).

Plate 45

Solanum rostratum Dun.



## GRAMINEAE (Grass Family)

Sorghum halepense L.

Folklore names: Johnson Grass (2), Zacate de Johnson (3)

Perennial to 3m. tall.

## ETHNIC REMARKS

Although several ranchers in Northeastern Mexico consider Johnson Grass a troublesome weed, as well as a poison, it is used as a forage crop in Texas. Johnson Grass contains the cyanogenic glucoside dhurrin, which upon freezing and thawing will break down into lethal prussic acid. If a plant containing prussic acid is eaten by livestock, it will cause paralysis, prostration, coma, and eventual death (Burlage, 1968).

Ranchers should consider this species as a possible forage crop because only the northern-most areas of Mexico are subject to frost and Johnson Grass survives well in the fairly arid climates typical of Northeastern Mexico.

Plate 46

Sorghum halepense L.



*Stachys trifida* (L.) Nutt.

*Stachys trifida* (L.) Nutt.

Johnson Arb.

Herbarium of the University of California, Berkeley, Calif., U.S.A. Herbarium of the University of California, Berkeley, Calif., U.S.A.

1911, No. 1000



## MALVACEAE (Mallow Family)

Sphaeralcea coccinea (Pursh) Rydb.

Folklore names: Red False Mallow (2), Scarlet Globe-Mallow (2),

Hierba del Negro (2, 3)

Perennial herb with decumbent or ascending stems.

Leaves: Broadly deltoid, pedately parted, the midlobe and often the primary lateral divisions pinnately few-cleft or parted.

## ETHNIC REMARKS

The aerial organs may be used as an infusion for colds, grippe, and severe cough. The root may be chewed or boiled, then taken as a decoction to alleviate the pain of broken bones. The leaves and flowers when combined act as a laxative when taken as an infusion.

Plate 47

Sphaeralcea coccinea (Pursh.) Rydb.



## COMPOSITAE (Sunflower Family)

Thelesperma megapotamicum (Spreng.) O. Ktze.

Folklore names: Colorada Greenthread (2), Cota de Silvestre (2, 3)

Perennial herb from horizontal rhizomes, mostly 30-75cm. tall.

Leaves: Usually once-, rarely twice-pinnate, often trifid or simple, rarely ternately pinnatisect, 40-95mm. long.

## ETHNIC REMARKS

A strong decoction of the leaves may be used to reduce fever. Babies with chafed skin are bathed in a weak solution of the leaves and flowering heads to reduce the irritation. A tea of the entire plant is used as a diuretic and vermifuge. A strong yellow dye can be prepared from the ray flowers by boiling them in water. The intensity of the dye may be increased by placing small amounts of the root of Mangifera indica L. Mango, Rosamorada, with the original dye and boiling the two together.

Plate 48

Thelesperma megapotamicum (Spreng.) O. Ktze.



## BROMELIACEAE (Pineapple Family)

Tillandsia usneoides (L.) L.

Folklore names: Long Moss (2), Spanish Moss (2), Heno (1, 2)

Paxtle (1, 2, 3) Tacali (2)

Slender, branching epiphyte, stands to 8m. long.

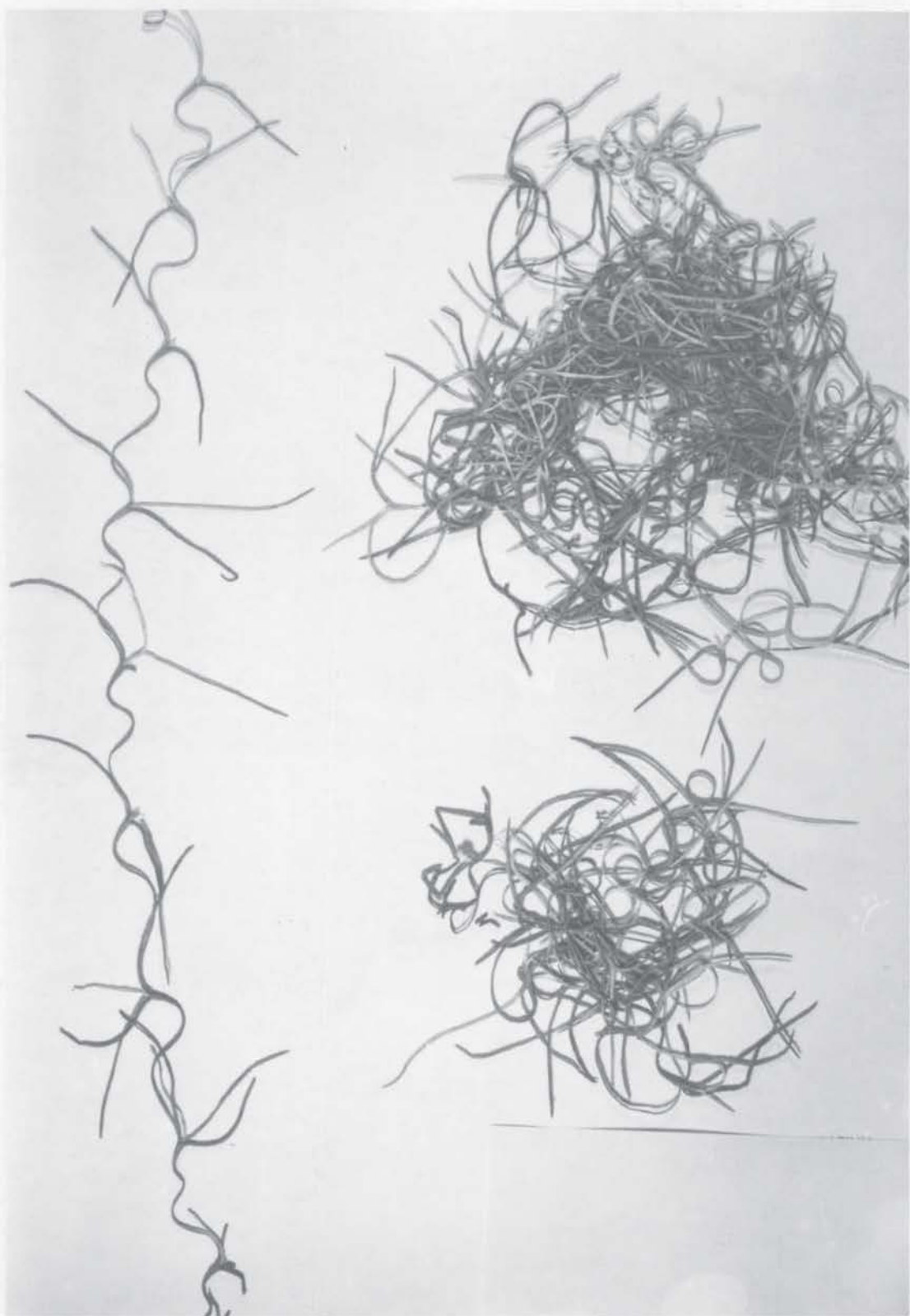
## ETHNIC REMARKS

Burlage in 1968 stated the plant could be mixed with lard and used as a preparation to relieve hemorrhoidal pain. He also states that it is useful as a stomach tonic and diuretic. The entire plant when tested by Madsen and Pates (1952) inhibited the growth of Gram positive bacteria. A liquid decoction of the entire plant may be used in treating epilepsy in infants according to Martinez (1969). In Monterrey Paxtle serves as a stuffing for furniture.

Plate 49

Tillandsia usneoides (L.) L.





## VERBENACEAE (Vervain Family)

Verbena halei Small.

Folklore names: Texas Vervain (2), Verbena (1, 2, 3)

Erect, ascendingly branched annual, to 1m. tall.

Leaves: 3-10cm. long, strigillose, lower leaves oblong to ovate, mid-leaves 1- or 2-pinnatifid, uppermost leaves dentate or entire.

## ETHNIC REMARKS

A decoction of the flowers may be used as a shampoo to slow balding. Martinez (1969) states, "a decoction of the flowers gives strength to hair." Martinez (1969) also indicates that in cases of severe fever, "five grams of leaves boiled with one liter of water until only one-half liter remains, then taken before each meal, will control the fever." He states further that the decoction may be strengthened by adding the leaves of Fresno (Fraxinus berlandieriana A. DC.) before or during boiling.

Plate 50

Verbena halei Small.



## COMPOSITAE (Sunflower Family)

Verbesina encelioides (Cav.) Gray.

Folklore names: Cowpen Daisy (2), Capitaneja (1, 2, 3)

Branched, grayish-green, taprooted annual, 1-9dm. tall.

Leaves: Opposite, lamina portion deltoid and narrowed below to a broad subpetiolar base which usually clasps the stem.

## ETHNIC REMARKS

A mouthwash of Capitaneja will encourage healing of severe mouth ulcers when taken as a decoction. In the Mercado Colon, Capitaneja was sold with Hierba del Pollo (Commelina erecta L.). This could be added to the decoction if the healing did not progress at a satisfactory rate. A decoction of the leaves and flowers may be used as a febrifuge and expectorant.

Plate 51

Verbesina encelioides (Cav.) Gray.



## COMPOSITAE (Sunflower Family)

Vernonia texana (Gray) Small.

Folklore names: Leafy Ironweed (2), Texas Ironweed (2)

Erect, perennial herb, 10-15dm. tall.

Leaves: Sessile to short-petioled, lanceolate to ovate-lanceolate, 6-15cm. long, 15-50mm. broad, long acuminate, sharply and coarsely serrate to nearly entire.

## ETHNIC REMARKS

The bitter root is used as a tonic, alterative, depurative, and febrifuge. The poor people of the Monterrey region use the plant as an aphrodisiac. In some parts of Texas, Blacks also use the plant as an aphrodisiac and a cure for snakebite, according to Burlage (1968).



Plate 92

Vernonia texana (Gray.) Small.



## ARACEAE (Arum Family)

Xanthosoma robustum Schott.

Folklore names: Capote (1, 2, 3), Marac (in Guatemala) (1), Quequesque (2)

Small, slender herb, arising from a hypogen caudex.

Leaves: Broadly sagittate-triangular, 20-30cm. long, 15-25cm. wide near the base.

## ETHNIC REMARKS

Although Pixi was not collected in the markets of Monterrey nor Saltillo, it is a frequent ornamental throughout both cities. Jorge Jimenez Mendoza, a janitor at the Instituto Tecnológico y de Estudios Superiores de Monterrey volunteered the following information on Pixi: "If the plant is in direct sunlight, the leaves may be used as a bland spice in tacos. If the plant is found in shaded areas, the root may be eaten, but only if it is cooked well. If it is not cooked completely, it will cause stomach cramps and diarrhea. The leaves may be boiled and the resulting juice given as a cure for asthma, coughs, and colds. The juice from the boiled leaves is sometimes given to mothers who have a problem of producing sufficient milk for their nursing infants." Schultes (1941) reported the Indians of Oaxaca use the crude milky sap as a substitute for sulfur to coagulate wild rubber (Castilla sp.) in the fabrication of rain coats.

Plate 53

Xanthosoma robustum Schott.



## SUMMARY

Fifty-two species representing 49 genera and 29 families of flowering plants were studied for their folklore and current ethnic uses. The majority of the species were collected in the markets of Monterrey and Saltillo which are located in the states of Nuevo Leon and Coahuila. Several specimens were also obtained from traveling brujos in and around Monterrey and Saltillo or from the field.

The majority of ethnic information, including the folklore or common names of the specimens, was obtained from the literature. The folklore uses of the plants was related by word of mouth through conversations with brujos, as well as Mexican citizens. All specimens were classified, photographed, and detailed ethnobotanical remarks were given for each specimen, as well as a brief taxonomic description of those plant organs used most frequently by the people.

## Glossary of Ethnobotanical - Medical Terms

- alterative - a substance that hastens the renewal of damaged tissue.
- analgesic - pain relieving.
- androgenic - a substance that increases the production of androgen.
- anodyne - pain-easing.
- anti-atherogenic - substances that reduce cholesterol.
- anti-helminthic - substances that cause the death or removal of worms in the body.
- anti-pyretic - substances to control fevers.
- antispasmodic - preventing or curing syphilis.
- antithermic - controls temperature fluctuations.
- aperient - producing a natural movement of the bowels.
- aphrodisiac - exciting the sexual organs.
- bronchitis - inflammation of the bronchial tubes.
- cathartic - producing evacuation of the bowels.
- chorea - a nervous disorder characterized by irregular and involuntary movement of the muscles.
- condiment - an additive to food.
- decoction - a liquid preparation obtained by boiling medicinal vegetable substances in water.
- demulcent - soothing; allaying irritation of surfaces especially mucous membranes.
- depurative - a purifying agent.
- diaphoretic - substance which promotes perspiration.
- discutient - a remedy which causes dispersion or disappearance, as of a swelling.
- diuretic - substances which produces urination.

dropsy - an infiltration of the tissues with diluted lymph.

emetic - drugs which cause vomiting.

emmenagogue - an agent which stimulates menstrual flow.

expectorant - a cough inhibiting substance.

febrifuge - drug which reduces fever.

febrile - pertaining to or characterized by fever.

grippe - influenza.

hemostatic - drugs which control bleeding.

indolent - slowness in healing.

infusion - the process of extracting the active principle of a substance  
by means of water but without boiling.

lactation - the formation or secretion of milk.

lenitive - soothing, demulcent.

leucorrhoea - excessive bleeding, usually internal.

lumbrici - intestinal worms.

neuralgia - severe pain along the course of a nerve.

palliative - a drug which relieves the symptoms of a disease without  
curing it.

poultice - soft, semi-liquid mass applied externally.

purgative - drug which evacuates the bowels.

refrigerant - an agent having cooling properties.

rhinitis - inflammation of the nasal mucous membranes.

scorbutic - agent to aid in the cure of scurvy.

sialagogue - producing a flow of saliva.

stimulant - agent which causes alertness.

stranguary - painful urination.

sudorific - inducing sweating.



tonic - an agent producing normal tone of an organ or patient.

vermifuge - any agent that expels or kills intestinal worms.

vertigo - dizziness.

vulnerary - any agent that heals wounds.

## LITERATURE CITED

- Bishop, C. J. and R. E. MacDonald. A survey of higher plants for antibacterial substances. *Canadian Journal of Botany* 29: 260-269. 1950.
- Burlage, Henry M. 1968. Index of plants of Texas with reputed medicinal and poisonous properties. (Austin, Texas?) 272p.
- Castetter, E. F. Uncultivated native plants as sources of food. *Ethnobiological Studies in the American Southwest I.*, University of New Mexico, Biological Series 4 (1): 1-62.
- Correll, D. S. and M. C. Johnston. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner, Texas. 1881p.
- Frisby, A., J. M. Roberts, J. C. Jennings, R. Y. Gottshall, and E. H. Lucas. The occurrence of antibacterial substances in seed plants with special reference to Mycobacterium tuberculosis. (Third Report) Michigan Agricultural Experimental Station Quarterly Bulletin 35: 392-404. 1953.
- Jimenez, Jorge. Personal communication. 1970.
- Jiu, James. A survey of some medicinal plants of Mexico for selected biological activities. *Lloydia* 29 (3): 250-259. 1966.
- Kalsi, P. S., M. L. Gandhi, and I. S. Bhatia. Essential oils in the montha sedge. *Journal of Research of the Punjab Agricultural Society, India* 6 (2): 383-387. 1969.
- Liegey, F. W. Antibiotic properties of plants common to Cattaraugus County. *St. Bonaventure University Science Studies* 15: 40-62. 1953.
- Lipp, F. J. Ethnobotany of the Chinatec Indians, Oaxaca, Mexico. *Economic Botany* 25 (3): 234-239. 1971.
- Madsen, G. C. and A. L. Pates. Occurrence of antimicrobial substances in chlorophyllose plants growing in Florida. *Botanical Gazette* 113: 393-398. 1952.
- Martinez, M. 1969. *Las plantas medicinales de Mexico*. Andres Botas, Mexico City. 657p.
- Munsell, Hazel E. Central American edible plants. *Journal of Home Economics* 42: 629-631. 1950.
- Schertz, K. F., W. C. Boyd, W. Jurgelsky, Jr., and E. Cabanillas. Seed extracts with agglutinating activity for human blood. *Economic Botany* 14: 235. 1960.

- Schultes, R. E. 1941. Economic aspects of the flora of northeastern Oaxaca, Mexico. Ph. D. Thesis. Harvard University. Cambridge, Massachusetts.
- Standley, P. C. 1924. Trees and shrubs of Mexico. Contributions from the United States National Herbarium. 23 (4): 1,025p.
- Rojas, Paulino. Personal communication. 1970.
- Rudolph, Rojas I. Contribucion al estudio quimico del llanten (Plantago major L.). Anales de la Facultad de Quimica y Farmacia, Universidad de Concepcion. Chile 20: 146-150. 1968.
- Rose, J. N. 1899. Useful plants of Mexico. Contributions from the United States National Herbarium 5 (4): 256.
- Willaman, J. J. and B. G. Schubert. 1961. Alkaloid-bearing plants and their contained alkaloids. United States Department of Agriculture Technical Bulletin No. 1234. 287p.
- Ximenez, Francisco. 1615. Los quatro libros de la naturaleza y virtudes de las plantas. Mexico.