

March, 1953.

To the Graduate Council:

I am submitting herewith a thesis written by William Henry Banks, Jr. entitled "Ethnobotany of the Cherokee Indian." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Botany.

Carson J. Sharp
Major Professor

We have read this thesis
and recommend its acceptance:

Madeline Kuehner

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Accepted for the Council:

E. H. Waters
Dean of the Graduate School

ETHNOBOTANY OF THE CHEROKEE INDIANS

33

A THESIS

Submitted to
The Graduate Council
of
The University of Tennessee
in
Partial Fulfillment of the Requirements
for the degree of
Master of Science

by

William H. Banks Jr.

March, 1953

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Last, but most important, are those persons who are the very substance of this paper - my informants.

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INTRODUCTION

In September, 1951, a study of the Ethnobotany of the Cherokee Indians was suggested to the writer as the subject for his Master of Science thesis at the University of Tennessee, by Dr. Aaron J. Sharp. The idea met with immediate enthusiasm for a number of reasons.

The research involved in such a study would necessarily deal with people as well as plants, thus combining the writer's greatest interests. The project would also afford an excellent opportunity to work in close contact with a botanically rich area, thus enabling the writer to strengthen his knowledge of nature.

Work on the problem did not actually begin until some seven months later. In the intervening period, however, preparatory work was undertaken. The writer enrolled in Anthropology courses at the aforementioned institution. Therein were gleaned concepts which helped in the gathering of factual data, suggested some of the dynamics of the culture under observation, rounded the discussions appearing in the appendix and aided immeasurably in the writer's understanding of the Cherokee Indians.

In May, 1952, steps were taken to provide for the writer and his wife a place of residence for a three months field trip. With the help of Mr. Joe Jennings, reservation superintendent, and Mr. Sam Gillam, agricultural agent of the reservation, a room was located. The room was

rented from the 73-year old widow of a "full-blooded" Indian, her daughter and her "full-blooded" son-in-law. Once established it was a matter of discovering the contacts, gaining their confidence and getting information from them pertaining to Cherokee usage of plants.

Work proceeded very slowly at first, chiefly through the writer's inexperience in knowing how to start. The task of gathering information on the some 800 plants which James Mooney (Mooney, 1890) indicated to be in the composite Cherokee repertoire was staggering for the short length of time allotted. The writer resolved to concentrate on a smaller number of plants, but to gather more complete information on these. At the same time, effort was made to gather data on as many plants as time and circumstances permitted.

After arriving in Cherokee, North Carolina in late June, 1952, the first step was to obtain information concerning likely informant "prospects" from Miss Mary Ulma, librarian of the Cherokee Government School. Miss Ulma was instrumental in the organization of a medicinal herb contest which appeared in the Cherokee Indian Fair in October, 1951. She supplied the author with a carbon copy of the contest entries, listing the plants of each exhibit. She also furnished the ten names of the contestants and information on how to locate their homes.

With this list of ten names the writer set out to contact these persons and to obtain from them additional and more complete information.

Five of these persons proved helpful in giving information, one person had moved to New Jersey, two were considered to be unreliable and were not contacted, one lady was reticent to impart any information and the last was a white person, not contacted. Through these persons and Mr. John Witthoft, five additional persons were contacted who were of great help. Mr. Witthoft graciously lent to the writer his personal file listing plants with their Cherokee names and usages. These field notes were taken from at least three informants not included above. Two of these three persons are deceased.

The general pattern of approaching a likely informant was (1) introduction, (2) light conversation or remarks on a neutral subject - weather, crops, local events, etc., - (3) statement of the writer's purpose, (4) the exchange of ideas.

Most informants were quite willing to tell what they knew. One person refused to help, and another (Yute Jumper) suddenly decided to stop giving information. The writer on his third call to the Jumper cabin found the 83-year-old Indian "out" and on the fourth call was told that he (Jumper) no longer wanted to tell his secrets. A theory some of the older Indians retain is that medicines lose their potency if the knowledge of their use becomes common. This may well be, for as it will be seen, the efficacy of a medicine may depend solely on a psychological effect.

The writer first went with his informants on walks through the shaded woods, stopping at crystal springs for a refreshing drink and

calling occasionally at the cabin of a neighboring Indian. Along the way the guide would pick a familiar plant, tell how it is (or was) used and move on. The writer collected these plants and identified them later either with a manual or by having them identified at the University of Tennessee.

This method, although the most satisfactory way to gather information on native plants, proved very slow. The writer could take such hikes with informants only at their convenience. Only one, or two at the most, hikes could be arranged per week. On each hike a maximum of ten to fifteen plants could be discovered.

The writer used three methods to expedite the gathering of data. The first method was the use of colored plates of plants in House's Book of Flowers. This method enjoyed only limited success for several reasons: (1) Many of the plants pictured in the book had no local counterpart, (2) Many of the flowers pictured are a different species of a locally appearing genus and the small morphological differences caused confusion and, (3) in many cases the plants pictured are idealized, and all are photographed against an artificial background, both causing additional confusion.

The second and third methods were the use of dried plants, shown to the informant for his identification. The plants were either those collected on the reservation (second method) or those brought from the herbarium of the University of Tennessee (third method). In the latter case the specimens were mounted. As a guide to what

species should be brought from the University, the writer used a file supplied to him by Miss Mary Ulma. The file, compiled by Miss Ulma and Mr. Jess Lambert, listed all plants seen in flower and identified during the Spring of 1952.

The writer first brought fifty herbarium sheets to Cherokee representing the first fifty plants recorded in the file. Many of these plants were unfamiliar to the informants, being of more rare distribution. In a second group, the writer selected from the remainder of the file some 95 plants which he considered more common to the area. The others were not treated.

The use of dried specimens proved much more successful than the colored plates, although the former method also presented difficulties. Dried plants at best are different from fresh matter. One of the extreme cases is the delicate Monotropa uniflora blooming inconspicuously in a moist bed under the shade of a large tree. In a dried condition it appears as a blackened blob. These last two methods, despite their faults, produced information in quantity and provided an easy way to check the identical plant with more than one informant.

At first the writer had no choice but to accept the information given to him in blind faith of its authenticity. Checking later with data from other informants gave some ground for the reliability of information from individual informants, but even more reason for doubt, as many of the usages differed drastically. Still later data indicated there was little hope for even a fifty-per-cent matching as in most

cases each informant had a different use for each plant. This subject is presented more fully in the discussion. The writer had to revert to blind faith in the gathering of data. It is the writer's opinion, however, that no informant gave false information purposely. Particularly in regard to Yute Jumper, the information gathered is considered absolutely authentic. The data from Aggie Lossiah checked in every detail to the information which she had in the contest entry almost ten months earlier. Flaws found in this study are human errors: either of the informant in misidentifying a plant name or use, or the writer's errors, which we hope are few.

Fourteen persons are considered the main informants of this study, although other individuals have supplied information on a fewer number of plants. In the case of these latter persons their full name will follow the information attributed to them. In the case of the former fourteen, their names will be indicated by letters. These persons, the communities in which they live and their initials are listed below.

- 1) Aggie and Henry Lossiah, Yellow Hill A.L.
- 2) Tom Lossiah, Soco T.L.
- 3) Noyah Arch, Soco N.A.
- 4) Yute Jumper, Bird Town Y.J.
- 5) Hester Reagon, Jackson County H.R.
- 6) Minnie and Darrel Allison, Bird Town M.A.
- 7) Lilly Hornbuckle, Soco L.H.
- 8) Nancy Conseen Robbinsville, N.C. N.C.
- 9) Mose Owle, Bird Town M.O.
- 10) Molly Sequoyah, Big Cove M.S.
- 11) Will West Long, Big Cove W.W.
- 12) Cain Screamer, Wolf Town C.S.

Aggie and Henry Lossiah are taken together. Mr. Lossiah suffered a paralytic stroke some three years ago which deprived him of clarity of speech. His English was difficult, if not impossible, to understand and his Cherokee was understood by only a few. Whenever a plant was under consideration, a conversation in Cherokee ensued of which the writer was completely ignorant. After a lively dialogue Mrs. Lossiah would turn and relate the information. The writer was never certain who was actually responsible for giving the information, although Aggie confessed ignorance of plant lore. Tom Lossiah is no relation to the latter couple.

Minnie and Darrel Allison are mother and son and are taken together because of near identical information given by them.

The written was taken by Aggie and Henry Lossiah to visit Nancy Conseen, a native of Robbinsville, sixty miles from Cherokee.

Of the fourteen persons listed, four are white enough to be considered non-Indian although they have Indian ancestry or relatives. These persons are Minnie and Darrel Allison, Hester Reagon and Lilly Hornbuckle. The discussion section will treat the data gathered from these informants of mixed heritage compared with the data from full bloods.

On the suggestion of Mr. John Witthoft, the Cherokee name for the plant was taken along with other data. This later was proved highly useful. It provided a further comparison of plants between informants and literature. Moreover, it vouched for the informant's familiarity of

the plant under consideration. Each Indian name is annotated as to who supplied it to the writer.

The development of a written language to accompany the spoken language of the Cherokee is one of the most extraordinary achievements of all time (anonymous, 1936). In the 1820's a crippled Cherokee of mixed blood observed that the white people had a way of talking on paper. Unaided and in the face of ridicule he undertook the job of devising a symbol for each Cherokee word or idea. The impossibility of such a system was soon apparent, but in time the ex-hunter discovered that every Cherokee word could be broken down to a limited number of sounds. He improved his first drafts until a system of only eighty-five sounds was developed. For each of these he devised a symbol which he either invented or borrowed from the English alphabet. He accomplished this in total ignorance of the English language.

So successful was the experiment that almost "overnight" the Cherokee nation became literate. Anyone who spoke the language could read and write with little effort. This most famous of all Cherokees is immortalized in the name of North America's oldest living monument, the redwood tree Sequoia gigantea of California. There are today many living descendants of this famous Cherokee literary character bearing either his name Sequoyah, or the later family name, Walkingstick.

With the Sequoyah syllabary as a tool, many of the learned medicine men recorded their knowledge concerning Cherokee ceremonies and beliefs. In many of their formulas plant lore is included. The writer

has seen one of these undiscovered manuscripts written and owned by Yute Jumper, and was told by Tom Lossiah of the latter's ownership of one. The writer regrets that the information contained in these two texts remains a secret - a good project for an anthropologist interested in linguistics, or other ethnological studies.

Other manuscripts have been exploited by ethnologists such as James Mooney, Frans Olbrechts and others. The translation of such material requires the cooperation of an Indian well versed in the use of the syllabary.

A phoneme system has been devised so that any Cherokee word may be written in symbols understood after brief study. This system, outlined below, was suggested to the writer by John Witthoft.

VOWELS

- a . . . as in father
- a . . . as in the German mädchen (rare)
- i . . . as in meat
- ɪ . . . as in bit
- E . . . as in fate
- e . . . as in bat
- ə . . . an indeterminate vowel sound
- ʌ . . . as in but
- o . . . as in rot
- ɔ . . . intermediate between rot and bought
- ω . . . as in bought or law

u . . . as in boot

SEMI-VOWELS, ACCENTS, etc.

h . . . as in hat

y . . . as in English you

w . . . as in white

˙ . . . after a vowel indicates that the vowel is long

˘ . . . between syllables represents an unvoiced, breathed sound. When occurring with an "s", it is expressed as "sh".

ʔ . . . a glottal catch resembling a hard "k" but sounded more deeply in the throat

˗ . . . beneath a vowel represents a nasal quality

h . . . as in hat

y . . . as in English you

w . . . as in white

/ . . . is the primary accent

\ . . . is the secondary accent

CONSONANTS

d,k,l,m,n,t, and hard g are as in English

l . . . as in bottle or rattle

d_j . . as soft g preceded by a d

t_s, d_z, and k_l are consonant combinations

The phoneme system of Frans Olbrechts, 1932 was not used as it includes symbols involving sound distinctions which Cherokees do not recognize. An older phoneme system used by Mahoney, 1849 which is

similar to a newer one listed in the Cherokee Fair program (1951), is useless because many fundamental sounds are overlooked.

A great flexibility was noticed in some Cherokee words, especially in the pronunciation of vowels. This will be evidenced later, where it will be seen that the Cherokee names for certain plants fluctuate around a general sound pattern. This is true especially in regard to the several dialects. Again, there are words with slight sound differences having entirely different meanings.

dił sti : dance

a* má : salt

dił stí : fight

a má : water

^dji-yuh' : poplar tree or canoe

'si-yuh' : Hello

It is believed that if the sounds indicated in the phoneme system, above, are carefully duplicated in pronouncing the name of a plant, any Cherokee will understand the speaker's meaning.

In the body of information which is to follow, every plant is listed in a botanical organization: from the plants considered phylogenetically lowest in the plant kingdom, to the highest. Each botanical name is followed by the English common name, and the Cherokee name (if any). In many cases the Cherokee name is a word having a descriptive significance, such as, "it blows in the wind" for Baptisia. Again the Cherokee name is translatable only to the English common name, as "na^tsi" for "pine".

The names are followed by a description of how the plant is used.

The information may be from either an informant or from literature;
in either case the source will be indicated.

PLANTS USED BY CHEROKEE INDIANS

NON-VASCULAR PLANTS

FUNGI

Lycoperdon pyriforme Persoon, Puffball - Nàkwisiusdí (Mooney Ms.), Nà'kwi'siudi.gidó (Olbrecht, 1932) (Cherokee names probably applicable to all "puffballs".)

(1) The dried spores are used as a powder on old sores. (A.L.)

Geaster spp., Puffball -

(1) The dried spores are used as a powder to make the funiculus fall off a newborn child. (W.W.)

Fistulina hepatica Fr., Beefsteak Mushroom -

(1) This mushroom, when eaten, has the taste of beef. (Jess Lambert, W.W.)

ALGAE

Blue green algae from stagnant water is used in a poultice to cure headaches. (W.W.)

LICHENS

Several kinds of fructiocese lichens (U^tsàlElá, (W.W.) "pot scrapings") are collected from off fallen stems and are used for cancer medicine. (Mooney Ms. C.)

VASCULAR PLANTS

OPHIOGLOSSACEAE

Botrychium virginianum (L.) Sw., Rattlesnake-Fern - UsEli•t'í, (Olbrecht, 1932) "it held erect".

(1) The root is used as an alternate ingredient in the medicine accompanying Formula 5: 'For dreaming of snakes'.

OSMUNDACEAE

Osmunda cinnamomea L., Finnamon-Fern - Ig•liuw•skilí ustigá. (Olbrecht, 1932)

(1) The entire plant is used as an ingredient in the medicine accompanying Formula 41: 'For chills'.

POLYPODIACEAE

Adiantum pedatum L., Maidenhair-Fern - Kogú sked'gÉ, (W.W.),
Kog'sasgud'gÉ, (W.W.) "it held erect"; Kaku', (W.W.),

- (1) The entire plant is used as an ingredient in the medicine accompanying Formula 41: 'For chills'.
- (2) A decoction of the whole plant is used as an emetic in case of ague and fever. (Witthoft, 1947b)
- (3) A tea made by pouring boiling water over the leaves is used for rheumatism; another fern is also used. (Mooney Ms. C).

. . . The doctors explained that the fronds of the different varieties of fern are curled up in the young plant, but unroll and straighten out as it grows, and consequently a decoction of ferns causes the contracted muscles of the rheumatic patient to unbend and straighten out in like manner (Mooney, 1885).

- (4) A leaf tea is drunk and used as a wash to cure fevers (Mooney Ms. C).
- (5) The powdered leaves when smoked are good for heart trouble. (M.A.)
- (6) For sudden paralytic attacks as in bad pneumonia of children, a steep of the entire plant is blown all over the head and chest of the patient, where he is hot. A prayer is said. (W.W.)

Camptosorus rhizophyllus (L.) Link, Walking-Fern - Logwis'i, (C.S.)
"star"; Inatugan'Ka, (Olbrecht, 1932) "snake tongue".

- (1) An ingredient of the medicine accompanying Formula 29: ' . . .

when their breast swells.'

(2) Those who dream of snakes drink a decoction of this fern and Hepatica acutiloba to produce vomiting after which the dreams do not return (W.W.).

Cystopteris fragilis (L.) Bernh., Fragile-Fern - Igoli uwó'skili noyji'Eí. (Olbrecht, 1932.)

(1) An ingredient in the medicine accompanying Formula 41: 'For chills'.

Dennstaedtia punctiloba (Michx.) Moore, Hay-scented Fern - IgoliuyEla'ǵ. (Olbrecht, 1932)

(1) An ingredient in the medicine accompanying Formula 41: 'For chills'.

Dryopteris spp., Wood-Fern - Yaná u^tsEstá (Mooney, 1885).

(1) A root decoction is drunk to produce vomiting (Mooney, 1885).

(2) A root decoction, sometimes with other plants added, is rubbed on the skin for rheumatism after preliminary scratching. (Ibid.)

(3) A warm decoction is held in the mouth to relieve toothache (Ibid.).

Polystichum acrostichoides (Michx.) Schott, Christmas-Fern -
 GígəgÉ^ˈ ugwaguwindi^d zú^ˈ (W.W.), "red on inside of leaves",
 Yɔːnəu^d zEːː stɔ̃ (Olbrecht, 1932), Ymæu^d ʒEstɔ̃ (Olbrecht, 1932),
 "bear's bed"; Gali^ˈ (A.L.).

- (1) An ingredient in the medicine accompanying Formula 41:
 'For chills'.
- (2) A tea of the leaves is rubbed on for indigestion. (A.L.)
- (3) A cold water infusion of the roots is drunk by old folks
 for stomach ache or bowel complaint. (N.A.)

PINACEAE

Picea rubens Sarg. Spruce -

- (1) The bark is used in modern basketry (Wilson Reed).

Pinus echinata Mill. Yellow Pine - Nɔ̃^t si^ˈ (A.L., W.W.), "pine".

- (1) A tea of the needles is taken for coughs and "hang on".
 (M.A.)

Pinus pungens Lamb., Table-Mountain Pine - Nɔ̃^t si^ˈ (W.W.),
 "pine".

- (1) A decoction including the cone of a yellow pine tree, the
 stem of Impatiens capensis, the root of Veronica officinalis,
 and the bark of Ulmus rubra is given to pregnant women before
 going to the water each new moon. The pine is used because it

represents the quality of long life and unimpaired health, which will be given to the offspring. (Olbrecht, 1932).

Pinus virginiana Mill., Virginia Pine - Nj^tsi (A.L., W.W.), "pine".

- (1) Used in the medicine accompanying Formula 12: 'For an incantation disease caused by a maligning conjurer'.
- (2) A root tea is used for sore throat. (Minnie Saunooke).
- (3) The root is boiled in a tub, the turpentine is skimmed off, and the solution is spread on a tanned deer's skin for a drawing plaster. (Witthoft, 1947b).
- (4) The needles are used in modern basketry. (Wilson Reed)
- (5) A bunch of "buds" (two inch long stem tips) with the needles are made into a tea (boiling is optional) which is used to check bowels or stop coughing. (A.L.)
- (6) Pine branches are burned in cooking vessels and the ashes are thrown on the rekindled hearth fire in a home after a death for purification. This is sometimes done also in the house of the relatives. (Olbrecht, 1932)
- (7) The needles of pine, the bark of Hamamelis virginiana and Lindera Benzoin are made into a hot tea decoction (boiling five or ten minutes). The patient drinks the tea, covers up, and his fever "breaks out". (T.L.)
- (8) The needles of pine and the stem of Vicia caroliniana are put in a bucket with apple juice and drunk by the ball players for

wind during the game. (N.A.)

(9) A person with a cold may wrap himself in blankets and steam his room with boiling water in which pine needles have been dropped. (H.R.)

(10) The needles or the gum of pine (or the root of Sassafras) was used in the old days to flavor home made soap.* (A.L.)

(11) The roots of pine, Rubus trivialis and Alnus serrulata (a handful of each) are made into a tea which is good for piles. The tea is drunk and used as a bath. (A.L.)

Tsuga canadensis (L.) Carr., Hemlock - Nónú (W.W.), "hemlock".

(1) A tea made of the stem tips of hemlock is used for kidney trouble. (A.L.)

(2) Hemlock bark is pounded and used in a poultice for itching armpits. (W.W.)

(3) A decoction including hemlock Smilax glauca and Platanus occidentalis is drunk to expell afterbirth. (Olbrecht, 1932)

(4) The bark is used in modern basketry. (Wilson Reed)

(5) The bark is made into a rose-tan fabric dye. (Leftwich, 1952)

* When A.L. was a young woman the practice of her family was to collect the ashes from all fires throughout the year, saving them in a hopper kept for that purpose. In the Spring, when the hogs were slaughtered, the soap was made. The ashes were soaked in water and the lye drippings were collected in a cooking vessel. The strength of the lye was cut by the addition of hog lard. The lye and lard was cooked for the length of time necessary to give the hardness of soap desired. The writer has used a fine quality soap of this kind made by Mandy Walkingstick.

ALISMATACEAE

Sagittaria latifolia Willd., Arrowhead - KænE*?si' (T.L.),
A'ɔ^tliyE)ski' (Olbrecht, 1932).

- (1) If a baby fevers too much, bathe it in a tea made of the leaves. Also give them one sip. (A.L.)
- (2) A witch's potion. (Olbrecht, 1932).

GRAMINEAE

Andropogon virginicus L., Beardgrass, Broomsedge - KænEs'kæwɔ'di'
(Olbrech, 1932), Selú kway' (W.W.)

- (1) - An ingredient in a green corn medicine with Impatiens spp.,
Zea Mays and Cucurbita pepo. (M.S.) - In a second green corn
medicine (see Appendix) it is one of three required ingredients (W.W.).
- (2) Of magical significance with the recitation of Formula 60:
'For prevention or cure of frostbitten feet.'
- (3) A tea of the entire plant is used to bathe the sores caused by
poison oak. (M.A.)
- (4) One of the ingredients which is mixed with mutton tallow,
making a salve for sores. (M.A.)
- (5) The stems are used in a yellow dye for fabrics (Leftwich,
1952).
- (6) The tops, when in solution with onion peels, make a dye ranging

from yellow to orange. (M.A.)

Arundinaria tecta (Walt.) Muhl. Small Cane - I'yá (Speck, 1920), "cane".

(1) Used in aboriginal as well as contemporary basketry. (see appendix) (Speck, 1920)

Arundinaria gigantea (Walt.) Chapm., Giant Cane - I'yá (Speck, 1920), "cane".

(1) Used in aboriginal as well as contemporary basketry. (Ibid.)

(2) The stalks are used for blowguns. The joints are heated over a fire and the tube is straightened. (John Witthoft)

Coix Lacryma-Jobi L., Job's Tears - Selú uni^dzí (M.S.), "corn, their mother". (introduced)

(1) The seeds are strung around the baby's neck for teething.

(T.L.) - "A universal custom of Mediterranean origin." (John Witthoft)

Panicum spp., Panic Grass - KanEsgá (T.L.).

(1) The stems are used for padding the inside of moccasins.

(T.L.)

Zea Mays L., Corn, Volunteer Corn - SELú (N.C., A.L.), "corn";

SELú'g^αwat^α(M.S.), "corn, wild"; ^sαwosa^αul^si'yEnEH^N (W.W.), "came up by itself".

- (1) Corn is the major economic crop of the Cherokee Indians.
- (2) Volunteer corn is an ingredient in a green corn medicine with Andropogon virginicus, Impatiens spp. and Cucurbita pepo (M.S.) - In a second green corn medicine (see Appendix), volunteer corn is an alternate ingredient. (W.W.) - The exposed buttress of a corn stalk is used in a green corn medicine. (N.C.)

Eriophorum spp. Cotton Grass - dJis^tuski^í d^αti^í (W.W.), "rabbit's tail".

- (1) The plant has some use in medicine with a prayer, but not by W.W. (W.W.)

Scirpus validus Vahl., Great Bulrush - G^αn^α*ga^tsu^αt'əⁿ (Olbrecht, 1932).

- (1) An ingredient in the medicine accompanying formula 20: 'For spoiled saliva'.
- (2) The great bulrush is one of the few herbs which is cultivated by medicine men. (Olbrecht, 1932)

ARACEAE

Acorus Calamus L. Sweetflag, Calamus - U'y^αd^αli^í ustigag^αdus^í

(Olbrecht, 1932), *yu·ltE'í*, (Olbrecht, 1932), *Uy·da·li* (N.A., W.W.).

(1) An ingredient in the medicine accompanying Formula 81:

'For itching privates. . . '.

(2) The root is chewed for colds, headache and sore throat. (M.A.)

(3) A hot root infusion when drunk is good for colds. (N.A.)

Arisaema triphyllum (L.) Schott, Jack in the Pulpit - *Tu·s'tí* (T.L., N.A.), *Tu·i'stí* (W.W.), *Tuyastí* (M.S.), *Y·d·gw·d·ski* (A.L.).

(1) The root is beaten and used in a poultice for boils "before they run". ("The roots look as though covered with boils.")

(M.S.)

(2) Several of the roots (which look like a boil) are roasted in coals for two or three seconds. The roots are then cut into pieces the size of possum grapes and rolled into balls. For kidney trouble eat 2,3,4 or 7 of the balls. (W.W.)

(3) The root is made into a poultice which is used for headache.

(A.L.)

Orontium aquaticum L., Golden Club - *GanE'sí* (W.W.), *K·nEsi*

(Olbrecht, 1932, M.S.)

(1) The root is crushed and used in a poultice for muscle soreness after scratching the afflicted area. When Mandy Walkingstick was a young girl the plant was grown in springs near the cabins because of its scarcity in the area. (M.W.)

(2) A steep is prepared in which children bathe every new moon

to ward off epidemic disease: whooping cough, measles, etc. (W.W.)

(3) Babies are bathed in a steep to give them strength. (Olbrecht, 1932)

XYRIDACEAE

Xyris caroliniana Walt., Yellow-eyed Grass - DalonigÉ nastE^d zí, (W.W.)
"yellow root".

(1) A root steep is drunk for diarrhea, when the stools are liquid and yellow in color. Especially good for children.

Sisyrinchium may be used instead. (W.W.)

COMMELINACEAE

Tradescantia virginica L., Spiderwort - Tagwaló (M.S.), Tɔgwɔ•lí (A.L., N.A.), Tɔ'gwa•K (W.W.), "spiderwort"; Yonùnigistí (C.S.), "spiderwort".

(1) The young plant is eaten in salads or as greens in the Spring. (T.L., A.L., N.A., Witthoft, 1947b).

(2-3) A tea of spiderwort and six other ingredients are drunk for female ailments, or for "rupture". (M.S.)

(4) Spiderwort is one of the ingredients in a medicine for kidney trouble, a prayer is necessary. (W.W.)

(5) When a person craves some food and eats too much, beat up the

root of spiderwort and make a tea. The sore stomach will be cured when the tea is drunk. (A.L.)

(6) A poultice of the beaten roots will cure cancer. (Lottie May Squirrel).

JUNCACEAE

Juncus tenuis Willd., Wire Grass - KanEská (M.S.), "grass"; NánDudEdó[?]ti (Y.J.).

(1) The tea of wire grass is a ball player medicine. The sturdy character of its stems keeps the player from falling down. (Sevier Crowe)

(2) - Babies are washed in the tea of wire grass to insure strength in growing up. (M.O.)

- A tea of wire grass and common plantain (Plantago spp.) is given to an infant when first starting to crawl or walk to prevent lameness. (Y.J.)

Juncus effusus L., Soft Rush - Gánagá ustigá (Olbrecht, 1932).

(1) An ingredient in the medicine accompanying Formula 20: 'For spoiled saliva caused by dreaming of snakes'.

Juncus spp.

(1) Several species of rush are used as string in binding up dough in oak leaves for cooking bread. (A.L.)

LILIACEAE

Amianthium Muscaetoxicum (Walt.) Gray, Fly Poison -

(1) The root is a crow poison; and a sure, but severe cure for the itch. (Witthoft, 1947b)

Erythronium americanum Ker, Dog's tooth Violet - An^t sa, (A.L.), Ad['] si (C.S.), Ad^t s['] (Y.J.), Adⁿ sa['] (M.S.); "trout", "mountain trout".

- (1) A root tea will break a fever. (A.L.)
- (2) Warm the leaves over a fire, crush them in your hand, and pour the juice over a wound that won't heal. (C.S.)
- (3) Beat the roots of dog's tooth violet and Panax trifolius and make a cold infusion which is good for fainting persons. (Y.J.)
- (4) When "mountain trout" blooms it is time to fish. Chew the root and spit them into the river when you go fishing to make the fish bite "because it is marked like trout". (M.S.)

Hosta japonica (Thumb.) Voss, Narrow leaved Plantain Lily -

G^o•st[']•nisti (?), "whipping with a small stick", G^o•st[']•nisti (W.W.).
(introduced)

- (1) Steep the leaves - don't boil, rub the tea on swollen parts of the legs and feet caused by invisible insects. Scratch the sore parts before applying and use the medicine with a formula. (W.W.)
- (2) When you cough and spit blood, make a warm infusion of the roots

taken from the East side of the plant. (Source unknown.)

Lilium Superbum L., Turk's cap Lily - Kangu^dz^αt (W.W.), Kⁿigu^ts^αtí (Olbrecht, 1932), Kalsto^{gá} (M.S.), Kangu^dj^αtá (N.C.), "lily".

(1) For flux (loose and bloody bowel movements) drink a warm or cold root infusion. (N.A.)

(2) A root decoction is given to infants to drink and to be bathed in to make them fleshly and fat (from the fleshy character of the roots. (Olbrecht, 1932).

(3) A thick root decoction is used as a lotion to rub on rheumatic joints. (A.L.)

(4) The root is beaten into a flour which can be used in making bread. (N.C.)

Lilium canadense L., Wild Yellow Lily.

The writer believes that this lily and L. superbum are confused by most Indians and that the Cherokee names and usages, above, probably apply to both species. One usage may be confined to this species:

(1) Boil the roots of wild yellow lilly and wild orange-red lily into a decoction and apply to rheumatic joints. (M.S.)

Lilium spp., Wild Orange-red Lily - Ga^hagus^αtagí (W.W.).

(1) Boil the roots of wild orange-red lily and L. canadense into a decoction and apply to rheumatic joints. (M.S.)

(2) The root of wild orange-red lily is boiled and prepared like hominy and eaten in famine times. (The root resembles an ear of corn.) (W.W.)

Polygonatum biflorum (Walt.) Ell., Solomon's Seal - Uganastá (A.L., N.C., Mandy Walking-stick), Utanastá (M.S.), "sweet"; Walb sunádisti (W.W.) "frog fighting".

(1) The young leaves are eaten in the Spring in a number of ways: raw, boiled, or boiled and fried. They may be eaten either in a salad or as greens. (N.A., A.L., Y.J., T.L.)

(2) A long time ago, the roots were dried and beaten and used as flour for bread. (Mandy Walking-stick, Y.J.)

(3) The roots can be ground and used as salt. (M.S.)

(4) The root is heated and bruised and applied as a poultice to remove ulcerated swelling resembling a boil or carbuncle. (Mooney, 1885).

(5) The root when roasted, beaten up, and made into a tea is a good medicine for stomach trouble. (N.C.)

(6) A medicine of solomon's seal is taken for "spoiled saliva", caused by dreaming of the dead, making the patient feel exhausted. Take the root and some dirt from in front of a ground hog's den that came from far underground, and boil the two in a gallon or more of water. "Drink as much as you can and make yourself vomit it up with your finger until you cannot throw up any more, for four straight mornings." (W.W.)

Smilacina racemosa (L.) Desf., False Solomon's Seal - Udiłstí. (N.C.)

- (1) Steep the root in cold water, bathe sore eyes in it. (M.S.)

Smilax glauca Walt., Sawbrier - Ga^dliw^o·dí. (Olbrecht, 1932), "he climbs down"; Nugu^tł^o (Olbrecht, 1932), ^aNuga^tł^o (T.L.), "brier".

- (1) The roots of sawbrier, Platanus occidentalis and Tsuga caroliniana are boiled into a decoction which is drunk to expell afterbirth. The roots from all the plants must be gathered from the east side of the plant. (Olbrecht, 1932)
- (2) The patient is scratched with the stem of sawbrier in Formula 19: 'For rheumatism'.
- (3) An ingredient in the medicine accompanying Formula 28: 'For local pains, cramps, and twitchings, etc. caused by dreaming of animals'.
- (4) Apply the wilted leaves to a boil to bring it to a head, or to open sore to draw out the pus. (H.R.)
- (5) For "bad disease" drink a tea made by boiling for a short time the bark of sawbrier, Evonymus americanus, Liquidambar Styraciflua, Vitis aestivalis, Platanus occidentalis, Fagus grandifolia, and Nyssa sylvatica. (T.L.)

Smilax herbacea L., Carrion Flower - Sik^at^aski (W.W.), "grows just one day".

- (1) The vines and roots of carrion flower and S. rotundifolia,

when boiled together is a tea good for any stomach trouble. A prayer is sometimes said. (W.W.)

Smilax rotundifolia L., Common Greenbrier - Aniskíná unnesad' (W.W.), "for the leg".

(1) (see S. herbacea, above.)

Streptopus roseus Michx., Twisted Stalk - ~~Walsium~~ ^{Walsium} ~~isti~~ (A.L.), "frog fight"; ^dZuliskí, ^dzuhi^gí (A.L.), Uhel' ^gskí (N.C.).

(1) The young leaves are collected in the Spring and eaten in several ways: by itself, with Polygonatum biflorum, or with beans. (N.C., A.L., T.L.)

They say that a frog and a snake got in a fight. The frog got away from the snake by hiding under this weed. (Henry Lossiah).

Trillium (all species) - Ay^gdigwal^gskí (A.L., T.L., N.A., N.C.), Ayud^gwal^gskí (W.W.), Aniyad^gwal^gskí (M.S.), "thunder and lightning". This plant is in some way associated with the myth of SELu (see Appendix, Green Corn Ceremony). The plant is not used for medicine. At least six informants gave the name, but no use for the plant. (Y.J., A.L., T.L., M.S., N.A., N.C.)

. . . . They are not picked or used for anything. These flowers are just like people and the thunders play with them." (M.S.)

Uvularia sessilifolia L. Wild Oats - Walusi us'ugá (M.S.), ^d Zusgá dalò'dí (M.S.).

(1) The smashed root is made into a steep which is drunk for diarrhea. (M.S.)

Veratrum viride Ait., False Hellbore - A'iskwá'né'dǫ (Olbrecht, 1932),

(1) Used in the medicines accompanying Formulas 25 and 31: 'For soreness in the muscles'.

(2) Used in the medicine accompanying Formula 35: 'For shifting pains'.

Yucca flaccida L., Adam's Needle - SElukwoya' (W.W.).

(1) In a green corn medicine (see Appendix) Adam's needle is a required ingredient.

(2) The root or leaves (or both) are boiled into a tea which is drunk for sugar diabetes. (W.W.)

(3) The roots when pounded and boiled can be used as a soap to wash blankets, etc.

(4) To intoxicate fishes, by strewing them pounded on the water. (Witthoft, 1947b).

AMARYLLIDACEAE

Agave virginica L., False Aloe -

(1) The root is chewed in obstinate cases of diarrhea with wonderful success. It is however, a very strong medicine. (Witthoft, 1947b)

IRIDACEAE

Sisyrinchium spp., Blue-eyed Grass - DalonigE^í nastE^dzi (W.W.), "yellow root", EgwÁ^í ulis^í (N.A.), "grandchild".

(1) A root steep is drunk for diarrhea, when the stools are liquid and yellow in color. Especially good for children.

Xyris caroliniana may be used instead. (W.W.)

(2) Eaten in salads. (N.A.)

ORCHIDACEAE

Aplectrum hyemale (Muhl.) Torr., Putty Root, Adam and Eve.

(1) The root is used in medicine to make children fleshy and fat.

(Olbrecht, 1932)

(2) The roots are put in slop to make the hogs fat. (A.L.)

Cypripedium acaule Ait., Pink Lady's Slipper - UstiskwE^íunlasul^í (T.L.), ?E^{hi}ulasul^{hi} (N.A.), ?GwEulas^íula^í (A.L.), "lady slipper".

(1) A tea of pink lady's slipper and C. calceolus var. pubescens is drunk for sugar diabetes. (W.W.)

- (2) A strong tea of pink lady's slipper and Sanicula spp. is drunk for stomach cramps. (A.L.)
- (3) A warm steep of the roots of pink lady's slipper and Comandra umbellata is drunk for kidney trouble. (M.S.)
- (4) A hot tea made of four entire plants will relieve rupture pains in either men or women. (H.R.)
- (5) Root tea will relieve the pains of female monthly trouble and "change of life". (H.R.)
- (6) A root tea is good for kidneys and nerves. (M.A.)

Cypripedium Calceolus L. var. parviflorum (Salisb.) Fern, Large Yellow Lady's Slipper, Gwalasuk (A.L.) Ko[?]kwEunalasuk (W.W.), "partridge moccassin".

- (1) For colds or stomach ache, beat up the roots, make a cold tea and drink. (N.A.)
- (2) An ingredient in the medicine accompanying Formula 52: 'For removing worms'.
- (3) To break a high fever, drink a hot root tea and cover up. (NC.)
- (4) Decoction of the root used for worms in children. In the liquid is placed some stalks of the common chickweed, or purslane (Cerastium vulgatum) which, from the appearance of its red, fleshy stalks, is supposed to have some connection with worms. (Mooney, 1885)
- (5) A hot root tea is good for nerves, flu, colds and neuralgia. (M.A.)

(6) Boil the roots of the three kinds of lady's slipper (small purple, large yellow, and small yellow) into a tea for sugar diabetes. (W.W.)

Cypripedium Calceolus L. var pubescens (Willd.) Correll, Small Yellow Lady's Slipper.

(1) A tea of small yellow lady's slipper and C. acaule is drunk for sugar diabetes. (see also part 6, above). (W.W.)

Goodyera pubescens (Willd.) R. Br., Rattlesnake Plantain - Ig^{ha}li[✓] (N.A.)

(1) For relief of toothache, beat the roots fine and make a tea. Hold the tea in mouth. (N.A.)

(2) A cold tea of the leaves is good for colds, kidneys, and will improve the appetite (used with whiskey). (H.R.)

(3) Soak the plant in water and drip the ooze in sore eyes. (Sevier Crowe).

(4) A decoction of rattlesnake plantain, Alnus serrulata, Prunus serotina, Asarum canadense and Xanthorhiza simplicissima is a good blood tonic. "Take several swallows before a meal . . . builds the appetite" (M.A.)

Habenaria ciliaris (L.) R. Br., Yellow Fringed Orchis - Ugukú uská (A.L.), "owl's head"; A^tzati[✓] ani[✓] gw^x t^α (W.W.), "fish strung on a

stick"; Uko[?]kwE unalasu•k' (M.S.), "bobwhite's moccasin".

- (1) A cold "root", (rhizome) infusion will relieve headache. (A.L.)
- (2) Put a piece of the "root" on a fish-hook to make the fish bite better. (W.W.)
- (3) A warm tea infusion drunk every hour will check the flux. (N.C.)

Liparis Loeslii (L) Richard, Yellow Twayblade - Uy^odaⁱ yustⁱ (W.W.).

- (1) Boil the roots of yellow twayblade and Spiranthes lucida, drink this tea when the urine is sharp and clear and it hurts to urinate. (W.W.)

Spiranthes lucida (H.H. Eat.) Ames, Ladies' Tresses - Glad^oskat^onk^o (A.L.), Uy^odaⁱ yustⁱ (W.W.).

- (1) Wash infant in a warm steep to insure fast, healthy growth. (N.C.)
- (2) For urinary trouble. (see Liparis Loeslii, above)

SAURURACEAE

Saururus cernuus L., Lizard's Tail -

- (1) The roots are roasted and mashed and used in poultices. (Witthoft, 1947b).

SALICACEAE

Salix spp., Willow.

(1) The bark of several species is used in modern basketry.

(Leftwich, 1952)

Salix alba L., White Willow - Dilig^lliskí egw^l (Olbrecht, 1932) ,
"willow, big"; Tsigaliá (W.W.), "willow". (introduced)

(1) An ingredient in the medicine accompanying Formula 21: 'For aggravated hoarseness'.

(2) The stripped twigs are used in basketry. (Wilson Reed)

Salix humilis Marsh., Mountain Willow - Dilagali^lgi (A.L., N.A.),
Dik^lg^llis^lki^l ustig^l(T.L.).

(1) The root is chewed for hoarseness. (A.L.)

(2) Pieces of root are chewed by the ball players before and during game. Water must not be drunk. This is to give extra wind.

(N.A., A.L.)

JUGLANDACEAE

Carya spp., Hickory - ^aw^ln^lE^l (Olbrecht, 1932) Wan^lE^li^l (W.W.),
"hickory".

(1) In basketry, strips of hickory bark are used to finish the

rims. (Speck, 1920)

(2) A bark steep is drunk by ball players before the game to make the limbs more supple. (N.A.)

(3) An infusion drunk for the cure of a type of tuberculosis caused by incantation includes the barks of hickory. Castanea dentata, Fagus grandifolia, Quercus spp., Liriodendron Tulipifera, and Tilia spp. (W.W.)

(4) For relief of the pain of poliomyelitis. Bark of a black hickory tree is beaten and allowed to soak in old water. The infusion is put in the mouth and blown on the afflicted spots. "The pain leaves like magic, but the patient is left crippled." (M.O.)

(5) Chew the leaves of hickory and the whole flower of giant sunflower and you spit the color of blood. This might be used as a dye. (W.W.)

Carya tomentosa Nutt., Mockernut Hickory - ^uWanÉ' ? (M.O.), ^uWanÉ' (Olbrecht, 1932) "hickory".

(1) Used in the medicine accompanying Formula 61: 'For "thrash"'. .

(2) Used in the medicine accompanying Formula 69: 'For shot and arrow wounds' .

(3) The straightened branches are used for the making of arrows. (M.O.)

Juglans cinerea L., Butternut - Kohá (M.O.), "butternut": Hayagidá

(N.A.).

- (1) For toothache, make a warm or cold infusion of several barks: butternut, Prunus serotina, and Diospyros virginica, and Alnus searulata. "Hold the tea in your mouth against the decayed tooth, and the pus will come to a head." (N.A.)
- (2) A black splint dye is made of the bark. (Nancy Long, Leftwich, 1952) - A rich brown dye is made of the bark. (M.A.)
- (3) "A kind of pills are prepared from the inner bark and used as a cathartic." (Witthoft, 1947b)

Juglans nigra L., Black Walnut - SEdí (W.W.), SEtí (W.W.), "Black walnut".

- (1) A taboo is placed on the eating of black walnuts by pregnant women, or the child will have a broad nose. (Olbrecht, 1932)
- (2) The bark is not used in medicines because it is too poisonous. (W.W.)
- (3) A hot infusion of the inner bark is drunk for smallpox. (Loyd Lambert)
- (4) The bark of black walnut is a well known stain. (Speck, 1920; A.L., Leftwich, 1952; N.A., etc.)
- (5) The bark is strewn in streams to poison the fish. (W.W.)

CORYLACEAE

Alnus spp., Alder - ʔtʔsEí (W.W.), Ots E í (Olbrecht, 1932),

"alder".

- (1) Used in the medicine accompanying Formula 9: 'For sore eyes caused by dreaming of a rattlesnake'.
- (2) An ingredient in the medicine accompanying Formula 33: 'For pain in different places'.
- (3) An ingredient in the medicine accompanying Formula 34: 'For vomiting when the stomach is yellow'.
- (4) Used in the medicine accompanying Formula 35: 'For sore eyes'.
- (5) An ingredient in the medicine accompanying Formula 51: 'For menstruating women who dream of giving birth to animals or unnatural beings'.
- (6) Used in the medicine accompanying Formula 58: 'For diseases caused by magically introduced objects'.
- (7) An ingredient in the medicine accompanying Formula 95: 'For milky urine'.
- (8) For sore eyes. A bark infusion of speckled alder and Alnus serrulata is rubbed and blown into the eye of the patient, repeating two or four times. (source unknown)
- (9) One of the plants cultivated by medicine men. (Olbrecht, 1932).
- (1)) A bark infusion is drunk for heart trouble. (H.R.)

Alnus serrulata (Ait.) Willd., Common Alder - Its ^{Éí} (Olbrecht, 1932),
 AD₂^dJE^{hí} (A.L.), S_d^dJE^{hí} (N.A.).

- (1) An ingredient in the medicine accompanying Formula 33: 'For

pain in different places'.

(2) An ingredient in the medicine accompanying Formula 86: 'For indigestion'.

(3) For sore eyes (see part 7 of Alnus rugosa).

(4) A hot berry tea is drunk for high fevers. The patient wraps himself in a blanket and sweats. (T.L.)

(5) A bark steep is drunk for coughs. (T.L.)

(6) A cold tea of bark scrapings makes the kidneys act. (Lloyd Lambert)

(7) Alder bark tea is given to newborn babies for "thrash", a soreness of the mouth. (M.O.)

(8) For toothache, make a warm or cold infusion of several barks: alder, Juglans cinerea, Diospyros virginica, and Prunus serotina. "Hold the tea in your mouth against the decayed tooth, and the pus will come to a head." (N.A.)

(9) The roots of alder, Pinus virginiana and Rubus trivialis (a handful of each) are made into a tea which is good for piles. The tea is drunk and used as a bath. (A.L.)

(10) Skin the bark and make a cold water infusion. This tea is good to purify the blood or bring down high blood pressure. (H.R.)

(11) A warm bark tea when drunk will check "excessive bleeding" of females. (A.L.)

(12) A decoction of alder, Prunus serotina, Goodyera pubescens, Asarum canadense, and Xanthorhiza simplicissima is a good blood tonic. "Take several swallows before a meal . . . builds the

appetite." (M.A.)

(13) A bark decoction of alder alone is a general tonic. (M.A.)

Betula lenta L., Sweet Birch - $\text{A}^t\text{soní}$, (Olbrecht, 1932, "birch".

(1) A young man being initiated into the "profession" of medicine man will, when in danger of coming into contact with a menstrual woman, chew a piece of the inner bark and spit "where his soul lies". His magical powers are otherwise in jeopardy. (Olbrecht, 1932)

(2) A bark infusion is ~~taken~~ for the stomach. (A.L.)

Betula nigra L., River Birch - GanÉti skinó (W.W.), GanÉtisgi (Olbrecht, 1932), "birch".

(1) An ingredient in the medicine accompanying Formula 22: 'For milky urine'.

(2) A tea is made of bark sap which is drunk to check the bowels. (H.R.)

Carpinus caroliniana Walt., American Hornbeam - Tsu^*tina (Olbrecht, 1932), "hornbeam".

(1) An ingredient in the medicine accompanying Formula 22: 'For milky urine'.

(2) Used in the medicine accompanying Formula 65: 'For navel yellowness'.

Corylus americana Walt., Hazelnut - U^yugida (Olbrecht, 1932),

Hayugida (N.A.).

- (1) An ingredient in the medicine accompanying Formula 34: 'For when the stomach is yellow'.

Ostrya virginica (Mill) K. Koch, Ironwood - ^dJustin~~W.W.~~(W.W.), "ironwood".

- (1) The bark of ironwood and Magnolia acuminata are made into a decoction. For toothache, hold the hot decoction in the mouth and spit out when it has cooled. Repeat as often as needed. (W.W.)

FAGACEAE

Castanea dentata (Marsh.) Borkh., Chestnut - Tili (A.L., T.L., N.A.) "Chestnut".

- (1) Collect from off the ground year-old chestnut leaves. Boil them for a short time and drink the tea for heart trouble. (T.L.)
- (2) Leaves collected from young sprouts will cure old sores. (A.L.)
- (3) Chestnuts are ground into flour, which is used in making a bread. (A.L.)
- (4) An infusion drunk for the cure of a type of tuberculosis caused by incantation includes the barks of chestnut, Carya spp., Liriodendron Tulipifera, and Tilia spp. (W.W.), Fagus grandifolia, and Quercus spp. (W.W.)
- (5) A steep of the barks of four trees is a good medicine for monthly

female trouble: chestnut, Acer rubrum, Quercus alba, and Q. nigra (Y.J.)

(6) Of the bark is made a rich brown dye. (M.A.)

(7) Sometimes women, after giving birth to a baby, won't stop bleeding and begin cramping. Prepare a cold infusion of the barks of chestnut and Aesculus spp. and give them to drink. ". . . not too much of it, or it will stop everything." (Y.J.)

(8) Prepare a decoction of the leaves of chestnut and Verbascum Thapsus and mix with brown sugar or hone. Use as a cough syrup. (M.A.)

(9) To make the navel of an infant recede. Collect the small galls of a chestnut tree which are close to the ground and heat in the hearth of fireplace. Take four of these and allow them to cool to the point where the child can stand the heat. With each of the galls, hit the child's navel four times. Do this four times a night with pressure and repeat for four nights, if necessary, until the navel recedes. (N.A.)

Castanea pumila (L.) Mill., Chinquapin - Unigi ^hnagⁱatki, (Olbrecht, 1932), "chinquapin".

(1) Used in the medicine accompanying Formula 23: 'For **fevers**'.

(2) Used in the medicine accompanying Formula 30: 'For fever blisters'.

Fagus grandifolia Ehrh., Beech - Kus^h(W.W.), "beech".

(1) An infusion drunk for the cure of a type of tuberculosis caused by incantation includes the barks of beech, Castanea dentata, Quercus spp., Fagus grandifolia, Liriodendron Tulipifera, Tilia spp., (W.W.)

(2) For "bad disease" drink a tea made by boiling for a short time the barks of beech, Smilax glauca, Evonymus americanus, Nyssa sylvatica, Liquidambar Styraciflua, Vitis aestivalis and Platanus occidentalis.

(T.L.)

Quercus spp. Oak - T^dá (Olbrecht, 1932) "oak".

(1) An infusion drunk for the cure of a type of tuberculosis caused by incantation includes the barks of oak, Castanea dentata, Carya spp., Fagus grandifolia, Liriodendron Tulipifera, and Tilia spp. (W.W.).

(2) Oak splints are used in basketry.

Quercus alba L., White Oak - T^dá (Olbrecht, 1932), "oak", Ta lá (Y.J.).

(1) - An ingredient in the medicine accompanying Formula 49: 'For diarrhea'. - A tea for bowel troubles. (A.L., M.A.)

(2) The bark of white oak is soaked in cold water. This tea when applied will bring relief to gall (sore groin), sore armpits, or chapped areas. The bark can be chewed for mouth sores. (A.L.)

(3) A bark tea is used as an emetic. (Witthoft, 1947b)

(4) A steep of the barks of four trees is a good medicine for monthly female trouble: white oak, (Quercus nigra, Acer rubrum, and Castanea dentata. (Y.J.)

Quercus falcata Michx., Spanish Oak - Gule^tsustigá, (Olbrecht, 1932)
"oak".

- (1) An alternate ingredient in the medicine accompanying Formula 21:
'For aggravated hoarseness'.

Quercus imbricaria Michx., Single Oak -

The Cherokee name and usage is the same as Q. falcata, above.

Quercus nigra L., Water Oak - GulanEgwa (Y.J.), "water oak".

- (1) A steep of the barks of four trees is a good medicine for
monthly female trouble: water oak, Quercus alba, Castanea dentata,
Acer rubrum. (Y.J.)

Quercus rubra L. Red Oak - Dɔ'u^tlo^tsi (Olbrecht, 1932), "red oak".

- (1) An ingredient in the medicine accompanying Formula 49: 'For
diarrhea'.

Quercus stellata Wang., Post Oak - ^tSuⁱuská (Olbrecht, 1932), ^tSuská
(Olbrecht, 1932) "post oak".

- (1) An ingredient in the medicine accompanying Formula 22: 'For
milky urine'.

Quercus velutina Lam., Black Oak -

- (1) Leaves of this oak and other oaks having large leaves are used to

wrap dough for boiling in bread making. (A.L.)

(2) A bark tea is drunk for relief of asthma. (Lloyd Lambert)

ULMACEAE

Ulmus rubra Muhl. Slippery Elm - D^uw^dzila' (Olbrecht, 1932), I'dah^h (N.A.), Dⁱwa^dzila' (Olbrecht, 1932), Daw^dzila' (T.L.), "elm".

(1) An ingredient in the medicine accompanying Formula 49: 'For diarrhea'.

(2) A decoction including a cone of Pinus pungens, the stem of Impatiens capensis, the root of Veronica officinalis, and the bark of slippery elm is given to pregnant women before going to the water each new moon. The elm is used because the slippery character of its sap is believed to aid in the delivery of the child. (Olbrecht, 1932)

(3) Chew inside bark and spit on baseball glove - makes the ball stick to the glove. (N.A.)

(4) For burns, make a steep of the bark and wash. (A.L.)

(5) Old people grow the trees for medicine. (T.L.)

URTICACEAE

Pilea pumila (L.) Gray, Rich Weed. "Toe Itch" - Uni^yyalugiski (A.L.).

(1) An infusion is made to reduce the excessive hunger of children.

(A.L.)

- (2) Rub the stem between the toes for itching. (L.H.)

Urtica gracilis Ait., Bear Nettle - TolEdá(N.A., T.L.), TolEdáata^dsásti
(W.W.) "stinging on you".

- (1) Medicine for upset stomach. Burn off the stickers and rub on.

(T.L.)

- (2) The leaves, stems and pounded roots are soaked in water and warmed.

The tea is drunk for ague. (W.W.)

- (3) The twisted stems are used for bow strings. (Y.J.)

SANTALACEAE

Comandra umbellata (L.) Nutt., Bastard Toadflax - Uⁿnadataskis'ká
(C.S.), "pus, it oozes out"; Ganigwalisgi (Olbrecht, 1932, M.S.),
"clotted blood" or "it is bruised".

- (1) Pick a leaf and put the juice which oozes out on a cut or sore
to make it heal. (C.S.) (confusion with Euphorbia?)

- (2) A hot infusion of bastard toadflax and Cypripedium spp. is drunk
for kidney trouble. (M.S.)

Pyrolaria pubera Michx., Oilnut, Tallow Ball - ^tSigwagwá(N.C.).

- (1) - Roast the ripe fruit and pulverize it by rubbing on a rock or
some rough object. Use this as a salve for sores. (Mandy Walkingstick).

- Roast and grate the fruits and mix with tallow for old sore salve.(A.L.)

- Make a poultice of the pounded root and bear oil and apply to old sores. "It healed an eighteen year-old sore." (N.C.)

LORANTHACEAE

Phoradendron flavescens (Pursh.) Nutt., Mistletoe - Uda^l (N.A.), Uda^tí (A.L., T.L.), Udat^lí (W.W.), "married to another kind" (a word expressing an immoral relationship? A.L. would not translate this meaning, saying "I don't know what it means.")

- (1) Mistletoe, found on the ground where it has fallen, steeped in hot water is a medicine for pregnant women. The tea helps to get the baby from the mother quickly. (Olbrecht, 1932)
- (2) Make a tea ooze and bathe the head with it for a headache. (A.L.)
- (3) To cure lovesickness, vomit for four days, then drink of mistletoe tea. (W.W.)

ARISTOLOCHIACEAE

Aristolochia durior Hill., Dutchman's Pipe - U^{*}da^{*}iuten^l (Olbrecht, 1932).

- (1) An ingredient in the medicine accompanying Formula 81: 'For urinary trouble'.

Aristolochia Serpentaria L., Virginia Snakeroot - Unast^tE^ts^tsiyú

(N.A., Y.J.), UnastE^tsi^tsi'gá (Olbrecht, 1932,) UnastE^dz^tiy' (W.W.), "little root"; Stastigá, "root".

(1) An alternate ingredient used in the medicine accompanying

Formula 5: 'For when he dreams of snakes'.

(2) An ingredient in the medicine accompanying Formula 24: 'For sharp pains'.

(3) - Used in the medicine accompanying Formula 39: 'For dizziness, fainting, or headaches'.

- A cold root tea is drunk to relieve headache - (Y.J.)

(4) An alternate ingredient in the medicine of Formula 80: 'For itching privates when one has urinated on a fire'.

(5) - A root decoction is drunk for stomach ache. (A.L.)

- A cold root tea is drunk for a stomach ache. (Y.J.)

(6) A root decoction is blown on the patient for fever and feverish headaches. (Mooney, 1885)

- A root steep is drunk for fever. A prayer is recited. (W.W.)

(7) A root decoction is drunk for coughs (Mooney, 1885)

(8) To cure snakebite, chew the root and spit upon the wound. (Ibid)

(9) To relieve a toothache, place a piece of the root in the hollow tooth. (Ibid).

(10) Boil the root for a short while and drink the tea for heart trouble. (T.L.)

(11) - Drink a root tea or chew the root and swallow the juice for colds. (N.A.)

- A cold root tea (infusion) is good for colds. (Y.J.)

(12) If a person gets wounded in an accident (cut with an axe, etc.) a cold infusion of the entire plant when drunk will relieve the pain and prevent fainting. (Y.J.)

13 The bruised root will bring relief when held against a nose made sore by constant blowing in colds. (Mooney, 1885)

Asarum canadensis L., Wild Ginger, - Luiga^tli (W.W.), "climbing";
Skwo^{*}lu^{*}toná (Olbrecht, 1932,) Nuyaga^tli (W.W.), Skwalí (N.C., N.A.),
Unisk^dl^d jun^don^d (T.L.).

(1) An ingredient in the medicine accompanying Formula 29: 'For swollen breast'.

(2) An ingredient in the medicine accompanying Formula 54: 'For abdominal pains caused by the terrapin'.

(3) The leaves dried and pounded are used for snuff. (Witthoft, 1947b)

(4) The fresh leaves are applied to wounds. (Ibid)

(5) A root tea is drunk for colds. (N.C.)

(6) A decoction of heart leaf, Goodyera pubescens, Alnus serrulata, Prunus serotina and Xanthorhiza simplicissima is a good blood tonic.
"Take several swallows before a meal. . . . builds the appetite."

(M.A.)

(7) - A root infusion is drunk for monthly period pains. (M.A.)

- A tea for female complaint. (A.L.)

(8) - A root tea is drunk for heart trouble. (M.A., T.L.)

- A beaten root tea is taken for the heart. (Lottie May Squirrel)

POLYGONACEAE

Polygonum aviculare L., Knotweed -

- (1) A root infusion for a child taking the flux. (Y.J.)
- (2) A tea is drunk for kidney trouble. (A.L.)

Polygonum Hydropiper L., Smartweed - Ganikwili^ístí (A.L.), "clotted blood", or "it is bruised"; Uyan^ístí (C.S.).

- (1) The plant was used to poison fish a long time ago - it is no longer used. (W.W.)
- (2) - The plant is cooked up and used in a poultice for swollen joints or bruises.

- The crushed roots, leaves, or flowers are applied to bruises or pains as a liniment. It is strong. (C.S.)

-Wring the plant up, cook it, and mix with cornmeal for a poultice to be used for pain. (H.R.)

- (3) Rub the leaves on children's fingers to prevent thumb sucking. (Bettie Owle)

Rumex Acetosella L., Sheep Sorrel - dzun^dzoⁱstí (A.L.), "sour".

- (1) The leaves are used as a poultice for sores. (A.L.)

Rumex Crispus L., Yellow Dock - ^tsukw(likanaw⁵(A.L.), Dal¹ni²g³unastE^dji
(N.A.)

- (1) Beat up the roots and feed them to a horse when it is sick to its stomach. (A.L.)
- (2) A root tea is given to a woman in childbirth labor. (A.L.)
- (3) A root tea is good for the blood. "My mother has used it in the Spring when every scratch will cause a sore and sickness." (M.A.)
- (4) A root tea will break up constipation. (Sam Owle)
- (5) In late pregnancy (the last five months) boil a big piece of the root in a gallon of water - boil down to three quarts. This tea, when drunk will keep down the blood loss in childbirth. (N.A.)

Tovara virginiana (L.) Raf., Jumpseed - Dal¹niyuh¹stí¹ (A.L.), A^tsEhí¹
(N.A.).

- (1) A hot tea of the leaves of jumpseed and the bark of Gleditsia tricanthos is given to those with whooping cough. (N.A.) The plant was used by old medicine men, but Henry Lossiah forgets how.

CHENOPODIACEAE

Chenopodium ambrosioides L., Jerusalem Oak, Vermifuge - Dil¹gows¹gi¹
(T.L.) Digayasugi¹ gows¹gi¹ watigÉ¹ (A.L.), " . . . it smells"; Uni^tsiyú¹
suhiyustí¹ (Mooney Ms), Dilá¹ (N.A.).

- (1) - Boil a stem and leaf decoction to a thick consistency, cool, and

cut into bite size blocks. Give these to children to rid them of hookworms. No water must be drunk during the treatment. (T.L., A.L.)

- Beat up the tops and roots and make a tea by pouring over it hot water. Take no breakfast and drink the tea from early morning to noon to get rid of the worms. (Mooney Ms. C)

- Make a thick syrup of the seeds and add molasses. Take the mixture for worms. (H.R., M.A., Minnie Saunooke)

(2) A warm root tea is drunk in the winter for "fever disease". Y.J.)

(3) For colds and headache make a cold tea, drink and moisten the head with it. (N.A.)

AMARANTHACEAE

Amaranthus retroflexus L., Green Amaranth - Wats'ká. (W.W.)

(1) An alternate ingredient in a green corn medicine (see Appendix.)

Amaranthus spinosus L., Spring Amaranth - TolEtíyusti' (W.W.), "stick on you, like".

(1) An alternate ingredient in a green corn medicine (see Appendix).

NYCTAGINACEAE

Mirabilis spp., Four-o'clock.

(1) Milk which has been poured over the leaves of four-o'clock is a fly poison (H.R.)

PHYTOLACCACEAE

Phytolacca americana L., Poke - ^dZayitag (W.W.), ^dZaⁱag (A.L.),
^dJa^yadEhi (N.A.), "poke".

(1) - The leaves are eaten in salads in early Spring. (T.L., N.A., N.C., W.W.)

- "In the Spring of the year, bear-bacon is a favorite dish with the traders, along with herbs that the woods afford in plenty . . . especially with the young tops of poke, the root of which is a very strong poison. And this method they pursue year by year, as a physical regimen, in order to purge their blood." (Adair, 1775)

(2) Beat the dried roots fine and sprinkle the powder on old sores. (N.A.)

(3) The roots are boiled and the tea is used for eczema. The tea is either applied or put in the bath water. The tea is also effective in curing chickens of "cholera" (appearing to the writer to be a deficiency disease in undernourished fowl). (H.R.)

(4) Beat the root fine and put in cold water. This tea will cause the urine to flow more easily. (T.L.)

(5) - Poke berry wine will relieve rheumatism. Add sugar to the crushed fruit and allow to ferment. The wine is taken a tablespoon

at a time. (A.L., M.A.)

- The berries when eaten will relieve rheumatism. (H.R., L.H.)

(6) The crushed berries add color to canned fruit. (T.L.)

(7) Poke greens are good for building up the blood. (M.A.)

CARYOPHYLLACEAE

Cerastium vulgatum L., Common Chickweed -

(1) A decoction of the stems of chickweed and the root of Cypripedium

Calceolus var. parviflorum is used for worms in children. (Mooney, 1885)

RANUNCULACEAE

Actaea pachypoda Eli., Doll's Eyes - Ulidastí ustigá (Olbrecht, 1932),

"he deceives, it is little"; Kanostagwáí (N.S.), Kano'stagwáí (W.W.).

(1) An ingredient in the medicine accompanying Formula 75: 'For chills'.

(2) This will kill the teeth of young people if they are not careful with it. (Y.J.)

(3) This is used for swelling of the leg which is caused by the biting of spirit insects which are in the flesh. Boil the root, make a really hot tea, and bath the foot in it. Bathe and wash the leg until the brew is cool. This will drive the spirit insects from the flesh.

(W.W.)

Anemone quinquefolia L., Wood Anemone - Yɛnwi^d junstí uwa^tzi^í (W.W.),
"little people's saliva."

(1) This is used in an attraction medicine (love formula). Get the root **before** the spring winds blow, it is no good after that; it has a long root. Hold the root in the hands and rub between them while reciting the formula. (W.W.)

Anemone virginica L., Thimbleweed - ^dZistú uska^íntí (A.L.), "rabbit . . ."

(1) A root tea is used to cure the whooping cough. (N.C.)

Aquilegia canadensis L., Columbine - Gígá^í a^dzil^íski (Y.J.) "bloodlike, it is a flower"; Lalu^í ní (C.S.), "bell".

(1) A cold water infusion will stop the flux. (Y.J.)

Cimicifuga racemosa (L.) Nutt., Black Snakeroot, Black Cohosh - Ulid^ístí ut^ín, (Olbrecht, 1932), "he deceives, it is tall".

(1) The roots in alcoholic spirits were used to relieve rheumatic pains. (Witthoft, 1947b)

(2) An ingredient in the medicine accompanying Formula 75: 'For chills'.

Clematis virginiana L., Virgin's Bower - U^dɔ^í ustigá (Olbrecht, 1932)
"little vine": Igàgati (W.W., T.L., N.A.), Egà^íti (A.L.) "sun light";

Osiw ni (N.C.), "grows on the hot house".

(1) - An ingredient in the medicine accompanying Formula 81: 'For urinary trouble '.

- "Sun light", with other ingredients, is steeped and drunk as a medicine for yellow, painful urination. (W.W.)

- A root tea is drunk by children or grownups for kidney trouble. "When the water won't stop". (Nephritis?) (Y.J., A.L.)

- Boil the roots for one hour, reducing a gallon of water to a three quart decoction. Drink all you can before retiring; during the night you wake up in a deep sweat. This is a good medicine for the bladder and kidneys. (N.A.)

(2) This is one of the ingredients in a medicine to be drunk if you get sick eating the first harvest of roasting ears. (N.C.)

(3) A warm infusion of "sunlight" and Asclepias perennis is drunk for backache, or the roots may be chewed instead. Salt is forbidden. (T.L.)

(4) A root infusion is drunk for stomach trouble (ulcers, etc.) (A.L.)

Delphinium spp., Larkspur - Waga^djunihihi (M.S.) "cattle not supposed to eat".

(1) Root makes cow drunk and kills him. (M.S.)

Hepatica americana (D.C.) Key, Liverleaf, Hepatica -

Skw^j•lustiga (Olbrecht, 1932) Skwali (A.L., N.A.), Uni•skwa•li (W.W.), "hepatica".

- (1) An ingredient in the medicine accompanying Formula 29: 'For swollen breasts'.
- (2) An ingredient in the medicine accompanying Formula 54: 'For abdominal pains caused by the terrapin'.
- (3) Used for coughs either in tea or by chewing roots. (Mooney, 1885)
- (4) ". . . Those who dream of snakes drink a decoction of this herb and . . . Camptosorus rhizophyllus to produce vomiting, after which the dreams do not return. The traders buy large quantities of liverwort from the Cherokees, who may have learned to esteem it more highly than they otherwise would." (Mooney, 1885)
- (5) Hot root tea is drunk for bowel trouble. (A.L.)
- (6) Boil the root, give the tea to children to drink every new moon to keep off epidemics like whooping cough, measles, etc. (W.W.)
- (7) Smoke the dried, crumpled leaves for heart trouble. (T.L.)
- (8) For toothache in the Spring, beat up the leaves and make a tea. Hold the tea in the mouth. (N.A.)

Hepatica acutiloba D.C., Hepatica - Unisk^hlí^d Junstí, (T.L.), "hepatica, little".

The usages are similar to Hepatica americana.

Thalictrum dioicum L., Early Meadow-Rue- A^tzatí wa^d ziská (W.W., A.L.), "fish scales".

(1) - A root tea is prepared for diarrhea. (A.L.)

- A decoction of the root is drunk for diarrhea with vomiting.

(Mooney, 1885)

Trollius laxus Salisb., Globe Flower. (introduced)

(1) The leaves and stem are steeped in boiling water for "thrash."

M.S.)

Xanthorhiza simplicissima Marsh., Yellow Root - Dilóní (A.L.) "yellow";
Dolóní unasté^d zí, (W.W.) "yellow root".

(1) Used in the medicine accompanying Formula 70: 'For childbirth'.

(2) - Bathe the eyes with a bark ooze to relieve them of soreness.

(A.L.)

- For sore eyes, make a poultice by wrapping scraped bark in flannel and moistening until wet. (N.A.)

(3) - For sore mouth, chew the root or use an infusion as a mouth wash. (N.C., M.A., Lottie May Squirrel, Sam Owle)

(4) Yellow root is an ingredient which is mixed in mutton tallow for a salve for sores. (M.A.)

(5) A root tea is drunk for cramps. (Amonite Sequoyah)

(6) The root is used as a dye material. (Leftwich, 1952)

(7) A decoction of yellow root, Asarum canadensis, Goodyera pubescens,

Alnus serrulata and Prunus serotina is a good blood tonic. "Take several swallows before a meal . . . builds the appetite." (M.A.)

(8) A tea for nerves. (H.R.)

BERBERIDACEAE

Caulophyllum thalictroides (L.) Pers., Blue Cohosh - U·lidas'dí (A.L., C.S.) "he deceives"; Kan·st·gwali. (?)

(1) For toothache, hold the root tea ooze in the mouth. (A.L.)

- When teeth are rotting, chew the root or drink tea. The teeth will be poisoned in three or four years. (M.A.)

(2) Rub leaves on "oak-poison", - kills it right away. (C.S.)

(3) Root tea for after pains. (M.A.)

Podophyllum peltatum L., May-Apple - UnEskwÈtug' (A.L., J.L), UniskwÈtug' (C.S.), Unàguistí (N.A.), UwilshwÈtugí (C.S.)

(1) Indians used to sell the root a long time ago, but no medicine of it is known. (T.L.)*

(2) Beat up the roots and make an ooze of them. Soak corn in this ooze before planting to keep off crows. (A.L.)

- Soak corn in root tea ooze as an insect repellent. (H.R.)

- The joints of the roots are a poison. Cut out the parts between the joints, mash, and boil for medicine. (C.S.)

*Olbrecht, 1932, felt that the white traders may have caused importance to be laid on collected herbs.

(3) Beat up the roots fine like a meal. A teaspoonful of this powder is used as a laxative. (N.A.)

- Bake the root in an oven or in the sun until dry. A small piece of the internode of the root taken as a pill will "clean you out". (A.L.)

- A root tea for bowels. (Amonite Sequoyah)

- A syrup is boiled of the root and given for a purgative, two pills at a time. (Witthoft, 1947b)

(4) A drop of the juice of the fresh root in the ear is a cure for deafness. (So I have been told, I never witnessed it.) (Witthoft, 1947b)

(5) The root soaked in whiskey is drunk for rheumatism. (A.L.)

MAGNOLIACEAE

Liriodendron Tulipifera L., Tulip Tree, Poplar - ^dGiyuh' (T.L., A.L., Y.J., W.W.), ^tSigú' (Olbrecht, 1932), "poplar".

(1) An alternate ingredient in the medicine accompanying Formula 5:

'For when he dreams of snakes.'

(2) An alternate ingredient in the medicine accompanying Formula 80:

'For itching privates when one has urinated in the fire.'

(3) An ingredient in the medicine accompanying Formula 86: 'For indigestion'.

(4) In ancient times a log of poplar was used in making a dugout canoe.

The Cherokee name for "poplar" also means "canoe". (John Witthoft)

(5) A decoction of the bark of poplar is blown with a tube on fractured limbs to help them heal. The arm is splinted and rest is prescribed. (Olbrecht, 1932)

(6) - For indigestion, drink an infusion made by steeping the root or root bark (pounded) of a young tree about two feet in height. (W.W.)

- A bark tea for stomach trouble. (H.R.)

(7) A decoction of the root bark is made and given in fevers. (Olbrecht, 1932)

(8) A bark decoction is drunk for bowel trouble. (Peter Long)

(9) The bark is used as a preservative in home-made medicine. (T.L.)

(10) Skin off some of the bark and dry it in an oven. Powder the bark and take a small quantity (on the end of a knife) for pin worms. (H.R.)

(11) An infusion drunk for the cure of a **type** of tuberculosis caused by incantation includes the barks of poplar, Quercus spp., Carya spp., Castanea dentata, Fagus grandifolia, and Tilia spp. (W.W.)

Magnolia acuminata L., Cucumber Tree - ^dJu'y^{stí} (N.A.), ^tSù'y sti (Olbrecht, 1932), "they are bitter;" ^tSuglo^d ^{jE}·gwa' (W.W.), "big leaves".

(1) An ingredient in the medicine accompanying Formula 86: 'For indigestion.'

(2) The barks of big leaves and Ostrya virginica are made into a decoction. For toothache, hold the hot decoction in the mouth and spit out when it has cooled. Repeat as often as needed. (W.W.)

(3) - A tea of the bark is drunk to relieve cramps in a baby's stomach (in summer). (A.L.)

- A cold or warm tea is drunk for belching or stomach ache.

(N.A.)

(4) The bark of cucumber tree is one ingredient in a medicine for "bloody flux". (A.L.)

Magnolia macrophylla Michx., Great Leaved Magnolia, Wahoo Tree (?) -
Tsuglò^d jEgwa (W.W.)

(1) Pour hot water over the bark and snuff this tea up the nose to relieve sinus trouble. (M.A.)

CALYCANTHACEAE

Calyanthus fertilis Walt., All spice - KⁿEⁿ ^{ská} (Olbrecht, 1932, T.L.), KanEs 'í (N.A.).

(1) An ingredient in the medicine accompanying Formula 55: 'For irregular urination'.

(2) For a person who is losing his eyesight, drip a cold bark tea into the eye from a saturated rag. "Will take white stuff off the eyeball." (N.A.)

- (3) - A bark ooze will cure children's sores. (A.L.)
 - Bark tea for baby's hives. (M.A.)

Calycanthus floridus L., Strawberry Shrub -

- (1) The roots are used (though very strong) in an emetic. The seeds poison wolves. (Witthoft, 1947b)

ANNONACEAE

Asimina triloba (L.) Dunal, Paw Paw - Desh^hg'í (T.L., Bascom Walkingstick), paw paw.

- (1) - Of the bark they made very strong ropes. (Witthoft, 1947b)
 - The bark is twisted into a string. (Bascom Walkingstick)

LAURACEAE

Lindera Benzoin (L.) Blume, Spicebush - N^hda^tlí (A.L.), No^hsta^dgi (N.A.), N^hta^tsi (T.L.), "spicebush".

- (1) A bunch of twigs as big as your fist is boiled in water for a short time for a beverage tea. (A.L., N.A., L.H.)
 (2) The barks of spicebush, Cornus florida, and Prunus serotina are steeped. Add this tea to pure corn whiskey and drink to break out the measles. (A.L.)
 (3) Boil together the bark of spicebush and Hamamelis virginiana

and some needles of Pinus virginiana for five or ten minutes.

To "break out" fever, drink this tea hot and cover up. (T.L.)

(4) Give a tea to baby to drink for hives. (H.R.)

(5) Drink cool, sweet tea for red measles. (Bettie Owle)

Sassafras albidum (Nutt.) Nees., Sassafras - Gansta^d za' (Kimsey Squirrel), Kan·?sta^t chí (W.W.), Kansta^d jí (A.L., N.A.), "sassafras".

(1) - Steep the bark of the tap root in hot water and drink for diarrhea or flux. (W.W.)

- Drink the root tea daily for bowels. (Kimsey Squirrel)

(2) The root tea is drunk as a blood builder. (H.R., M.A., T.L., A.L.)

(3) The root of sassafras (or the gum of Pinus virginiana was used in the old days to flavor home made soap. (see P. virginiana) (A.L.)

(4) A root poultice is applied to sores anywhere on the body: sprained ankles, bruises, etc. (N.A.)

(5) For sore eyes (styes, pink eye, etc.) make a cold eye wash of the pith. "My mother used it all the time." (M.A.)

(6) A root tea is drunk for headaches and colds. (N.A.)

(7) A few pieces of the bark or root are boiled for a short time in water for a beverage tea. (N.A., L.H.)

PAPAVERACEAE

Sanguinaria canadensis L., Bloodroot - Gíg^{gE} unaStE^dzi (W.W.),
 "red root"; Gitli wa'it^h (A.L.), Gitli wa' t^h (A.L.), "dog-penus".*

(1) The red juice of the root is used in basketry dye. (Speck, 1920; A.L., N.A., Witthoft, 1947b)

(2) Soak the root in cold water and drink for cough medicine.
 (T.L.)

(3) Dry the root, pulverize, and sniff the powder for catarrh.
 (A.L.)

CRUCIFERAE

Capsella Bursa pastoris (L.) Medic., Shepherd's Purse - Uli^si (N.A.), Uli^si ut^h (W.W.).

(1) - In early Spring the young leaves are eaten for salad, raw or with salt. (N.A.)

- The spring greens are cooked. (W.W.)

* When A.L. was asked to give a literal translation of the Cherokee name for bloodroot she quickly told the writer that "Git^hli" meant "dog", but professed ignorance of the second word.

Dentaria diphylla Michx., Toothwort - Anaskwalaski (T.L.).

- (1) Beat up the roots and put in a poultice for headache. (T.L.)

Dentaria heterophylla Nutt., Toothwort, Crow Foot (?) -

Anaskwasgi, Analiskwalagiski, Nasquilenski (N.C.).

- (1) A poultice of the beaten up roots to draw out the pains of headaches, etc. Apply for a full day or for two days. (N.A., Y.J.)

- (2) - The greens are eaten in early spring. (Y.J.)

- This toothwort is an ingredient in a salad "to fill belly"

- made with grease and onions. (N.C.)

- (3) Some people chew the root (it is strong) for colds. (Y.J.)

- (4) A tea of the roots is drunk for sore throat. (Y.J.)

Nasturtium officinale R. Br., Watercress - Amayi uduhjudig nEhi

(N.A.).

- (1) The greens are eaten in salads. (N.A.)

Sisymbrium officinale (L.) Scop., Hedge Mustard - Egwa ulis'i (N.A.),

"grand child".

- (1) It grows wild in yards. An old field weed used in salads. (N.A.)

SARRACENIACEAE

Sarracenia purpurea L., Pitcher Plant - Yugwi^dla (Olbrecht, 1932)

Yugweli (M.O.), Yugwilu (W.W.): (The writer could find no informant who could recognize a mounted specimen, yet Olbrecht reported its use with Cherokee names.)

(1) Drink the water found in this flower to obtain a never failing memory - for medicine man initiates. (Olbrecht, 1932)

SAXIFRAGACEAE

Heuchera americana L., Alum Root - Adan[?]gulagiskí UnEg[?](T.L.), "coated tongue, White"; Uy[?]dali[?]ustia[?](Y.J.), "sweet flag, little";
^t Suhala[?]ga[?]•'É (A.L.), dayEKwa[?] (N.A.).

(1) Chew the root to take the coat off the tongue. (T.L.)

(2) - Drink root tea for grumbling stomach (Dysentery), a cupful at night. (A.L.)

- Drink tea for dysentery. (M.A.)

(3) For "thrash," make a cold tea of the finely beaten roots.

Allow the powder to sit in the cold water for several hours. (Y.J.)

(4) For bad sores during the "dog days" of late summer, make a tea (warm or cold) and sprinkle on. The scab will fall off and new skin will form underneath. (N.A.)

Hydrangea arborescens L., Wild Hydrangea, Seven Bark - Did[?]nE[?]rw[?]•ski[?] (Olbrecht, 1932, N.A.), Did[?]nE[?]glis[?]•ki[?] (A.L.), "peal off"; Suluyilga[?] (Olbrecht, 1932), "swamp tree"; U[?]S[?]tahi[?] (T.L.).

- (1) An ingredient in the medicine accompanying Formula 15: 'For disordered bile'.
- (2) An ingredient in the medicine accompanying Formula 51: 'For menstruating women who dream of giving birth to animals or unnatural beings.'
- (3) To stop vomiting in infants from 18 months to 10 years, make a cold tea of the inner bark. Collect the bark when green. (N.A., A.L., T.L., Y.J., M.A.)
- (4) Bind on freshly scraped bark for burns or risings. (H.R.)
- (5) A poultice is made for sore or swollen muscles. (C.S.)

Saxifraga pensylvanica L., Swamp Saxifrage - ^dZo'liyustí (C.S.), "tobacco like"; A'wigang (N.C.)

- (1) The leaves are eaten green (as lettuce) in salads. (N.C.)
- (2) A root poultice is made for sore and swollen muscles. (C.S.)

Tiarella spp., Foamflower - Ad[?]galagiskí un Ega (T.L.).

- (1) A tea is held in the mouth to remove the white coat from the tongue. (T.L.)

HAMAMELIDACEAE

Hamamelis virginiana L., Witch Hazel - Kanasudá[\]wa (T.L.),

"witch hazel".

- (1) A bark decoction will relieve a sore throat. (Minnie Saunooke)
- (2) Pour hot water over the bark to make a tea for colds. (A.L.)
- (3) The bark of witch hazel and Lindera Benzoin, and the needles of Pinus virginiana are made into a hot decoction (boiling five or ten minutes). The patient drinks the tea, covers up and his fever "breaks out". (T.L.)

Liquidambar Styraciflua L., Sweetgum - ^dJilali (T.L.), ^dJi[·]li (N.A.), ^dZil[·]lu (A.L.), "sweetgum."

- (1) Boil for a short time the barks of sweetgum, Evonymus americanus, Vitis aestivalis, Platanus occidentalis, Fagus grandiflora, Smilax glauca, and Nyssa sylvatica - a tea for "bad disease". (T.L.)
- (2) Knock off a piece of the bark and return in a week to collect the hardened sap for chewing gum. (N.A., L.H.)
- (3) Of the inner bark a tea is made for nervous patients. (Witthoft, 1947b)
- (4) The gum is used for a drawing plaster. (Witthoft, 1947b)

PLATANACEAE

Platanus occidentalis L., Sycamore - Kuwá unE[·]ga (Olbrecht, 1932), "mulberry, big"; Kuwí yustí (T.L.), Kuwí yustí unE[·]? (A.L.), "like mulberry".

- (1) An ingredient in the medicine accompany Formula 22: 'For milky urine'.
- (2) An ingredient in the medicine accompanying Formula 49: 'For diarrhea or dysentery'.
- (3) An ingredient in the medicine accompanying Formula 51: 'For menstruating women who dream of giving birth to animals or unnatural beings.'
- (4) - An ingredient in the medicine accompanying Formula 86: 'For afterbirth'.

- A decoction of the roots of sycamore, Tsuga caroliniana, and Smilax glauca is drunk for afterbirth. (Olbrecht, 1932)

- (5) Boil for a short time the barks of sycamore, Liquidambar styraciflua, Evonymus americanus, Vitis aestivalis, Fagus grandiflora, Smilax glauca, and Nyssa sylvatica - a tea for bad disease. (T.L.)
- (6) When a sore becomes infected, wash it off with a bark ooze of sycamore. (A.L.)
- (7) Beat the bark fine and make a tea for infants. When their faces break out and peel wash with this tea and new skin will grow back like the young sprouts of a sycamore. (N.A.)

ROSACEAE

Agrimonia parviflora Ait., Agrimony - Unigánaschá nawatia^kstatí (A.L.),
K^dn jistugá unit^lig^tl^{do} Ei (Olbrecht, 1932).

(1) - Used in the medicine accompanying Formula 71: 'For bowel troubles'.

- Beat up the root balls, put in cold water and drink for bowels. (L.H.)

(2) When I was a girl and the children couldn't get enough food to fill them up, my mother gave them a root tea of this to satisfy their hunger. (A.L.)

Amelanchier canadensis (L.) Medic., Serviceberry - Uđ•l•nǎ (W.W.), Uđ•liní (A.L.), Uđ•k•ní (T.L.), N.A.) "serviceberry".

(1) An ingredient in the medicine accompanying Formula 78: "For bad diarrhea". (also W.W. and A.L.)

(2) The berries are canned for winter use. (N.A.)

Aruncus dioicus (Walt.) Fern., Goat's Beard - Tili yustí, (A.L., Y.J., T.L., M.A.), "chestnut like".

(1) Beat the root fine and boil for a while in water. Allow the tea to cool and drink while warm to stop excessive urination. (Y.J.)

(2) For bee stings in the face or eye, beat the root and apply. (A.L.)

(3) If the feet are swollen, make a root "ooze" (infusion) and bath the feet. (A.L.)

(4) A hot root tea given to pregnant women will keep them from losing too much blood at childbirth. It will also relieve suffering.

(N.A.)

Crataegus Spp., Hawthorn - TELini (A.L.), TE[•]kn[•] (T.L., N.A.),
"hawthorn".

- (1) Bark tea is drunk to give good circulation. (A.L.)
- (2) Bark tea of hawthorn or Gleditsia tricanthos is drunk or bathed in by ball players to ward off tacklers. "No one wants to run into the thorns (which these plants have)."

Gillenia stipulata (Muhl.) Baill., American Ipecac, Indian Physic.

- (1) The roots of Ipecac and G. trifoliata (or the whole plant) are made into a decoction. A pint of this is drunk when an emetic is needed. (Whitthoft, 1947b)

Gillenia trifoliata (L.) Muench, Indian Physic, Bowman's Root - AlEukil[•]stí (A.L.), Ul[•]ukil[•]stí (N.C.), UlEustí[•] (N.A.), "locusts are in a tree", "the locust frequents it"; Tiliyustí (W.W.), (?), "chestnut like".

- (1) Used in the medicines accompanying Formulas 25 and 31: 'For soreness in the muscles'.
- (2) This is a bad medicine. The steeped root, if drunk by a woman, will make her permanently sterile. "Alright to give to a woman if she cannot bear children and her life depends on it." (W.W.)

(3) Boil the root and drink the tea for bowel complaint accompanying fever and vomiting of yellow substance. (Mooney Ms. C.)

Two doctors state that it is good as a tea for bowel complaints, with fever and yellow vomiting, but another says that it is poisonous and that no decoction is ever drunk, but that the beaten root is a good poultice for swelling, (Mooney, 1885).

(4) - A cold root infusion will relieve bee stings. (A.L.)

- This is good for bee as well as other stings. Make a tea if you have time, or chew the root and apply the juice to the wound. (Y.J.)

(5) The roots of Bowman's root and G. stipulata (or the whole plant) are made into a decoction. A pint of this is drunk when an emetic is needed. (Witthoft, 1947b)

(6) The pounded root is a good toothache medicine. (N.C., N.A.)

Potentilla spp., Cinquefoil - Aniyuh'stí (A.L., N.A.), "strawberry like".

(1) A mouthwash tea of the finely beaten roots to cure the "thrash". (H.R.)

(2) A tea of it is given in fevers. (Witthoft, 1947b)

(3) In old times the ball players ate the root or bathed in a root tea to prevent injury. (A.L.)

(4) The night before the game the ball player would chew the root for wind. (N.A.)

Prunus pennsylvanica L., Fire Cherry - Ta'yá gadé'siEhí (W.W.),
 "cherry lives on mountains"; Kwan' unsti 'gá (Olbrecht, 1932),
 "peaches, they little."

(1) An ingredient in the medicine accompanying Formula 72:

'For flux'.

(2) A menstruating woman is forbidden to eat meat of any animal that is shot or it will make her sick. At the beginning of her period, on the first morning, she should drink a warm steep of this bark so that she can eat such meat. (W.W.)

Prunus Persica (L.) Sieb. & Zucc., Peach - Kwana' (A.L.), "peach".
 (Introduced)

(1) A bark steep is drunk for cough medicine. (A.L.)

(2) Soak the bark in cold water; use this tea to stop vomiting.

(M.A.) (M.A. stipulated that in collecting the bark for this medicine the knife must cut upward. For medicines used in treating the bowels the bark must be cut off in a downward motion. This is suggestive of ancient Indian practice, but no other informant mentioned it.)

(3) A tea of the bark and cold water is drunk for a sick stomach. (H.R.)

(4) Cold bark tea and soda is applied to piles. (L.H.)

Prunus serotina Ehrh., Wild Cherry - Ta'yá (A.L., T.L., N.A.),

"cherry"; Ta'y^hEluEhi (W.W.), "cherry lowland"; P^hya im^hgEhi'i (Olbrecht, 1932), "cherry lives on mountains".

(1) - An inner bark decoction is drunk for fever. (T.L.; Witthoft, 1947b, Y.J.)

- A decoction of the barks of wild cherry and Clethra acuminata is drunk to break high fever. (A.L.)

(2) The wood is used for carving. (Leftwich, 1952).

(3) Boil together the barks of wild cherry, Lindera Benzoin, and Cornus florida. This tea, added to pure corn whiskey, is drunk to break out the measles. (A.L.)

(4) A bark tea will break up colds. (H.R.)

(5) A thick bark decoction is taken for coughs. (M.A.)

(6) A bark infusion is drunk by women just before delivery at the first pangs of childbirth. (Olbrecht, 1932)

(7) A decoction of wild cherry, Alnus serrulata, Goodyera pubescens, Asarum canadense, and Xanthorhiza simplicissima is a good blood tonic. "Take several swallows before meal . . . builds the appetite." (M.A.)

Prunus virginiana L., Choke Cherry - T^hya (Olbrecht, 1932), "cherry". (This species reported by Olbrecht)

(1) An ingredient in the medicine accompanying Formula 1: 'For fever'.

(2) An ingredient in the medicine accompanying Formula 86: 'For

indigestion'.

(3) An ingredient in the medicine accompanying Formula 21: 'For hoarseness'.

Pyrus Malus L., Apple - Sunktá "apple"; Sonktá anĒy, 'stá Sh^h?t zusti, inġEEhí "apple" (introduced)

(1) Used in the medicine accompanying Formula 21: "For aggravated hoarseness".

(2) The bark is used in a yellow fabric dye. (Leftwich, 1952)

(3) Mix the bark of an apple tree with the "bark" of a two year old corn stalk and make a cold steep. To be drunk by the ball players for dry throat. (Source forgotten.)

(4) In a bucket of apple juice is put the stem of Vicia caroliniana and the needles of Pinus virginiana which is drunk by the ball players for wind during the game. (N.A.)

Rosa virginiana Mill., Wild Rose - Adayákali'ski (W.W.) "to choke us".

(1) "If you chew leaves, they stick in mouth and throat and choke you. Use bark from stem in medicine without other ingredients." (W.W.)

(2) The roots are boiled and the tea is drunk for dysentery. (Witthoft, 1947b)

Rubus argutus - Nuga^{la} gadu^{sEhi} (A.L.), "blackberry, mountain".

- (1) A root tea for bowel complaint. (A.L.)

Rubus flagellaris Willd., Blackberry - Nu^{ga} ^{ti} (Olbrecht, 1932),
Nuga^{la} (A.L.), "blackberry".

- (1) An ingredient in the medicine accompanying Formula 55: 'For irregular urination'.
(2) Wash the root, chew it to take the coat off the tongue. (T.L.)
(3) - Root tea is drunk for summer complaint. (H.R.)
- Root tea for dysentery. (M.A.)
(4) The root is good to chew for cough. (J. Witthoft, 1947b).

Rubus idaeus L., Raspberry - S^{andi}wa^{ti} (W.W.), Soti^{wu} ^{di} (Olbrecht, 1932) "raspberry".

- (1) An ingredient in the medicine accompanying Formula 51: 'For menstruating women who dream of giving birth to animals or unnatural beings'.
(2) If two sisters have babies and one of the sisters dies, the other sister can nurse the dead sister's baby only if the baby takes a medicine before suckling, otherwise, it will sicken and die. Steep the root of regular wild raspberry growing toward the East and have the baby drink before suckling. (W.W.)

Rubus occidentalis L., BlackRaspberry - Soti^{wu} ^{di} (Olbrecht, 1932),

"raspberry" Nugatis (T.L.), "blackberry".

(1) An ingredient in the medicine accompanying Formula 51: "For menstruating women who dream of giving birth to animals or unnatural beings".

(2) The roots are used for toothache (it is bitter). (T.L.)

(3) "There used to be an old man who made medicines for us in the ball game. We would chew on the root of this and never miss a tackle because of the briars on the stem." N.A.)

(4) This and other vines with briars are used for surgical scratching. (Olbrecht, 1932)

Rubus trivialis Michx., Dewberry (identification uncertain, on basis of common name.

(1) The roots of dewberry, Pinus virginiana, and Alnus serrulata (a handful of each) are made into a tea which is good for piles. The tea is drunk and used as a bath. (A.L.)

LEGUMINOSAE

Amphicarpa bracteata (L.) Fern., Hog Peanut - Tuyá yustí (T.L.), "bean like", Anistí (W.W.), "Threads".

(1) For snakebite, brew the root and blow the tea on the wound with a prayer and a song. Chewing tobacco can be used as a substitute. (W.W.)

(2) The herb has a round, edible root. (W.W.)

(3) A root tea is drunk for diarrhea. (A.L.)

Baptisia tinctoria (L.) R. Br., Wild Indigo, Rattlesnake Weed - Aliw^hteski (A.L., T.L.), Diniliw^hteski (W.W.), Galiw^htahEski (Y.J.) Di^y sh^hdbudi^hski (N.A.), "leaves moving about in every direction", "waving in the wind".

(1) - The root is washed, beaten, and put in hollow tooth for toothache. (A.L., Y.J., Lottie May Squirrel.)

- Hold a root tea against the tooth. "It will decay the tooth to the root. . . . you'll never have a toothache in the same tooth." (N.A.)

(2) The roots afford a blue dye for fabrics.. (Leftwich, 1952)

(3) A cold tea will stop vomiting. (Lloyd Lambert.)

Cassia fasciculata Michx., Partridge-Pea-Gamgid^h (M.S.), "has been taken out".

(1) A medicine of the roots is given to the ball players to keep them from getting tired. (T.L.)

(2) A tea of partridge pea and C. marilandica is taken for fainting spells. (A.L.)

(3) "The name and behavior of this plant is sexually symbolic. It is forbidden for man to handle the plant, as it is forbidden for him to handle his penis - if he does his penis will die. A

woman can gather this plant and prepare it for medicine. Rub the scraped root on a woman's vulva, makes a man's penis go right in without difficulty; for man who is old or impotent and unable to enter." (M.S. - copied from the field notes of John Witthoft with minor editions to improve continuity.)

Cassia nictitans L., Wild Sensitive Plant - UnàgEí' t'sagay'EHí (W.W.), "black, grow in old fields". The writer believes that the names and usages assigned to C. fasciculata are also applicable to wild sensitive plant.

Cassia marilandica L., Wild Senna - UnàgEí, n'Ekeí (W.W.), Unìg'í (N.A.), GunàgEí (M.D.), "black"; Utan' unìgE'í (W.W.), AnàgEí utan (A.L.), "big black"; Di'stayí (C.S.) "they are tough".

(1) Used for a disease called "black", when a person becomes black around the mouth and eyes - a deadly disease (Cerebral hemorrhage?). Also used for heart trouble. The roots are steeped in hot water; a formula is recited. (W.W.)

" . . . decoction drunk for . . . disease also called "black" in which the hands and the eye sockets are said to turn black; also for a disease described as similar to Unagi'i, but more dangerous, in which the sockets become black, while black spots appear on the arms, legs, and over the ribs on one side of the body, accompanied by partial paralysis, and resulting in death should the spots appear also on the other side."

(2) A tea of wild senna and C. fasciculata is taken for fainting

spells. (A.L.)

(3) If you have a sprained arm, try to pull up this plant with it. It can't be done, but the arm will be cured. (C.S.)

(4) Wild senna is one of the ingredients in a medicine for pneumonia. (Source forgotten.)

(5) The leaf tea is a laxative. (M.O.)

(6) For high fever in children, give them a root tea of this.

(A. Sequoyah; Mooney, 1885)

(7) A tea for cramps in grown ups or children. (N.A.)

(8) The bruised and moistened root is used to poultice sores.

(Mooney, 1885)

Cercis canadensis L., Redbud - Kwaniyustí (A.L.), "like peaches".

(1) A bark tea for whooping cough. (A.L.)

(2) Children are fond of eating the blossom. (Witthoft, 1947b).

Clitoria mariana L., Butterfly Pea - Tuyaiyuh'stí (N.A.), "pea like", Unagladel^dzustí (A.L.), "pea, little".

(1) For sore mouth (thrush) in grownups or babies. Hold the root tea in mouth for ten to twenty minutes and spit out. Take another mouthful of fresh tea. (N.A.)

Coronilla varia L., Crown Vetch - Unag^oustiyu' (W.W.), "black little"; Un^ts^hstá u'tan^o (Olbrecht, 1932), Egw^hz^hstí (A.L.). (introduced)

- (1) An ingredient in the medicine accompanying Formula 20: 'For spoiled saliva caused by dreaming of snakes'.
- (2) Smash the roots, stems and leaves and rub on for rheumatism or cramps. (W.W.)
- (3) When ball players are bathed in a steep of this, it will keep them from getting hurt. An old time Indian medicine. (A.L.)

Desmodium nudiflorum (L.) DC., Tick Trefoil, Devil's Shoe String - Unita[•]LE[•]isti[•]nday[•]la^dgi (W.W.), "they come to stick on your clothes"; Skinokan[•]sd[•] (A.L.)

- (1) Make a tea of the roots and bathe body for cramps. (A.L.)
- (2) "Get this and as many other "stick on" plants as you can, including beggar's lice (Cynoglossum officinale), boil, drink and vomit large quantities of it every four days for bad memory. Then you will remember everything" (W.W.)

Gleditsia triacanthos L., Honey Locust - Ka^tshadzi[•] (W.W.), Ka[•]LE[•]gi^d (T.L. & A.L.), Ka[•]LE[•]gi^d (N.A.), "honey locust".

- (1) An ingredient in the medicine accompanying Formula 46: 'For indigestion'.
- (2) Bark tea of honey locust or Crataegus spp. is drunk or bathed in by ball players to ward off tacklers. "No one wants to run into the thorns (which these plants have)." (A.L.)
- (3) A hot tea of the bark of honey locust and the leaves of Tovara

virginiana is given to those with whooping cough. (N.A.)

(4) Beat up the pods fine, make a tea for measles. (N.A.)

Glycine apios L., Wild Bean - Anis'tí (W.W.), "threads";

Tuyúⁱyustí (W.W.), "bean like".

(1) Used in a "green corn" medicine.

- Will West Long states that a medicine was also drunk by the more conservative families of the Big Cove. This medicine passed out of usage about 1895. Leaves and stems of the wild bean were steeped in hot water and the liquor drunk to prevent damage to the stomach by the new beans.

No evidence remains of the associated procedure. (Olbrecht, 1932).

(2) "Let chipmunks collect the roots . . . raid the chipmunks' dens in Fall, replace the stolen beans with corn." The beans are used in bread. (T.L.)

Lupinus spp. Lupine - ʔgá^lí egwá (N.A.). " . . . big."

(1) Drink and wash with a cold tea made of the entire plant to check hemorrhage and vomiting. Soak head in the tea to stop vomiting. (N.A.)

Stylosanthes biflora (L.) B.S.P., Pencil Flower, Squaw Vine.

Ganigwili^lski (A.L.), "clotted blood" or "it is bruised".

(1) A hot tea of the roots is used for female complaint. (A.L.)

(2) A decoction of the four varieties of Ganigwiliskí - Scutellaria lateriflora, S. elliptica, Hypericum spp. and Stylosanthes spp. is drunk to promote menstruation, and the same decoction is also drunk and used as a wash to counteract the ill effects of eating food prepared by a woman in the menstrual condition, or when such a woman by chance comes into a sick room or a house under a tabu. (Mooney, 1885)

Tephrosia virginiana (L.) Pers., Rabbit Pea, Catgut - U^dza·daliⁱyustiⁱ gadusa·Ehí (N.A.), "pea like, grows on a mountain": Tuyunstiⁱ nEgE·nEhí (C.S.) "bean, small wild," DisTayⁱ (Olbrecht, 1932, N.C.), Al^dzsu^tn^a (A.L.).

(1) The roots were boiled and the tea was given to children to make them strong and muscular. (Olbrecht, 1932).

(2) - A tea was given to the ball players to transfer the toughness of its root to the muscles. (N.A.)

- The root tea was a ball player's remedy. The thighs were scratched and washed with the tea. (N.C.)

. . . Women wash their hair in a decoction of its roots to prevent its breaking or falling out, because these roots are very tough and hard to break, from the same idea ball players rub the decoction on their limbs after scratching to toughen them. (Mooney, 1885)

(3) The decoction is drunk to cure lassitude. (Mooney, 1885)

(4) The root is used with other ingredients in a medicine for

kidney trouble. (C.S.)

(5) A good medicine for cramps. Scratch the limb and apply a tea made of the root and stem. (A.L.)

Trifolium pratense L., Clover.

(1) A tea is made for fevers. (H.R.)

Vicia caroliniana Walt., Vetch - $\text{A}^t \text{sostí}$ (W.W.), $\text{Al}^d \text{z}^u \text{stá}$ (W.W. T.L., N.A.), "a wreath for the head"; $\text{U}^t \text{sstá ustigá}$ (Olbrecht, 1932), "a wreath for the head, little".

(1) An ingredient in the medicine accompanying Formula 20: 'For spoiled saliva caused by dreaming of snakes'.

(2) An ingredient in the medicine accompanying Formula 28: 'For local pains, twitchings, cramps, etc. caused by dreams and revengeful animal spirits'.

(3) The stem of vetch and the needles of Pinus virginiana are put in a bucket with apple juice and drunk by the ball players for wind during the game. (N.A.)

(4) A decoction is rubbed on the ball players after scratching to render their muscles tough. (Mooney, 1885)

(5) Rub on a cold root tea made of the roots and leaves to relieve cramps. (Y.J., Mooney, 1885)

(6) An ingredient in a medicine for rheumatism. (Mooney,

1885.)

"One of the Cherokees' most valuable medicinal herbs."
(Mooney, 1885)

LINACEAE

Linum usitatissimum L., Flax - $\text{Dale}^t \text{da}^t \text{suta}^t \text{an}^t$, ". . . washes patient with." (Identified only through common name.) (introduced)

(1) Used in the medicine accompanying Formula 48: "For fever attacks".

OXALIDACEAE

Oxalis spp., Sorrel - $\text{d}^d \text{Juni}^d \text{j}^d \text{sti}$ (T.L.), $\text{dJu}^d \text{z}^d \text{isti}$ (W.W.), $\text{d}^d \text{Zunazoyusti}$ (Y.J.), $\text{d}^d \text{Juy}^d \text{sti}$ (C.S.), "sour", $\text{Gan}^d \text{zu}^? \text{di}$ (A.L.).

(1) A cold leaf tea will stop vomiting. (A.L.)

(2) Chew the leaves for "disordered saliva" (when the saliva tastes bitter and dry - this is not spoiled saliva.) (W.W.)

(3) Another kind of sorrel is chewed to cure spoiled saliva. (W.W.)

(4) Mix a leaf decoction with sheep grease. Put this salve on sores. (L.H.)

(5) Make a tea of the entire plant - Give to children to drink and bathe them with it to remove hookworm. (A.L.)

(6) Good for cancer when it is first started. Extract.

the juice from the leaves by wilting and crushing them. Rub the juice on the sores with the fingers. (Y.J.)

GERANIACEAE

Geranium maculatum L., Wild Geranium - Adankalà · 'skí (W.W.),
Andankàlagiskí (Mooney Ms) "it removes things from the gums".

(1) - It removes things (canker sores) from the gums. (M.S.)

- Steep the leaves and blow the tea into the mouth with
a prayer. (Mooney Ms. C.)

POLYGALACEAE

Polygala spp., Milkwort.

(1) A tea of the whole plant or roots is taken for summer
complaint. (A.L.)

Polygala Senega L., Senega L., Seneca Snakeroot. (Identification
only for common name.)

(1) For snakebite -

. . . Every one carries in his shot pouch a
piece of the best snake root, such as Seneeka, or
fern snake root, or the wild horehound, wild
plantain, St. Andrew's cross, and a variety of other
herbs and roots, which are plenty, . . . When an
Indian perceives he is struck by a snake, he
immediately chews some of the root, and having

swallowed a sufficient quantity of it he applies some to the wound; which he repeats as the occasion required and in a proportion to the poison the snake has infused into the wound. (Adair, 1775)

EUPHORBIACEAE

Euphorbia spp., Ground Milkweed - Ganigwiliskí (T.L.), "clotted blood" or "it is bruised".

(1) A cupfull of warm tea is given to a mother after the baby is born to stop the bleeding. (T.L.)

Euphorbia corollata L., Flowering Spurge, Milkweed - U'kaataskiski (Mooney, Ms.) Ugat'agsiski (A.L.) "pus it oozes out"; Gigag^E uⁱ-yòdu^{wi} dá (Y.J.) "blood like, it is covered"; U'stag^d hi ustigá (Olbrecht, 1932) "it leaning against, it is little"; Unaxiyustí ataskiskí (N.A.) "milk like, comes out of".

(1) - An ingredient in the medicines accompanying Formulas 6 and 94: 'For urinary trouble'.

- Make a tea of the bruised stem for glut(white urine).

Drink about a pint of the tea early in the morning and again before dinner - take for two or three days. (Mooney Ms. C.)

(2) - Put the root in hollowed tooth to stop toothache. (Y.J.)

- Scrape the bark from the root and use for toothache.

(A.L.)

(3) - Put the milky ooze from the stem and leaves on sores and

leaves on sores and pimples. (A.L., N.A., Kimsey Squirrel)

- Put the milk on warts. (M.A.)

Euphorbia maculata L., Eyebane - Uḡtəsgisgí (Olbrecht, 1932, "pus it oozes out".

(1) An ingredient in the medicine accompanying Formula 94: 'For when they urinate white.'

(2) The juice is rubbed on for skin eruption, especially on children's heads. Also used for sore nipples. (Mooney, 1885).

(3) The juice is used as a purgative. (Ibid.)

(4) A decoction is drunk for gonorrhea and similar diseases in both sexes, and is held in high estimation for this purpose. (Ibid.)

(5) The herb is an ingredient in a medicine for cancer. (Ibid.)

ANACARDIACEAE

Rhus copallina L., Dwarf, or Shining Sumac - Da'lóní (Olbrecht, 1932). "yellow".

(1) An ingredient in the medicine accompanying Formula 53: 'For water blisters'.

Rhus glabra L., Smooth Sumac - Kwalḡḡ(A.L.), Kwalḡḡ (W.W., T.L.), "sumac"; Kḡlogwḡstiyú anidḡwikḡḡEi (W.W.), "sumac small, they are smooth"; Kḡlḡ'ḡwḡdidḡwiskḡḡEhí (W.W.).

(1) An ingredient in the medicine accompanying Formula 53: 'For water blisters'.

(2) - A mother, wishing to raise her child as a witch, fasts her new born baby for several days, then drinks a bark decoction that her milk might flow abundantly. (Olbrecht, 1932.)

- A cold tea of the roots is used by old women to make their milk flow. (T.L.)

(3) For convulsions of people and animals when the brain has been affected, a root steep is blown all over the hot areas. A prayer is said. (W.W.)

(4) Use this and another variety of sumac for "clapps" (gonorrhea). Make a tea of the berries and roots of sumac and the root of another herb, drink four times daily. (N.A.)

(5) The red berries are eaten for kidney trouble or to stop the bed wetting of children. (A.L., H.R.)

(6) A cold tea of the scraped bark is drunk for bowel trouble. (L.H.)

(7) Gargle the berry tea for tonsillitis. (M.A.)

- For sores on the arm or in the mouth during dog days, make a cold water infusion of the youngest roots of sumac. For young children, lance the blisters with a pin, allowing the water to drain, and rub on the tea. (Y.J.)

Rhus radicans L., Poison Ivy - Higina^{lif}, (Mooney Ms.), "my friend";

U^dlɔdǎ (Olbrecht, 1932), U^tlɔdǎ, U^tlɔdǎ́ (A.L.).

- (1) An ingredient in the medicine accompanying Formula 20: 'For spoiled saliva'.

Rhus typhina L., Staghorn Sumac.

- (1) An ingredient in the medicine accompanying Formula 53: 'For water blisters'.

AQUIFOLIACEAE

Ilex opaca Ait., American Holly - Ustastí (A.L., W.W.), "shaking of the top".

- (1) Scratch muscles with the leaves where sore with cramps. (A.L.)
 (2) - The wood is used for carving specialties. (Leftwich, 1952)
 - Spoons are made of the wood. (Witthoft, 1947b)
 (3) The berries are used in a dye. (Witthoft, 1947b)

CELASTRACEAE

Evonymus (Euonymus) americanus L., Hearts-A-Bustin' with Love, Swamp Dogwood, Cat's Paw - ^dJuwǎdunǎ́ (A.L.), "they have sinews," "it is big".

- (1) An ingredient in the medicine accompanying Formula 55: "For irregular urination."

- (2) Boil for a short time the barks of cat's paw, Liquidambar Styraciflua, Vitis aestivalis, Platanus occidentalis, Fagus grandiflora Smilax glauca, and Nyssa sylvatica - a tea for "bad disease", (T.L.)
- (3) Drink a root steep at bedtime for "clapps" (gonorrhea). It will be cured in three or four days. (T.L.)
- (4) A warm tea is taken for stomach ache. (A.L.)
- (5) Scrape the bark in Springtime and make a tea; rub on for cramps in the "veins". (N.A.)
- (6) Root tea is drunk for falling of the womb. (A.L.)

ACERACEAE

Acer rubrum L., Red Maple - Tchunawakí (W.W.), ^hLuhawakí (W.W.), Tchawagí (N.A.), ^dSuwagí (T.L.), ~~Kiwagí~~, GígagÉ a ^dZilα'skí (Olbrecht, 1932), "Blood-like, it is a flower", ~~Kiwagí~~ (A.L.) "red-maple".

- (1) Steep and boil the bark; drink the tea for dysentery. (W.W.)
- (2) The inner bark is boiled into a heavy syrup and made into pills. These are dissolved in water which is used as an eyewash for sore eyes. (Witthoft, 1947b)
- (3) Drink a tea when people have red spots (hives). (A.L.)
- (4) Boil the bark and steam the eyes to help blindness. (T.L.)
- (5) A steep of the barks of four trees is a good medicine for

monthly female trouble: red maples, Quercus alba, Q. nigra, and Castanea dentata. (Y.J.)

Acer saccharinum L., Silver Maple - (some of the Cherokee names for A. rubrum, above, doubtless apply also to other maples.)

(1) Hot bark tea taken for measles. (Amonite Sequoyah.)

HIPPOCASTANACEAE

Aesculus Pavia L., Uskwat 'í, Uniskwáda (W.W.), Oskwadá (A.L.) Uniskwutú (W.W.), GalagEná akató, (M.O.) "buckeye" (the last Cherokee name cited is a literal translation, "buck eye", the preceding are Cherokee proper names.) (Identification by Olbrecht)

(1) An ingredient in the medicine accompanying Formula 46: 'For indigestion.'

(2) - The nuts are pounded and used in a poultice. (Witthoft, 1947b.)

- Scrape the meat out of a nut and make a salve for sores. (N.C., A.L.)

(3) Carry a nut in your pocket to cure piles. (N.C.)

(4) When a person feels queer, as if he is going to faint or as if a fit is coming on, scrape out some of the meat of a nut, grind it into flour; and steep it in warm water. Drink. (W.W.)

(5) - A bark tea is drunk by pregnant women to facilitate

delivery. (A.L.)

(6) Sometimes women, after giving birth to a baby, won't stop bleeding and they take cramps. Prepare a cold infusion of the barks of buckeye and Castanea dentata and give them to drink." . . . not too much or it will stop everything." (Y.J.)

(7) Buckeye wood is used in carving. It was a favorite wood in carving large dishes. (A.L.)

(8) The bark is used as a fish poison. (Witthoft, 1947b).

(9) Small pieces of the nut are chewed, and the juice is swallowed for colic. (M.O.)

BALSAMINACEAE

Impatiens capensis Meerb., Orange, or Spotted Touch-me-not -
Walelú unigle^dgístí (N.C.), Walelú una^dzilagístí (Olbrecht, 1932,
A.L.), "humming bird, taking soup out of the flower", Agi 'ka'í gá
(W.W.), "fauns knee."

(1) An ingredient in the green corn medicine with Andropogon virginicus, Zea Mays, and Cucurbita pepo. (M.S.)

- In a second green corn medicine (see appendix) it is an alternate ingredient. (W.W.)

(2) - A decoction including the stem of touch-me-not the cone of Pinus pungens, the root of Veronica officinalis, and the bark

of Ulmus rubra is given to pregnant women before going to the water each new moon. Touch-me-not is used because the exploding character of the ripe fruits is believed to expedite delivery. (Olbrecht, 1932.)

- The woman's vulva is bathed with a warm decoction of touch-me-not if delivery is difficult. (Olbrecht, 1932: N.C., M.S.)

- Make a tea of the stalks. Beginning in her sixth month of pregnancy, a mother will drink this tea every day until her child is born. (Y.J.)

(3) Crush the leaves in hand and rub on a child's stomach for sourness. (A.L.)

(4) A leaf tea is drunk for measles. (H.A.)

(5) A root tea is drunk for "bold hives" in babies. (M.A.)

(6) Rub the leaves on body to cure "poison oak". (L.H.)

(7) The blossoms are used in making an apricot dye for fabrics. (Leftwich, 1952.)

Impatiens pallida Nutt., Yellow Touch-me-not. While a few medicines call for a specific color of touch-me-not to be used as in ingredient, there is little uniformity. Apparently W.W. recognized a difference in the two touch-me-nots, but A.L., for one, draws no line of distinction, and considers them the same plant. The writer accepts the latter view as the most common, and believes that the Cherokee names and usages for I. capensis are, on the whole, applicable to yellow

touch-me-not. In (1), above, Olbrecht quotes W.W. as specifying I. capensis.

RHAMNACEAE

Ceanothus americanus L., New Jersey Tea - Elis'galá (N.A., T.L., N.C.), Elis'ka (A.L.).

(1) When "tired in the chest", drink as much of the warm tea as you can and vomit. (T.L.) T.L. adds that when the flowers of this plant are out, snakes are most apt to strike. . . .

(2) Take the root and make a hot tea for bowel complaint. Drink before bedtime. (N.A., A.L.)

VITACEAE

Ampelopsis cordata Michx., Un'sugá (Olbrecht, 1932,) "toes in the liquid".

(1) An ingredient in the medicine accompanying Formula 55: 'For irregular urination'.

(2) An ingredient in the medicine accompanying Formula 78: 'For bad diarrhea.

Vitis aestivalis Michx., Summer Grape - TE'lo dí (Olbrecht, 1932), TEL'ladí (T.L.), TEL'ladí (A.L.), "it hangs down."

(1) An ingredient in the medicine accompanying Formula 55:

'For irregular urination.'

(2) An ingredient in the medicine accompanying Formula 78:

'For bad diarrhea'.

(3) Boil for a short time the barks of summer grape, Evonymus americanus, Liquidambar Styraciflua, Platanus occidentalis, Fagus grandiflora, Smilax glauca, and Nyssa sylvatica - a tea for "bad disease". (T.L.)

(4) The grapes are eaten as food. (T.L.)

Vitis Labrusca L., Fox Grape - TEL^αh^αdí (W.W.), "berries hanging on"; Kw^αlu^d*sí (Olbrecht, 1932), Kwa lu s^α (T.L.), "blisters".

(1) An ingredient in the medicine accompanying Formula 55: 'For irregular urination'.

(2) The grapes are eaten as food. (W.W.)

TILIACEAE

Tilia americana L., American Basswood - Id^αh^α (A.L.), IdEh^α (Olbrecht, 1932), I^tEh^α (W.W.), "basswood".

(1) An ingredient in the medicine accompanying Formula 49: 'For diarrhea.'

(2) - Chew the bark and spit the juice on a snakebite. The tree must be one struck by lightning. (Mooney Ms. C.)

- Beat the bark and make a cold tea for snakebite.

"They've used it for dogs". Drink and bathe in it. (A.L.)

(3) An infusion drunk for the cure of a type of tuberculosis caused by incantation includes the barks of basswood, Quercus spp., Castanea dentata, Carya spp., Fagus grandifolia and Liriodendron Tulipifera. (W.W.)

(4) The wood is used for carving. (N.A.)

(5) Beat the bark and make a poultice for boils. (M.A.)

Tilia heterophylla Vent., White Basswood --

The dried specimen which the writer used for his work with various informants was the leaf of a cultivated basswood, which, of course, was not native to the area. Each informant recognized it immediately as a basswood and gave a name for it, but a few persons remarked that it looked "different". The writer concludes that no distinctions are drawn between the several species of basswood (other than habitat location) and that the Cherokee name and usage for T. americana above, applies also to white basswood.

GUTTIFERAE

Ascyrum Hypericoides L., St. Peter's Wort, St. Andrew's Cross, Feeble Weed -- Ganigwaliskí ayatǎlí (W.W.), "clotted blood, flat on ground"; Distayí (N.A., A.L.).

(1) To give infants strength, bathe them in a warm or cold root

tea. "Some babies will walk at eight or nine months with this."

(N.A.)

(2) Make a tea with as much as you can hold in your hand. To break a fever, drink this and go to bed. (A.L.)

(3) For snakebite (see Polygala Senega) (Adair, 1775).

Hypericum perforatum L., St. John's Wort, Flux Weed - Giga^djuyaiⁱ (N.A.), "blood, it has them in it"; Ganigwa^dliskiⁱ (Olbrecht, 1932) "clotted blood" or "it is bruised". (introduced)

(1) - The top leaves are made into a tea for bloody flux. (H.R.)

- Beat the roots fine and make a cold root tea. Drink as much as you can for bowel complaint. (N.A.)

(2) A decoction of the four varieties of Ganigwiliskiⁱ -

Scutellaria lateriflora, S. elliptica, Hypericum spp., and Stylosanthes spp. is drunk to promote menstruation, and the same decoction is also drunk and used as a wash to counteract the ill effects of eating food prepared by a woman in the menstrual condition, or when such a woman by chance comes into a sick room or house under a tabu. (Mooney, 1885)

CISTACEAE

Helianthemum spp., .Frostweed - GEg^{no}wEdowid^s (M.S.)

(1) Steep the leaves of either of these in cold water, drink for for kidney trouble. (M.S.)

VIOLACEAE

Viola pedata L., Pansey Violet, Johnny Jump Up, Dendasd~~a~~ski (N.C.).

(1) Crush the roots and make a poultice for boils. (M.A.)

Viola rotundifolia Michx., Round Leaved Violet - Din~~a~~dask~~a~~dE^íski (A.L.), KanEs^íi (N.A.), Andas~~h~~w~~a~~dEski (T.L.).

(1) Beat the root fine and make a tea to doctor corn with before planting. Keeps insects from destroying the corn. (N.A.)

PASSIFLORACEAE

Passiflora incarnata L., Passion Flower, Apricot Vine -

NEskwetukí (C.S.), "apricot"; Uw~~a~~g^á (N.A.), U^wwagá (N.C., A.L., T.L.)

(1) - The fruit is edible. (T.L.)

- Boil the fruit until syrupy, or eat raw. For a drink, crush the fruit, remove the seeds and mix the pulp with water. (C.S.)

(2) - It is just like apricot, but it has a small non edible berry. For brier or locust wounds, pound the root and apply to the sores. It will draw out the inflammation. (W.W.)

- One of the ingredients in a root tea for boils. (N.C.)
- (3) Beat up the root in warm water, drop into ear for ear-ache. (A.L.)
- (4) For babies who are hard to wean, make a tea of the roots and give to the six month old baby. At one year the baby will "drop off the breast" as an apricot drops off the vine. (N.A.)

NYSSACEAE

Nyssa sylvatica Marsh., Black Gum - Unigwá (W.W.), Unikwá (A.L.), "black gum".

- (1) An ingredient in the medicine accompanying Formula 34: 'For when the stomach is yellow'.
- (2) An ingredient in the medicines accompanying Formula 38 and 95: 'For urinary difficulty'.
- (3) - An ingredient in the medicine accompanying Formula 78: 'For diarrhea'.

- A bark steep is drunk for dysentery. (W.W.)

- (4) Boil for a short time the barks of black gum, Evonymus americanus, Vitis aestivalis, Liquidambar Styraciflua, Platanus occidentalis, Fagus grandiflora and Smilax glauca - a tea for bad disease. (T.L.)
- (5) Make a strong root ooze for the eyes. Wrap the ooze in a cloth and allow it to drip into the eyes. (A.L.)
- (6) A root tea is given by midwives to pregnant women to facilitate

delivery. "It gets the pains to working right." (H.R.)

(7) Cut up the bark and make a tea for "flooding" (excessive bleeding) in women. (M.A.)

ONAGRACEAE

Oenothera Spp., Evening Primrose, Hog Weed - Andꝛsꝛ Egwá (T.L.)

"big trout"; Sikwá unìgístí (A.L.), "the hog eats it".

(1) Eat the greens when young. (T.L.)

(2) Beat the roots fine, heat them, and make a poultice for piles.
(T.L.)

ARALIACEAE

Aralia nudicaulis L. Sarsaparilla -

(1) Drink a root tea for the blood. (A.L.)

Aralia racemosa L., Spikenard -

(1) Drink a root tea for backache, kidneys and lumbago: (M.A.,
H.R., A.L.)

Aralia spinosa L., Devil's Walking Stick, Angelica Tree -

U^dzakidá (A.L.), Yonꝛuni^{hi} yagístí (T.L.).

(1) Make a salve of the roots for old sores. (A.L.)

- (2) Bathe in a root ooze to cure paralysis. (A.L.)
- (3) A decoction of the roasted and pounded roots is given as an emetic. It is very strong; green it is poisonous. (Witthoft, 1947b)

Panax trifolius L., Dwarf Ginseng - Odàligalí (T.L.), gunstiga (M.S.), "mountain, he climbs"; Odaligalí, Ataligalí (N.C.), Odaligalí (A.L., N.A.)

- (1) An ingredient in the medicines accompanying Formulas 2 and 82: 'For headache'.
- (2) An ingredient in the medicine accompanying Formula 24: 'For breast pains.'
- (3) An ingredient in the medicine accompanying Formula 24: 'For fits, apoplexy'.
- (4) Along with other ingredients, a tea is made for "Baldhives", a childrens' disease that will bring death in two or three hours.
- (5) "A root which never fails curing the most inveterate venereal disease." (Timberlake.)
- (6) Take a tea of the roots as stomach medicine. (A.L.)
- (7) - Chew the root for short breath, coughing. (T.L.)
- Take a bite of the root every noon, and swallow. (N.A.)
- (8) Chew the root for colic, or make a hot water infusion.
(H.R., M.A.)
- Chew the root for sore side. (L.H.)
- (9) Beat the roots of gingseng and Erythronium americanum and

make a cold infusion which is good for fainting persons. (Y.J.)

The herb is one which is stored by medicine men, rather than collected only when needed. (Olbrecht, 1932)

Panax quinquefolius L., Ginseng, Sang

The Cherokee name and usages for this and P. trifolius are believed to be approximately the same. In a few cases the informant specified "small" or "large" 'sang'.

- (1) A poultice of the beaten roots is used for boils. (M.A.)
- (2) A decoction of the root is drunk for headaches, cramps, etc., and for female trouble. (Mooney, 1885)
- (3) The chewed root is blown on the sore spot for pains in the side. (Mooney, 1885)

The Cherokees sell large quantities of "sang" to the traders for fifty cents per pound, nearly equivalent to two days wages, a fact which has doubtless increased their idea of its importance. (Ibid.)

UMBELLIFERAE

Angelica Venenosa (Greenway) Fern., Water Parsnip - GənEldá (T.L.), GənEldá (A.L.).

- (1) Wash hands with a leaf infusion seven days after handling a corpse. (T.L.)
- (2) A tea is drunk by pregnant women. (A.L.)

Cicuta maculata L., Poison Hemlock - Tiliyustí (Olbrecht, 1932), "chestnut like" (?); Kanàsola (T.L.).

(1) A plant the old timers used to find out how long they would live. They would chew the roots, if they got dizzy they would die soon - if not, they would live a long time. (A.L.)

(2) The root is chewed and swallowed for four days consecutively by women who wish to become sterile. (Olbrecht, 1932)

(This information may have been given to Olbrecht who was over zealous in obtaining information of an intimate nature. This was possibly a little joke played on Olbrecht, who was unaware of the poisonous quality of the plant.)

(3) It kills what eats it. Corn is soaked in a root tea before planting to repel insect pests. (H.R.)

Eryngium yuccifolium Michx., Button Snakeroot, Rattlesnake Master - UwEtí (Olbrecht, 1932), SElakwɔ'yá (T.L.), SE'likwɔ'yá (Olbrecht, 1932).

(1) Used in the medicine accompanying Formula 50: 'For stomach trouble caused by bad odors'.

(2) "White folks used it for string to tie up hog meat." (A.L.)

(3) A root tea is held in the mouth for toothache. (M.A.)

(4) A decoction is given to children to prevent them from catching whooping cough. (Olbrecht, 1932)

Oxypolis rigidior (L.) C & R, Cowbane, Wild Potato - NunàagodanEí

(T.L.).

(1) The root is baked and eaten. (T.L.)

Pastinaca sativa L., Wild Parsnip - K~~an~~so^{cu}l⁵' (Olbrecht, 1932),
(introduced)

(1) An ingredient in the medicine accompanying Formula 3: 'For sharp pains'.

(2) The root of wild parsnip and the bark of Oxydendrum arboreum are boiled in a pot over a fire in which is burning some rubbish from around the house of a deceased person. The conjurer, who was unsuccessful in saving the life of the dead person, washes his hands in the pot for purification. (Olbrecht, 1932)

Sanicula spp., Black Snakeroot - ULEuk~~ai~~dí (W.W.), "treed by the locust."

(1) - Steep the root, drink for stomach trouble. (A.L.)

- A tea is drunk for colic. (H.R.)

Zizia aurea (L.) W.D.J. Koch, Golden Alexander - Gen^E.id⁵ (W.W.),
"it is pregnant".

(1) The root is chewed by medicine man initiates when in danger of coming into contact with a pregnant women. (Olbrecht, 1932)

CORNACEAE

Cornus florida L., Dogwood - KənE[?]sitá (L.S.), Kanu[?]sitá (W.W.)
 Gəná^dzitá (A.L.), Kanásitá (T.L.), Kənusi'tá (N.A.).

- (1) An ingredient in the medicine accompanying Formula 21: 'For aggravated hoarseness'.
- (2) Used in the medicine accompanying Formula 78: 'For bad diarrhea'.
- (3) - Boil together the barks of dogwood, Prunus serotina, and Lindera Benzoin. This tea, added to pure corn whiskey, is drunk to break out the measles. (A.L.)
 - A bark tea is taken for measles. (N.A.)
- (4) The petals in boiling water is taken for colds. (M.A.)
- (5) The bark is chewed for headache. (C.S.)
- (6) - Bathe in a tea made of the beaten bark for poisons of any kind. (N.A.)
 - Make a poultice of the bark for "oak poison". (C.S.)
 - The bark is used in poultices. (Witthoft, 1947b.)
- (7) The bark of the root is used to heal wounds. (Witthoft, 1947b)
- (8) For chicken pox, make a decoction of the bark of an old tree - pour the warm tea over the body and bathe in it. The pox will clear up the same day, but scars may remain. (W.W.)

CLETHRACEAE

Clethra acuminata Michx., White Alder - Sulù^u·yil^ugá (Olbrecht, 1932),

"swamp tree"; DidanElawaski (A.L.), "peels off" (note that these names are identical to those of Hydrangea arborescens).

- (1) An ingredient in the medicines accompanying Formula 15 and 34: 'For disordered bile'.
- (2) A hot bark infusion is good for bowel complaint. (Y.J.)
- (3) A decoction of the barks of white alder and Prunus serotina is drunk to break a high fever. (A.L.)

PIROLACEAE

Chimaphila maculata (L.) Pursh., Spotted Wintergreen - Ustasti (A.L.), "twisting"; Usta'sti u^sdiy (W.W.), "twisting, little"; Anaskwalaski (N.A.).

- (1) Wash the roots until white, beat them up and make a poultice for headaches or any kind of pain. (N.A.)
- (2) - Make a tea of the tops and roots for colds and LaGrippe. (M.A.)
 - Drink a root tea if feverish inside. (A.L.)
 - A tea for colds and fever. (H.R.)
- (3) Drink a tea for women's pains. (A.L.)

Monotropa uniflora L., Indian Pipe - Wolb^ssi nuwoti (N.A.), "wart medicine"; D^sWol^sli (W.W.) "wart" (?)

- (1) Make an infusion of the whole plant in cold water and use for

sore eyes. (A.L.) (A.L. says that the appearance of the first "wart" is sign that frost is three months away.)

(2) This is a "mushroom". Mash up the whole plant and rub on to cure bunions or warts. (N.A.)

ERICACEAE

Epigaea repens L., Trailing Arbutus - D^α?si^uw^{ay}í (N.A.), DoKashí go^tsi^t sí (M.S.), "terrapin's foot"; Oganú ag^αdage (W.W.), "ground Hog's forehead".

(1) Used in the medicine accompanying Formula 17: 'For diarrhea'.

(2) An ingredient in the medicine accompanying Formula 54: 'For abdominal pains caused by the terrapin'.

(3) A tea is made for chest ailment. In summer time the roots and leaves are used; in winter only the roots are used. (N.A.)

(4) A root tea is drunk for kidney trouble. (M.A.)

(5) The roots of "ground hog's forehead" and Gaultheria procumbens are made into a tea for chronic indigestion. (M.S.)

Gaultheria procumbens L., Teaberry, Wintergreen - As'ugíiyu'stí (W.W. M.S.) "it smells, it little"; A^{tα}gí gamunlahí (W.W.), "black bush herb".

(1) The roots of "it smells, it little" and Epigaea repens are made into a tea for chronic indigestion. (M.S.)

(2) The dried leaves of the "black bush herb" are a substitute for chewing tobacco. (W.W.)

Kalmia latifolia L., Mountain Laurel - Dushugá^d junstí^{yá} (W.W.),
Dusú[?] ^d junstí (A.L., N.C., T.L., N.A.), "laurel, it small";
Dus 'u[?] gó (M.S.) "laurel".

(1) An ingredient in the medicines accompanying Formula 25 and 31:
'For muscle soreness'.

(2) An ingredient in the medicine accompanying Formula 36: 'For shifting pains'.

(3) - A leaf decoction including the leaves of mountain laurel, Rhododendron maximum, and Leucothoë editorum is applied to rheumatic areas for relief. (A.L., Sevier Crowe.)

- Take all possible laurels and some other plants and steep.
Rub this tea on for rheumatism, after scratching first with scratcher.
(W.W.)

- Peel and boil the stick; rub on this tea for rheumatism.
(N.C., M.S.)

(4) In old times a leaf ooze was rubbed into the scratched skin of the ball players to prevent cramps. (A.L.)

(5) Of the leaves a salve was made for healing. (Amonite Sequoyah)

(6) The leaves were used for "surgical" scratching. (Olbrecht, 1932)

Leucothoe editorum Fern & Schub., Dog Hobble - E^uś (Olbrecht, 1932), Ewasuhí (Olbrecht, 1932), E[?]was'uhí (A.L.), "dog hobble".

- (1) An ingredient in the medicines accompanying Formulas 25 and 31: 'For sore muscles'.
- (2) An ingredient in the medicines accompanying Formula 36: 'For shifting pains'.
- (3) A leaf decoction including the leaves of dog hobble, Kalmia latifolia, and Rhododendron maximum is applied to rheumatic areas for relief. (A.L., Sevier Crowe)
- (4) Apply an ooze made of the beaten up roots to dogs to cure them of mange. (A.L.)
- (5) For itch, take a bath in some water in which has been poured a decoction of the leaf and stem. "Indians get it . . . it is caused by uncleanliness." (M.A.)

Oxydendrum arboreum (L.) D.C., Sourwood - NədagwE'yá, (Olbrecht, 1932), Nadogwayá (A.L.), NədagwE'yá (T.L.), NadagwE'yá (A.L.), "sourwood".

- (1) An ingredient in the medicine accompany Formula 38: 'For urinary trouble'.
- (2) - An ingredient in the medicine accompanying Formula 78: 'For bad diarrhea'.

- The young shoots are scraped and the bark is stewed for diarrhea - especially in the winter. (W.W.)

- A cold bark steep will check the bowels of children. (Y.J.)

- Beat up the leaves in cold water for diarrhea. (Y.J.)

(3) The twigs of sourwood and the root of Pastinaca sativa are boiled in a pot over a fire in which is burning some rubbish from around the house of a deceased person. The conjurer, who was unsuccessful in saving the life of the dead person, washes his hands in the pot for purification. (Olbrecht, 1932)

(4) A taboo is placed on the burning of sourwood for fuel because the use of its lye will bring sickness. (Olbrecht, 1932)

(5) For itch, take a bath in some water in which has been poured a decoction of the bark. (M.A.)

(6) Sourwood branches were used in the making of arrows. (John Witthoft)

Rhododendron calendulaceum (Michx.) Torr., Flame Azalea -

Kanagishki (C.S., A.L.) "turkey beard"; Dus'u'gó, (W.W.) "laurel".

(1) Peel and boil a twig and rub the twig on the place of rheumatism. (M.S.)

(2) A fungus "apple" formed on the stems is eaten to appease thirst when in the mountains. (C.S.)

(3) The flowers are used to decorate the house. (A.L.)

Rhododendron maximum L., Great Rhododendron - Dus'ug^djunt^a (C.S.),

Dusú[?] d^d zunt^aná (N.C.), "laurel big".

- (1) An ingredient in the medicines accompanying Formula 25 and 31: 'For muscle soreness'.
- (2) An ingredient in the medicine accompanying Formula 36: 'For shifting pains'.
- (3) - A leaf decoction including the leaves of "laurel, big", Kalmia latifolia, and Leucothoe editorum is applied to rheumatic areas for relief. (A.L., Sevier Crowe.)
- The above decoction also rubbed on the scratches of ball players. (A.L.)
- Peel and boil a twig and rub the twig on the place of rheumatism. (M.S.)
- (4) The wood is used in carving (spoons, toys, etc.). (N.C.)
- (5) Throw clumps of leaves into a fire and dance around it (a social dance) to bring on cold weather. (M.S.)

DIAPENSIACEAE

Galax aphylla L., Galax, Horse Hoof - Də[?]s'əwa'í (A.L.), "terrapin foot", Digasəgwə^də^djuwalog^ə (T.L.), Səgwili^ulasidí (Y.J.).

- (1) A root tea for kidney trouble. (Y.J.)

FRIMULACEAE

Lysimachia quadrifolia L., Whorled Loosestrif - Giga^t suyə^ə (Olbrecht,

1932), Gíg^dzuyaí (N.C., A.L., T.L.), "blood in your veins", "blood, it has taken in it"; Dəloní (M.S., N.A.) "yellow".

(1) - An ingredient in the medicine accompanying Formula 55: 'For when they urinate white'.

- A cold infusion is sometimes good for yellow urine. (M.S.)

- The root is used as a **diuretic**. A.L.'s grandfather was taken sick in the mountains. For relief he ate this plant from the palm of his hand and drank water. (A.L.)

- A kidney medicine. (N.C.)

(2) A tea for female trouble. (T.L.)

(3) - For children and grownups who pass blood **and** pus with their bowels, make a cold root tea. (Source unknown.)

- A root decoction for bowel trouble. (M.S.)

EBENACEAE

Diospyros virginiana L., Persimmon - Sulí (Olbrecht, 1932), Solí (A.L.), Salí (N.A.).

(1) An ingredient in the medicine accompanying Formula 72: 'For flux'.

(2) Used in the medicine accompanying Formula 84: 'For rheumatism'.

(3) An ingredient in the medicine accompanying Formula 86: 'For indigestion'.

- (4) Chew the bark for heartburn. (A.L.)
- (5) The wood was used to carve disease stampers in ancient times. (Olbrecht, 1932)
- (6) - Used with another plant for toothache. (N.A.)
- For toothache make a warm or cold infusion of several barks: persimmon, Alnus serrulata, Juglans cinerea, and Prunus serotina. "Hold the tea in your mouth against the decayed tooth, and the pus will come to a head." (N.A.)

LOGANIACEAE

Spigelia marilandica L., Indian Pink - GígǫgÉ a^dzilǫskí (Olbrecht, 1932), "bloodlike, it has flowers".

- (1) An ingredient in the medicines accompanying Formula 32 and 52: 'For intestinal worms'.

APOCYNACEAE

Apocynum cannabinum L., Indian Hemp - AndolaKǫ (W.W.), "they have broken legs"; Gadaludí, Gadǫladǫ (W.W.), "broke my leg".

- (1) Beat up, make a poultice for rheumatism. (Lloyd Lambert.)
- (2) The fibers are used for bow strings, mask cords, etc. (W.W.)
- (3) The fibers are used to weave grave cloth material. (Olbrecht, 1932.)

(4) The roots are boiled and strained and taken to clean out the kidneys. (For Bright's disease.) (M.O.)

ASCLEPIADACEAE

Asclepias perennis Walt., Milkweed - Ustigalí (T.C.), Gadolodá (A.L.),

(1) Peel off the bark, smooth it, twist it for bowstring. (A.L.)

(2) A warm infusion of this milkweed and Clematis virginiana is drunk for backache, or the roots may be chewed instead. Salt is forbidden. (T.L.)

Asclepias tuberosa L., Butterfly Weed, Pleurisy Root - Gu'gú (W.W., M.S., A.L.) "bottle" or "chigger"; Giga^dzuyaí (N.A.), OnEskwahí (N.C.).

(1) - Make a tea of the beaten up root for diarrhea. Drink all you can. (A.L., N.C.)

- A tea for diarrhea. If there are a lot of butterflies around the flowers, the plant is good for medicine, otherwise it is not. The butterflies must be of the same color as the blossoms. (W.W., M.S.)

- For bloody flux in grown ups or children, make a decoction and drink while warm. (N.A.)

(2) A tea is drunk for pleurisy. (N.C., A.L., M.A.)

(3) A root tea is taken for heart trouble. (H.R.)

- (4) A root tea for fever. (H.R.)
- (5) The stem is used in making belts. (John Witthoft.)

CONVOLVULACEAE

Ipomea pandurata (L.) G.F.W. Meg., Sweet Potato Vine, Trumpet Vine -
Nu'ná uganastá iyuhstí (N.A.), "potatoes, sweet like".

- (1) Drink a root tea for "cholera morbis" (bowel complaint). (H.R.)
- (2) The old Indians made a tea of the vine to treat sweet potatoes before setting them out. The tea was put in a tub in which the young plants were soaked before transplanting. This keeps away bugs and moles. (N.A.)
- (3) The bark of the root is scraped off and wrapped in muslin for a poultice used to relieve rheumatic pains. The moist poultice is kept on for a period of 15 or 20 minutes. (Narcissa Owen, 1907)

POLEMONIACEAE

Phlox maculata L., Sweet William - Gada^dzuslí (N.C.)

- (1) To make children grow and fatten, bathe them in a root infusion. (N.C.)

Phlox stolonifera Sims., Creeping Phlox - ^tSuwa^dù'ná ustigá,
(Olbrecht, 1932), "it has sinews, it small"; Dusugo'Eí, (?)

"laurel, is living".

- (1) An ingredient in the medicine accompanying Formula 75: 'For chills'.

BORAGINACEAE

Cynoglossum virginianum L., Begger's Lice - Unistilzi stiegwó
ustigá (Olbrecht, 1932), "they make them stick to it, the little
one"; Unistiluistí (Mooney, Ms.), "something that sticks to the
clothes."

- (1) An ingredient in the medicine accompanying Formula 4: 'For itching'.
(2) An alternate ingredient in the green corn medicine (see Appendix).
(3) For kidney trouble when the urine is white - the root is boiled
four times into a thick syrup. This decoction is taken for four days
during which the patient abstains from all food containing salt. The
root is generally collected in the summer while the top is green be-
cause the root must be pulled up by the tops, not dug. (Mooney Ms.
C.)
(4) The root is used for cancer. (Ibid.)
(5) Take this and other "stick on" plants and make a decoction
to be drunk every four days for bad memory. "Then you will remember
everything." (W.W.)

Echium vulgare L., Blueweed, Blue Devil - Uniskóí (Olbrecht, 1932),

"their heads".

(1) An ingredient in the medicine accompanying Formula 94: 'For when they urinate white'.

Lappula spp., Stickseed - UnistilistiEgú (Olbrecht, 1932), "they make them stick to it".

(1) An ingredient in the medicine accompanying Formula 4: 'For itching'.

Lithospermum Spp., Puccoon - Uniskó, (W.W.) "beads".

(1) The seeds were used as conjurer's beads. (W.W.)

LABIATAE

Blephilia spp., Wood Mint - Gows'αgí (N.A.), "it smells".

(1) A poultice of the leaves is used for headache. (N.A.)

(N.A. uses all "gows gi" plants for headaches.)

Collinsonia canadensis L., Horse Balm - Digayasu'gí (W.W.), "arm pit smell".

(1) Used in the medicine accompanying Formula 29: 'For swollen breasts'.

(2) Rub the leaves and flowers between hands and apply as poultice to the armpits to prevent excessive odor there. (W.W.)

Glechoma hederacea L., Ground Ivy - Gows ' ugi (N.A.), "it smells":
 Ga^{wa} s^agi udanisinido[?] idú' (W.W.), "vine on the ground, shaking
 itself".

- (1) A tea is given to babies for hives. (A.L., H.R.)
- (2) Steep the leaves in hot water, drink for measles. (W.W.)

Hedeoma pulegioides (L.) Pers., Pennyroyal - Gows' ugi (N.A., N.C.,
 A.L., T.L.), "it smells".

- (1) Beat the leaves and put in mouth for toothache. (T.L.)
- (2) Rub the leaves on the body to repel insect pests. (Sevier
 Crowe, Y.J., H.R.)
- (3) A cold tea of the leaves or the entire plant is drunk for flux.
 (Y.J., Betty Owle.)
- (4) A tea of the entire plant is taken for colds. (A.L., H.R., M.A.,
 L.H., Betty Owle.)
- (5) A tea of the leaves and stem is drunk for fever. (M.A., Betty
 Owle.)
- (6) Beat up the leaves and apply as poultice to relieve headaches.
 N.A.)

Lycopus virginiana L., Water Horehound - Aniwaniskí (W.W.),

- (1) A tea of this plant is drunk at a green corn ceremony. (Witthoft,
 1947b)
- (2) The root is chewed and given to infants to gnaw on to give

them eloquence of speech. (W.W.)

(3) Wring the plant in sweet milk, boil for five minutes, and feed to a dog which has been snakebitten. (L.H.)

Mentha spicata L., Peppermint - Gows'αgí (A.L., N.A.) "it smells", Wesda'ⁱunig'Estí (Witthoft, 1947b), "cat eats".

(1) - Drink a cold infusion for sick stomach. (M.A.)

- Wring up the leaves in water and drink for upset stomach.

(H.R.)

(2) Drink a tea to depress fevers (Witthoft, 1947b).

(3) - Take a tea for colds. (Witthoft, 1947b).

- Smell the leaves to relieve colds. (A.L.)

(4) The plant is used to flavor foods and medicine. (H.R.)

Monarda spp., Horsemint - Gw'shαgí (T.L.), Gonsαdí (W.W.), "it smells".

(1) A poultice of the leaves is applied for headache. (T.L., N.A.)

(2) "When I was a boy it was gathered in large bundles to hang up . . . it was used for colds". (Jess Lambert.)

Monarda didyma L., Crimson Beebalm, Oswego Tea, Red Horsemint - Gows'αgí (N.A.), "it smells"; GigαgÉ a^d jiluskí (Y.J., N.A.), "boodlike, it has flowers".

(1) - To stop nose bleed, sniff an infusion made of the crushed leaves. (Y.J.)

- To stop nose bleed, dampen the head with and drink a cold root infusion. (N.A.)

(2) A hot leaf tea brought out the measles when everything else failed. (Cam Sneed)

Monarda fistulosa L., Wild Bergamot - Gows'xgi (A.L., N.A.), "it smells".

(1) A warm poultice will relieve a headache. (A.L., N.A.)

Nepeta Cataria L., Catnip - Wesdà'unig'Estí (Kimsey Squirrel), "cat eats". (introduced)

(1) - A hot leaf tea is given to people with colds to make them sweat. (M.A.)

- A tea is given to babies for colds. (Minnie Saunooke)

- A tea for colds. (Olbrecht, 1932; L.H.)

(2) A poultice of the leaves is made for boils. (Betty Owle.)

(3) A leaf tea is taken as a stimulant, tonic. (Betty Owle.)

(4) A tea is given to depress fevers. (Olbrecht, 1932)

(5) A leaf tea is drunk to relieve an ailing stomach. (Kimsey Squirrel)

Prunella vulgaris L., Selfheal, Wild Sage - Ganigwiliskí (Y.J.)

"clotted blood," or "it is bruised"; Inatuwa^dzi^tz^á (W.W.),
 U^dzantiuwasit^á (N.C.) U^dzan~~an~~got^á? (A.L.)

(1) Bathe in a root tea when you are bruised ("when you turn blue") (Y.J.)

'Some of the old-timers called this plant "rattlesnake tail" from the shape of its flower (inflorescence).' (Y.J.)

(2) Make a cold water infusion to bathe burns. (A.L.)

(3) In early Spring the plant is used for greens. (A.L.)

(4) The plant is used to flavor other medicines. (H.R.)

Pycnanthemum spp., Mountain Mint, Mealy Mint - Gows^ágí (A.L., N.A.), Gw^fsh^ágí (T.L.), "it smells".

(1) - Make a poultice of the leaves for headache. (A.L., H.R., Mandy Walkingstick)

- Eat the leaves for headache. (N.A.)

(2) Drink a tea for fevers and colds (Mandy Walkingstick, H.R., N.A.)

(3) Make a tea of the leaves for heart trouble. (M.A.)

(4) Bathe with a warm tea an inflamed penis. (A.L.)

Satureja hortensis L., Summer Savory - Gaushagí (W.W., N.A.), "it smells".

(1) Sniff of the leaves for headache. (W.W., N.A.)

Scutellaria elliptica Muhl., Hairy Skullcap - see S. lateriflora (v).

Scutellaria incana Biehler, Skullcap - U[?]tanÉ udáí (A.L.) "grand hanging"; Ganigwiliskí (A.L.), "clotted blood" or "it is bruised".

(1) The root is one of the ingredients in a kidney medicine.

(A.L.)

(2) A decoction is taken for nerves. (M.A.)

(3) - The root tea is a medicine for female monthly periods. (A.L.)

- The roots of "it is bruised" and Helianthus spp. are boiled into a tea "for young women." (Y.J.)

Scutellaria lateriflora L., Mad Dog Skullcap - Ganilgw^dliskí utání (Olbrecht, 1932), "clotted blood"; or "it is bruised".

(1) A decoction of the four varieties of Ganigwiliskí - S. lateriflora, S. elliptica, Hypericum spp., and Stylosanthes spp. is drunk to promote menstruation, and the same decoction is also drunk and used as a wash to counteract the ill effects of eating food prepared by a woman in the menstrual condition, or when such a woman by chance comes into a sick room or house under a tabu. (Mooney, 1885.)

(2) A decoction is drunk for diarrhea. (Mooney, 1885)

(3) The root is used with other herbs in a decoction for breast pains. (Mooney, 1885)

(4) A decoction of the roots is drunk to help get rid of after-birth. Afterwards, vomiting is induced with a tea of Polymnia Uvedalia. (Olbrecht, 1932.)

SOLANACEAE

Datura Stramonium L., Jimsonweed - Unistilxisti (A.L.) (introduced)

- (1) Smoke the dried leaves for asthma. (A.L., H.R., Betty Owle)
- (2) The wilted leaves are heated and applied as a compress to boils. (Mandy Walkingstick)

Nicotiana rustic L., Wild Tobacco - ^tSolagayoli (Olbrecht, 1932)
"tobacco". Tobacco is used by itself or in combination with other plants in a number of the Swimmer Formulas:

- (1) In Formula 1: 'For fever'.
- (2) In Formula 2 and 82: 'For headache'.
- (3) In Formula 3: 'For sharp pains'.
- (4) In Formula 42: 'For apoplexy'.
- (5) In Formula 47: 'For snakebite'.
- (6) In Formula 79: 'To dispell witchcraft'.

Old tobacco is dropped on the fire in the home of a sick person to ward off witches, who prey on the weak. (Olbrecht, 1932)

- (7) In Formula 90: 'For boils'.

The seeds of old tobacco must be sown in November or December

because it won't grow if sown later. Regular tobacco is sown in Spring. When old tobacco is grown, the leaves must be taken off during a lightning storm, or else one must fast and remove the leaves at noon, not eating until afterward. Old tobacco was not used for smoking or chewing but just used for medicine and to do away with witchcraft, when it is usually mixed with ordinary tobacco. (W.W.)

Physalis heterophylla Nees., Ground Cherry - UnEgawistí^d junstí,
(C.S.) "tomato, little": Unaguhi^{stí} utana^(W.W.), "They go through, big".

(1) The plant has an edible berry. (W.W.)

Solanum carolinense L., Horse Nettle - Unul^{istá}(Y.J.), K^{liwó}ti^{nó}
u^{laná}hi^(W.W.), Go^{lⁱ}wod^á(A.L.).

(1) Pieces of the root are strung and placed about a baby's neck to stop excess flow of saliva. (M.A., A.L.)

(2) Cut up the berries and fry them in grease. The grease will then cure dogs of the mange. (H.R.)

Solanum nigrum L., Nightshade - S^{elá} un^á?g^í (W.W.), "name, black".

(1) If one of the family dies and the others are lonesome and affected by the death, make a tea of the leaves and stem of this. Use this tea to vomit in large quantities every fourth day. "To

throw up bad saliva." (W.W.)

(2) When young, it is made use of as the best relished potherb.

(Witthoft, 1947b)

SCROPHULARIACEAE

Gerardia flava L., Gerardia - Dɔ́yiwɔ́yí (Olbrecht, 1932) Di^tɔ́stəgí
istəgwɔ́ (Olbrecht, 1932).

(1) An ingredient in the medicine accompanying Formula 16: 'For fainting'.

Gerardia pedicularis L., Gerardia - Di^tɔ́stəgí stəgwɔ́ (Olbrecht, 1932)

(1) An ingredient in the medicine accompanying Formula 16: 'For fainting'.

Gerardia virginica (L.) BSP., At tɔ́zá Egwá (W.W.) "trout, big";
Di^tɔ́stəgí 'stəgwɔ́ (Olbrecht, 1932).

(1) An ingredient in the medicine accompanying Formula 16: 'For fainting'.

(2) An ingredient in the medicine accompanying Formula 49: 'For diarrhea or dysentery'.

- This is used in several medicines. (W.W.)

Pedicularis canadensis L., Common Lousewort - Uguk^ǎ usk^ǎ (A.L., N.C.),
Ukukú uskó (W.W.), "owl head".

- (1) A steep of the roots is rubbed on sores. A prayer is recited.
(W.W.)
- (2) "Owl head" is an ingredient in a cough medicine. (W.W.)
- (3) A hot root decoction is taken for stomach ache. (N.S.)
- (4) An infusion of the roots and leaves is drunk for flux. (A.L.)

Verbascum Thapsus L., Mullein, Mule Tail - ^tSo•liyustí ^dZaliyustí
(N.A.), unikwotE•n^ǎ (Olbrecht, 1932), "tobacco like, it has down";
^tSo•liyustí d^ǎlo•ní (Mandy Walkingstick) "tobacco like, yellow";
^dZuskwan^ǎní (N.A.), "blanket".

- (1) An ingredient in the medicine accompanying Formula 33: 'For pain in various places'.
- (2) Used in the medicine accompanying Formula 56: 'For throat trouble caused by insects'.
- (3) A tea of the roots is taken for female trouble. (Mandy Walkingstick)
- (4) Rub the leaves under the armpits for prickly rash. (H.R.)
- (5) - A syrupy decoction of the roots is taken for coughs. (A.L., H.R., Minnie Saunooke).

- Prepare a decoction of the leaves of mullein and Castanea dentata and mix with brown sugar or honey. Use as a cough syrup.
(N.A.)

- Chew the dried leaves for catarrh. (Betty Owle)
- (6) - A poultice made of the dried, shredded leaves in warm water will "take down" the swelling of sores. (N.A.)
- The leaves are used in poultices. (Olbrecht, 1932)
- (7) - An ingredient with one or two other herbs in a kidney medicine. (Y.J.)
- A root tea for kidneys. (Lloyd Lambert)
- (8) A tea of the leaves of mullein and Yonũ^uhiyagistí (Tradescantia?) is taken for miscarriage; (Dropped baby's bag.) Y.J.)
- (9) Bathe in a root infusion for swollen glands. (M.A.)
- (10) Bathe the legs in a root infusion for dropsy. (L.H.)

Veronica officinalis L., Common Speedwell - Ganagw^diskí (Olbrecht, 1932), Ganigwa^diskí (Mooney Ms.), "clotted blood", or "it is bruised"; Nigⁱtoits^Eí.

- (1) Apart from the regular medicine which accompanies Formula 75: 'For chills', an infusion of "clotted blood" is prescribed for the patient should "he thirst."
- (2) A decoction including the root of "clotted blood", and the cone of Pinus pungens, the stem of Impatiens capensis, and the bark of Ulmus rubra is given to pregnant women before going to the water each new moon. The bark of Veronica will cause the baby to "jump down" quickly. (Olbrecht, 1932)

BIGNONIACEAE

Bignonia capreolata L., Cross Vine. -

- (1) A tea made of the leaves cleanses the blood. (Witthoft, 1947b)

PHYRMACEAE

Phryma Leptostachya L., Lopseed - ^dZiskwá dinstá lugí (W.W.)

"bird, breast sticks out."

- (1) The roots are used in an attraction medicine (love formula).
The paired seeds are symbolic. (W.W.)

PLANTAGINACEAE

Plantago spp., Plantain - NanóudEdo²tí; (Y.J.) ^dJuyataí talawadE-istí (W.W.), "grows around white oak tree".

- (1) An infusion made of the leaves of plantain and the stalks of Juncus tenuis will strengthen a child when it is learning to crawl and walk. "If they don't walk, it's rheumatism. (A.L.)
(2) The leaves are used in a poultice for rheumatism. (A.L.)
(3) A leaf poultice will relieve a headache. (A.L.)
(4) - Apply the wilted leaves to a yellow jacket string. (A.L.)
- Wilt several leaves and put them on a sore. "It draws up

the sore" (L.H.)

(5) For snakebite (see *Polygala Senega*) (Adair, 1775)

RUPIACEAE

Mitchella repens L., Partridge Berry, Squaw Vine - *Tadistiunigisti* (W.W.), "pheasants eating"; *Kladisunigisti* dí (A.L.), *Kladis'di-unigisti* (N.C.).

(1) - The roots of squaw vine and Hieracium venosum are made into a tea for bowel complaint. (N.C.)

- A tea of the whole plant is taken for "summer complaint." (A.L.)

(2) A tea of the roots is given to a baby before it "takes the breast". (N.C.)

(3) A root tea is taken for monthly period pains. (M.A.)

(4) If you kill a pheasant and a cat which is going to have kittens eats some of the pheasant's guts, her kittens won't grow in her and will die after they are born. Make a steep of the leaves and give it to the cat to drink before the kittens are born, and they will grow and live. (W.W.)

Sherardia arvensis L., Field Madder. (introduced)

(1) A red or rose dye is extracted for use with fabrics.

(Leftwich, 1952, M.A.)

CAPRIFOLIACEAE

Lonicera spp., Honeysuckle - (No Cherokee name could be found).

- (1) The stems are used in basketry. (Leftwich, 1932: common fact.)

Sambucus canadensis L., Elder - Ko[?]sá (A.L.), Ko[?]s'á (N.A.), "elder".

- (1) The berries are used in jellies and other foods. (A.L.) and (Y.J.)

- (2) - A decoction made of the roots and the bark is taken for summer complaint. (N.A.)

- A tea of the scraped bark is good for the stomach. (H.R.)

- (3) Elder berry tea is drunk for rheumatism. (M.A.)

Viburnum acerifolium L., Maple Leaved Viburnum - Kanigá, (Y.J.).

- (1) This is an ingredient in a tea for smallpox. (Y.J.)

Viburnum cassinoides L., Witherod - Kanigá (T.L.).

- (1) If the tongue is sore, wash it with a bark infusion of this. (T.L.)

CUCURBITACEAE

Cucurbita pepo L., Gourd - Galuná (W.W.), Galu^t ná (M.S.), "gourd"

(1) - An ingredient in a green corn medicine with Impatiens spp., Zea Mays, and Andropogon virginicus. (M.S.)

- In a second green corn medicine (see Appendix) it is an alternate ingredient. (W.W.)

(2) An infusion made of the mashed seed is drunk to check excessive urination. (M.S.)

CAMPANULACEAE

Campanula divaricata Michx., Southern Harebell - ^{di}HiyÉ sá'dikí (W.W.), ^{di}yÉ^dZodiskí (W.W.).

(1) A tea made by steeping the root in boiling water is taken for diarrhea. (W.W.)

Lobelia Cardinalis L., Cardinal Flower - GigagÉ^ádzilóskí (Olbrecht, 1932). "bloodlike, it is a flower"; ^tSolliyustí gigagÉ^ádzilóskí (W.W.), "tobacco like, blood flower"; tZagagÉdjuntáná (C.S.), "to smell, big"; tSolliyustí amÉudu'hí (N.C.).

(1) An ingredient in the medicine accompanying Formula 33: 'For pain in different places'.

(2) A leaf decoction is drunk to reduce fever. (C.S.)

(3) A cold tea made of the roots and leaves when snuffed up the nose will stop nose bleed. (T.L., N.C.)

- A cold infusion of the roots of cardinal flower and blue cardinal flower is used for nose bleed. (A.L.)

Lobelia inflata L., Indian Tobacco - ^tSoliyustí (A.L.), "tobacco like"; Ski'in ^djunàsadón (C.S.), "devil's leg rattle".

(1) - The beaten up roots are used in a poultice for body aches. (A.L.)

- Rub the leaves on sores, aches, stiff neck chapped places, etc. "Don't drink it, it's bitter". (N.C.)

Lobelia siphilitica (?) L., Blue Cardinal Flower - ^dJoliyustí (T.L.), ^dZoli'yustí (C.S.), "tobacco like"; Tsol'ewa (A.L.).

(1) A cold infusion of the roots of blue cardinal flower and L. cardinalis, is used for nose bleed. (A.L.)

(2) A poultice of the crushed leaves is used for headache. (C.S.)

(3) A warm leaf infusion is good for colds. (T.L.)

(4) A poultice of the roots is applied to a rising. (T.L.)

Lobelia spicata Lam., Pale Spike Lobelia - ^tSoliyustí ustigá

get u'sE'i (Olbrecht, 1932), "tobacco like, small, mountain".

- (1) Used in medicine accompanying Formula 40: 'For arm shakes and trembles'.

Specularia perfoliata (L.) A. DC., Venus Looking-Glass - U'skway 'Elé; (Olbrecht, 1932), "they have it at the top".

- (1) An ingredient in the medicine accompanying Formula 46: 'For indigestion'.

COMPOSITAE

Achillea spp., Yarrow - S'a' so' nigi'si (C.S.), "goose weed".

- (1) Smoke the dried leaves in a pipe for catarrh. (C.S.)

Ambrosia spp., Ragweed - Ugwastilu^{ya} dǵ (W.W.).

- (1) A leaf tea is taken for fever. (H.A., M.A.)
 (2) A leaf infusion is rubbed on for hives. (M.A.)
 (3) - When the skin is poisoned, rub on the leaves. (A.L.)
 - For infected toes, apply the juice squeezed from wilted leaves. (Betty Owle).

Ambrosia artemisiifolia L., var. elatiior (L.) Descourtils,

Ragweed - UnistElEhistí (W.W.), "sticking out".

- (1) An alternate ingredient in a green corn medicine. (see Appendix.)

Ambrosia trifida L., Ragweed - Ugwa'taluyad' (W.W.).

- (1) An alternate ingredient in a green corn medicine. (See Appendix).
(W.W.)

Anaphalis spp., Pearly Everlasting - K'nesK'aw'dí (C.S.), "star flower", Ko'stu'd' (W.W.), Kostud' (Y.J.), Kostu'dá (A.L.), "ashes".

- (1) - A warm leaf steep is drunk for bad colds. (W.W.)
 - A tea of the whole plant is taken for flu. (H.R.)
 - Smoke or chew the leaves for bad colds. (A.L., N.A.)
 (2) - For throat infection, blow a warm tea on the tonsils with a tube. A formula precedes the blowing. (W.W.)
 - The leaves and stems are smoked for "phthysic", a hanging bronchial cough. (M.A.)
 (3) The dried leaves are a substitute for chewing tobacco.
 (A.L.)
 (4) To cure a headache or blindness caused by the sun's radiance, make a cold tea of the roots (or in the summer use the leaves and stem). Pour this tea over a hot rock and breath the fumes.
 (Y.J.)

Anaphalis spp., Everlasting - K'nesK'aw'dí (C.S.), "star flower", Ko'stu'd'ulú (W.W.).

- (1) The dried leaves are smoked for catarrh. (C.S.)

(2) Drink a warm steep for bad cold. (W.W.)

Antennaria plantaginifolia (L.) Hook., White Plantain, - Gosdudá (Y.J., T.L.), Kostugú (A.L.), "evergreen".

(1) - For bowel complaint (when the bowels change color - especially in children) drink a decoction of the entire plant. (Y.J.)

- Boil four "bunches", give to children for summer complaint.

(A.L.)

(3) A tea is taken for excessive discharge in the female monthly period.

Artemisia Absinthium L., Wormwood - Gowshadi uⁱgiwá di^hhisdodí (W.W.), "smell, worm, to kill with".

(1) For children with worms. Gather the seeds in Fall, roast and put them in molasses for children. (Source unknown.)

Aster spp., Aster, Hardweed - A[?]tá atayu^estí (Kimsey Squirrel), "eye like".

(1) A root tea will check diarrhea. (Kimsey Squirrel.)

Aster linariifolius L., Aster.

(1) Beat up the roots in water (make an ooze), sniff up the nose for catarrh. (A.L.)

Cacalia atriplicifolia L., Pale Indian Plantain - Dayewú (Mooney, Ms.), "it sews itself up".

(1) ". . . held in great repute as a poultice for cuts, bruises, and cancer, to draw out the blood or poisonous matter. The bruised leaf is bound over the spot and frequently removed. The dry powdered leaf was formerly used to sprinkle over food like salt."
(Mooney, 1885)

Cirsium altissimum (L.) Spreng., Plumed Thistle - ^dGi^dgí (A.L.), ^dZi^dzǐ (Mooney Ms.), "thistle"; Tgitgí ^djunstí Yustí (W.W.), "thistle, little".

(1) A warm tea of the roots is taken for overeating. (A.L., Mooney Ms. C.)
(2) The pappus(down) was formerly used to feather blow darts.
(W.W.)
(3) The roots are used in a poultice. (Witthoft, 1947b)

Coreopsis spp., Tickseed - Delóní, "yellow".

(1) Take a root decoction for flux (green colored excrement).
(N.A.)
(2) The whole plant is much used for coloring. It affords a red dye. (Witthoft, 1947b)

Erigeron pulchellus Michx., Robin's Plantain - Telohí ^dzuwadEstí

(A.L.), "white oak, around the"; ^dJuwadEⁱtí, (N.A.).

(1) - Make a poultice of the leaves for headache. (A.L.)

- Make a poultice of the roots for "sun pain" (headache).

(M.A.)

(2) Drink a cold root tea for colds, or chew the root and swallow the juice. (N.A.)

Eupatorium perfoliatum L., Bonest, Throughwort - Gad^dzuⁱtí
Gadu's^αEhí (W.W.), growing on mountain"; Kolk^αiskí (W.W.),
"rejoins" (translation of the English "boneset"?)

(1) - For colds and sore throat: boil the leaves and roots in water for a while and pour off part of the water. Allow the plant to steep in the remainder of the water for several hours. A spoonful of the resulting tea is to be taken every hour or two. (M.O.)

- A tea is made for fever. (W.W., Peter Long)

- A tea is made for "La grippe" (Influenza). (M.A., A.L., H.R.)

- "The tea caused me to puke . . . it broke up the colds."

(Cam Sneed.)

Eupatorium purpureum L., Joe-Pye-weed, Queen of the Meadow, Blow-Gun Weed, Trumpet weed - Ama[?]dit[?]tí (W.W.), Amad^αto[?]tí (W.W.),
"water dipper"; Talu.lú (A.L.).

(1) In Formula 62: 'For throat disease', blow gun weed is specified

as the tube with which the medicine must be administered.

(2) - The root is used in a decoction with another plant for urination. (Mooney, 1885)

- A root tea is taken for kidneys. (M.A., L.H.)

- The roots of queen of the meadow and Vernonia noveboracensis are used in a tea for the kidneys. (Y.J.)

(3) A root decoction is drunk for the female monthly period. (A.L., M.S., H.R.)

(4) The presence of the plant indicates the nearness of water. (A.L.)

(5) After becoming sick from the odor of a corpse, bathe in a root infusion of this. (A.L.) (Olbrecht, 1932, writes that the Cherokees in past times kept the body of a deceased person in the home for as much as a week, although he had found no evidence from his informants.)

(6) A tea of the roots keeps pregnant women "built up." (M.A.)

(7) The stem is used as a straw in sucking up water from a low spring. (Y.J.)

Gnaphalium obtusifolium L., Catfoot, Everlasting - Kostu^ts^g Kasduta^g (Y.J.), "ashes".

(1) An ingredient in the medicine accompanying Formula 28: 'For local pains'.

(2) An ingredient in the medicine accompanying Formula 62: 'For throat disease'.

(3) A decoction is drunk for colds. (Mooney, 1885)

Helenium autumnale L., Sneezeweed -

(1) The bruised roots of this and Vernonia noveboracensis steeped in warm water, given to women immediately after child-birth, prevents menstruation for two years; then she menstruates once when ready to conceive her next child. (W.W.)

Helianthus spp., Sunflower - Delonigé ganigwiliskí (Y.J.), "yellow, clotted blood"; Unadak[?]tsí (A.L.), "follows sun".

- (1) Bathe sore feet in an infusion of "swamp sunflower". (A.L.)
- (2) The roots of sunflower and Scutellaria incana are boiled into a tea "for young women". (Y.J.)

Helianthus spp. Large Sunflower - Delonigé dilaskí (W.W.),

(1) Chew the whole flower of giant sunflower and the leaves of Carya spp. and you spit the color of blood. This might be used as a dye. (W.W.)

Hieracium venosum L., Hawkweed - Tgitgí junstí yustí (W.W.), "thistle little, like"; dJistuga^ttsí (C.S.), "rabbit's ear"; A'wigalÉ (N.C.).

(1) The roots of hawkweed and Mitchella repens are made into a tea for bowel complaint. (N.C.)

Lactuca canadensis L., Wild Lettuce - Unigisogahstí (W.W.).

- (1) An alternate ingredient in a green corn medicine (see Appendix) (W.W.)
- (2) The leaves are eaten in salads (?). (H.R.)

Polymnia Uvedalia L., Leafcup - Gády'tí ustigá (Olbrecht, 1932)

- (1) A decoction of the roots of Scutellaria lateriflora is drunk to get rid of afterbirth. Afterward, vomiting is induced with a tea of leafcup. (W.W.) (Olbrecht, 1932)

Frenanthes trifoliolata (Cass.) Fern., Gall of the Earth -

- (1) The roots are one of the ingredients used in a stomach ache medicine. (The other herbs are forgotten). (N.C.)

Rudbeckia spp., Coneflower, Nodá. ustiá (N.C.), "sun, little"; A'tá (A.L.), "eye".

- (1) Make an ooze of the root in cold water. Drip this ooze from a cloth into an aching ear. (N.A.)
- (2) Bathe sores in a warm root infusion. (A.L.)
- (3) The entire plant is used in preparing a brown fabric dye. (H.R.)

Rudbeckia fulgida Ait., Cone Flower - A^{hα}wí aktá (W.W., N.C.), "deer eye".

Decoction of root drunk for flux and for some private diseases; also used as a wash for snake bites and swelling caused by (mystic) ^tsgayá or worms; also dropped into weak or inflamed eyes. This last is probably from the supposed connection between the eye and the flower resembling the eye. (Mooney, 1885)

Rudbeckia laciniata L., Coneflower - Sotchaní (T.L., A.L.)

- (1) Some people grow these in their garden. The plant is a favorite green, eaten when small. (T.L., A.L.)

Solidago spp., Goldenrod - Dáloní (C.S.), "yellow"; Ugu'gushó (Olbrecht, 1932), "owl head"; Un'Estilá Egwá (N.C.), "they stick on big".

- (1) - Used in the medicine accompanying Formula 73: 'For flux'.

- The roots of two goldenrods are used in a tea for summer complaint. (N.C.)

- (2) A root tea is taken for tuberculosis. (H.R.)

- (3) A root tea is used for neuralgia. (M.A.)

- (4) A tea is made for fevers. (Witthoft, 1947b)

Tagetes spp., Marigold - (introduced)

- (1) The flowers are used in a yellow fabrics dye. (Leftwich, 1952)

Vernonia noveboracensis (L.) Michx., Ironweed - Ganigwilis'kí

(N.C., A.L.), "clotted blood" or "it is bruised"; Kwandislok.tí
SakonigÉ atziloskí (W.W.), "purple flower"; Sóná. (T.L.)

(1) A tea is taken for the female monthly period. (A.L.)

(2) A root tea will relieve the pains following childbirth.

(Mandy Walkingstick.)

(3) The bruised roots of this and Helenium autumnale steeped in warm water, given to women immediately after childbirth, prevents menstruation for two years; then she menstruates once when ready to conceive her next child. (W.W.)

(4) The roots of ironweed and Eupatorium purpureum are used in a tea for the kidneys. (Y.J.)

(5) A root tea is held in the mouth for loose teeth - to harden the gums. (A.L.)

(6) A tea is made by steeping a large knot of the root in warm water. This tea is drunk for stomach ulcers or hemorrhage from the stomach. (M.O.)

Xanthium echinatum Murr., Cocklebur - UnEstilxistí (Y.J.), "they stick tight"; Unistaxistí djanEgwá (W.W.), "it sticks on, big".

(1) If a baby is afraid of you and cries when he sees you get a burr from this plant; touch it against your forehead, and then touch it to the baby's head. The baby will then like you and "hang on to you". (W.W.)

(2) If a fish bone or some other object is stuck in the throat, make a tea of the burs of this plant and take a large swallow.

(Y.J.)

(3) This and other "stick on" plants are used in a tea to retain the memory in the medicine men initiate. (Olbrecht, 1932)

(4) A tea of the burs is taken for cramps. (M.A.) "when the top bur is grown it is time for frost." (M.A.)

(5) Chew the roots for rattlesnake bite. (Betty Owle).

(6) A root tea is used as an emetic for sick stomach. (A.L.)

DISCUSSION

In the early days of the writer's residency in Cherokee, North Carolina it was assumed that as more and more data was collected, a concise picture of Cherokee plant usage might be formed. Conflicts soon became evident as more than one informant was consulted concerning the usage of a single plant. The ways in which the leaves and roots of Verbascum Thapsus, for instance, are employed by various persons are legion.

Many of the more commonly known plants, such as the one above, have as many usages as there are Indians on the reservation. Again, there are some herbs about which the Cherokee lore is more consistent. The inconsistencies, however, are more numerous and some discussion of them is in order.

Mr. John Witthoft offers two suggestions which might account for multiusage of a single species or several allied species of plants. The Cherokee Indians of North Carolina today are a heterogenous mixture of several ancestral stocks. Aggie Lossiah and Nancy Conseen represent one stock originating from an area outside the immediate vicinity of the reservation. The dialect of these two, as far as the writer could tell, is similar, as is some of the information taken from them.

In the preceding pages were frequent references to Witthoft, 1947b. This short paper includes plant lore taken directly from

a manuscript published in 1818 by the wife of a missionary. The data was taken down by this woman, an amateur botanist, who worked among the Cherokee Indians in an area known as Spring Place. Hardly a single usage has a parallel with other sources.

Noyah Arch and Yute Jumper may be from a third stock for the information given by them has some correlation. There are, of course, evidence of stocks other than these mentioned, as well as mixtures of two or more.

Aside from data gathered from Indians there are data gathered from mountain white people, which is practically an entity in itself. Any similarity in white usage and Indian usage may be considered a cultural infusion one way or the other, or a coincidence. Page after page of plant medicines dutifully recorded by Mahoney in his Cherokee Physician has in this work been omitted for little of this information appears authentic. Mahoney stresses use of cultivated plants, use of whiskey, and specific cures for the organ directly responsible for the malady, none of which are characteristic of Indian practices. As stated in the appendix, the Indian had little or no knowledge of anatomy and to his way of thinking, the cause of the disease is simply the apparent symptom.

In some cases through the process of trial and error it has been found that an herb is truly efficacious. It is no surprise that there is agreement from all sources concerning these herbs.

Witthoft's second suggestion is that personal needs and imagination influence an individual's use of a plant. Aggie Lossiah knew of many medicines for "female trouble", Noyah Arch had a large repertoire of cures for toothache and aids for ball players, and Henry Lossiah knew a dozen ways to induce urination. It is reasonable to suppose that any one person would recall for the longest time those medicines which he himself had had some need for.

Concluding this rather brief discussion, it might be said that an effort to organize a complete Cherokee Ethnobotany would be as futile as compiling individual statements from a large population on a current controversial subject.

Plant lore is a heritage which today belongs to individuals rather than an entire Indian group. There is little unity of detail.

A real consistency lies only in the theory which originally governed the selection of which plant to use. For instance, many plants are selected because of some real or imagined connection between it and the illness concerned. This idea and others, however, are more fully detailed in the introduction.

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APPENDIX

Appendix A. Cherokee Theory and Practice of Medicine

The travelers passing through Indian territory in the 18th and 19th centuries were practically unanimous in their praise of Cherokee medicines and remedies. From the pages of the diaries of these men and women come such favorable testimonies as this one from James Adair, 1775.

Although the Cherokee shewed such little skill in curing the small pox, yet they, as well as all other Indian nations, have a great knowledge of specific virtues in simples; applying herbs and plants, on the most dangerous occasions, and seldom if ever, fail to effect a thorough cure from the natural bush. In the order of nature, every country and climate is blest with specific remedies for the maladies that are connatural to it. . . . the Indians instigated by nature, and quickened by experience, have discovered the peculiar properties of vegetables, as far as needful in their situation of life. For my own part, I would prefer an old Indian before any chirurgeon whatsoever, in curing green wounds by bullets, arrows, etc. both for the certainty, ease, and speediness of cure; for if those parts of the body are not hurt, which are essential to the preservation of life, they cure the wounded in a trice.

James W. Mahoney, 1849, echoes the above sentiments and writes in the preface of his book, The Cherokee Physician:

. . . Those who will take the pains to read and study, will soon be convinced that the all-wise creator in the infinitude of his mercy, has furnished man with the means of curing his own diseases, in all the climates and countries of which he is an inhabitant.

Mahoney declares in a further burst of faith.

The time is not far distant, when most, if not all the diseases of our country, will be healed without the use of calomel and mercurial preparations, and when

foreign drugs will be disused by administering physicians.

Many Indians and mountain whites of Cherokee, N.C. still possess confidence in the old-fashioned Indian remedies. There are, of course, those who remain in a half sophisticated state where they consult a white physician on occasion, but who will still revert to their ancient medicines.

At least one man who had nothing good to say of Cherokee remedies was James Mooney, who probably knew more of the Cherokees than any other man before or since his time. Mooney, 1890, records the Cherokee myth accounting for the origin of some diseases:

The white doctor works upon a disordered organism. The Cherokee doctor works to drive out a ghost or a devil. According to the Cherokee myth, disease was invented by the animals in revenge for the injuries inflicted upon them by the human race. The larger animals saw themselves killed and eaten by man, while the smaller animals, reptiles, and insects were trampled upon and wantonly tortured until it seemed that their only hope of safety lay in devising some way to check the increase of mankind. The bears held the first council, but were unable to fix upon any plan of procedure, and dispersed without accomplishing anything. Consequently the hunter never asks pardon of the bear when he kills one. Next the deer assembled and after much discussion invented rheumatism, but decreed at the same time that if the hunter, driven by necessity to kill a deer, should ask its pardon according to a certain formula, he should not be injured. Since then every hunter who has been initiated into the mysteries asks pardon of the slain deer. When this is neglected through ignorance or carelessness, the "Little Deer," the chief of the deer tribe, who can never die or be wounded, tracks the hunter to his home by blood-drops on the ground, and puts the rheumatism spirit into him. Sometimes the hunter, on starting to return to his home, builds a fire in the trail behind him to prevent pursuit by the Little Deer. Later on, councils were held by the other animals,

birds, fishes, reptiles and insects, each one inventing some new disease to inflict upon humanity, down even to the grubworm, who became so elated at the bright prospect in view that in his joy he sprang into the air, but fell over backward, and had to wriggle off on his back, as the grubworm does to this day.

In another paper Mooney, 1885, writes of the promise which the plants make to man:

Each tree, shrub and herb, even down to the grasses and mosses, agreed to furnish a remedy for some one of the diseases named, and each said: 'I shall appear to help man when he calls upon me in his need.' . . . When the doctor is in doubt what treatment to apply for the relief of a patient, the spirit of the plant suggests to him the proper remedy.

The old time myths, above, are today forgotten but the beliefs have survived with certain alterations. Rather than the plants purposely helping man, the Indians believe that "when God made this earth, he saw that every plant had a purpose." (Aggie Lossiah)

The writer asked Mose Owle, "How did the Indians know what plant to use in case of an illness?"

Mose Owle explained (Paraphrased), 'The old Indians would go to the woods in search of a medicine - they would see a herb over yonder . . . they would wait until everything was still and quote a verse, a prayer from the Psalms, if the weed shook it was a cure for the disease he was seeking to cure. In seven days the cure would be complete, for God made the earth in seven days.'

On being asked the same question, Noyah Arch gave an almost identical answer. The story is definitely related to the story

told by Mooney, but with a Christian veneer.

The following outline of Cherokee medicinal beliefs is adapted from Olbrechts, 1932 and Mooney 1885.

I Concepts of disease,

I Ulsge^{Edo} is the term for disease as it is present in the body of the sufferer. Although it is invisible, intangible, and in all other respects immaterial, it very often may manifest its presence by material means as swellings, protuberances, or even by worms and insects. It does not as a rule torment a person of its own free will; it is inert of itself, but it is subject to the will of more powerful agents: spirits, ghosts, or even human beings who may cause it to enter the body of the person they wish to harm. It may be of latent character or its effects may be immediate.

2 Diseases are sometimes due to "our saliva being spoiled." The disease is caused by bad dreams of ghost people, snakes, fish, etc. Saliva is thought by the Indians to be as important physiologically as blood or bile.

3 Sickness may be caused by an enemy feeling "of a different mind" toward us. (uyauda*nt) It is a psychopathological state ascribed to the energies of a human enemy.

- 4 Sickness may be caused by the soul being ravished by a human enemy. The symptoms resemble No. 2 and No. 3 above.

II Names of diseases: (Mooney, 1885) In general the name given to the disease by the shaman expresses only his opinion as to the occult cause of the trouble. Thus they have definite names for rheumatism, toothache, boils and a few other ailments of like positive character, but beyond this their description of symptoms generally resolves itself into a statement that the patient has bad dreams, looks black around the eyes, or feels tired, while the disease is assigned such names as 'when they dream of snakes', 'when they dream of fish', 'when ghosts trouble them', . . .

III Disease causes,

- 1 Natural causes: Although most diseases are attributed to supernatural phenomena, some diseases, and certainly many accidents are regarded as fatalistic.

- 2 Supernatural causes:

a The spirits of various animals cause disease from "revenge" motives.

b Human ghosts cause various diseases in seeking to draw away their living relations.

c Spirits; a large number of spirits exist which are neither benevolent or nefarious, but may cause disease if prevailed on to do so by an enemy.

In many cases where the cause of a disease is known, the spirit's rival is invoked to effect a cure.

A few of the many spirits are listed below:

- (1) The sun (*no'doi gadi*) may send a headache because she hates to see her children screw their faces when they look at her.
- (2) The fire may send a disease as revenge for disrespectful treatment, such as burning offal, etc.
- (3) The river (*asku'ya ganei'do*) may also send diseases to those who commit disrespectful acts such as urinating in it.
- (4) The thunder man and the two little red men may bring disease to those who fail to observe certain tabus relating to them, but they are ordinarily the Indian's friend.

- 3 Preternatural causes: Diseases may be caused unknowingly, or otherwise, through the agency of man -
 - a Witches are people who are brought up to the "profession" by their parents. Witches are apt to send disease simply out of their wicked character, and are particularly dangerous to persons weakened by sickness.
 - b "Man killers" are ordinary men who send diseases to their enemies.
 - c Menstruating women **exercise** an involuntary, but unhealthy influence. She may not prepare food, go where someone is

sick, be present around growing crops, or wade in a river where there are fish traps. Tabus are also observed on her husband.

d Dreams may be caused or an omen of death or disease.

e Tabus: Many diseases can be avoided simply by observing certain tabus.

IV The Treatment of Diseases: The practitioner seeks to attack the cause of the malady. Once it is removed, cure will be effected in four to seven days. Continued illness beyond the seventh day indicates the patient may be suffering from more than one disease. The practitioner discusses with the patient what has happened to him recently in the way of omens, neglected tabus, dreams, etc. to determine the cause.

1 Materia Medica: mostly herbs -

a Herbs with a pungent odor are popular medicines.

b Some plants are selected from some connection between their appearance and the symptoms of the disease: milkweed for milky urine, etc.

c In contrast to "b", some plants with such a resemblance are taboed.

d Some plants are selected because the outward appearance suggests a cure, as the unrolling of a fern for rheumatism.

e Plants are sometimes thought to possess a peculiar power because of an unusual configuration of growth: a lightning struck tree, a crippled tree, etc.

2 Preparation of the medicine: four ways of processing plants for use are still known -

a Decoction: the plant material is placed in a large amount of water, which is partially boiled away.

b Steep: Infusion, steep, or "ooze". The plant material is pounded or shredded and is soaked in water, which is usually cold.

c Boiled: The plant material is boiled for a short time in water.

d Poultice: The plant material after being treated in one of several ways is wrapped in cloth and then applied to the ailing spot.

3 Administering of the medicine: Usually done by the shaman.

a The tea is often drunk. The amount to be taken is rarely specific; "as much as you can hold".

b In old times the tea was blown on the patient with a blowing tube.

c For some diseases, the root is simply chewed by the patient.

d The tea is sometimes applied directly to the ailing

spot. In some cases the patient is scratched with a sharpened instrument before the application.

e A method seldom practiced now is the sweat bath. The medicine is poured over heated stones while the patient inhales the fumes. In earlier times this treatment was associated with a sweat house: in later times the patient wrapped himself up in a blanket and lay on his bed. Sweating was followed by a plunge in cold water.

4 Formulas: see part "E" of appendix.

In addition to treatment of disease with herb medicines and formulas, various physical means are employed. These include "going to the water", divination with beads, and a crude message.

In general there are two types of practitioners: the herbalist and the conjurer. There is a real distinction between the two, although a single person may lay claim to being both.

The herbalist is an Indian man or woman who has a workable knowledge of herbs and their uses. He will treat a person who comes to him without charge although he may accept a gift; he criticizes the white physician who charges a fee. "You see, white doctors are out after money. We will help a sick man . . . and if he recovers we are glad. But your doctors, if they do not get money, they will not cure. So they make healthy people ill on

purpose, that they may cure them and get rich."* The herbalist declares emphatically that he is not a medicine man, and uses only herbs in his cure.

The divinator, or medicine man, partook in ball game preliminaries and the green corn ceremony. He used witchcraft as well as plants, and exacted a fee for his services. He sometimes used his magic to harm people.

*Not an actual quotation, this is the expressed sentiment of Jute Jumper.

Appendix B: The Green Corn Ceremony

The Green Corn Ceremony is all but forgotten among the Cherokees today, but less than a century ago it was an integral part of Cherokee culture and religion. A statement by Witthoft, 1949, sheds some light on the origin of the rite.

For some centuries prior to the appearance of Europeans on the North American continent, the aboriginal peoples of the Eastern Woodlands and of the Eastern plains shared an economic culture complex that depended largely upon agriculture and chiefly upon one plant, *Zea mays*.

The extreme dependence on corn soon became manifest in cultural myths. Two versions of the story SELu, the corn mother (SElu is also the Cherokee word for corn) were told to Witthoft, 1947a. The versions differ only in details: each relates the history of SELu, her hunter husband, Kanati, and their two sons.

The first son of SELu was of natural birth but the second son was born of magic, and he was wild and hard to control. One day when the father was on a hunting trip the sons plotted to spy on SELu, to discover where she procured the corn and beans with which she fed them. Following her into a storehouse and concealing themselves, they watched her beat upon herself as the corn fell from beneath her skirts. She then rubbed her armpits and produced beans. The son of un-

natural birth became enraged (according to one version, because he thought her a witch, and a second version, because he thought her feeding excrement to her family) and killed SELu. Subsequent to this slaying the first corn plant grew.

An earlier account of the myth (Mooney, 1883) states that before she was murdered, SELu pleaded with her boys to enact a ritual with her body. She instructed them to keep an all night vigil on the place where her blood would spill so that they would be provided with corn the next morning. Later, when the corn seed was distributed to all people, it was found that the corn would not grow unless an all night ceremony was held. Thus was initiated the sacred green corn ceremony.

The myths continue to tell how wild animals escaped from Kanati's store den and are now found throughout the woods, and that Kanati and his two sons became the thunder people.

Charles Hicks, 1818, a principal chief of the Cherokees recorded in a letter appearing in a newspaper story, the earliest known account of a green corn ceremony. The people would gather in the different towns at night about large fires. The conjurer in charge took some of the grains from seven ears of corn and fed them to the fire. (An offering to the thunder boys?) All the people attending would drink a tea of wild horehound (Lycopus virginicus L.) . . . Later in the season, when

the corn was getting hard the green corn dance was held. The dance lasted four days, near the season when the national council was in session.

Exactly what the belief common to all or most of the Cherokees may have been and what purpose of the dance and ceremony might have been, it is certain that the original significance has been altered. Frank G. Speck (Witthoft, 1949) described a modern green corn feast which he said was not held at any fixed time of the year. Speck observed that the feast seemed to have lost all connection with the cycle of the agricultural year. He concluded that it was performed for curative purpose and spiritual benefit at whatever time in the summer it may have been needed by persons desiring spiritual help.

Will West Long described such a festival (Witthoft, 1947a) which he stated was held the night before the first corn was to be eaten. This ceremony was probably observed by Will during his lifetime but the writer doubts if anything like it can be found or even described today. A few of the conservatives like Will West Long clung to such tradition, and remained unchanged by Christianity.

According to Will's account, the festival began with all participants taking a medicine causing them to vomit. This was followed by "going to the water" and bathing for purification.

A series of animal and social dances followed which lasted all night.

In the morning the conjurers, who were also the dance leaders, examined each person with the beads and the cloth to see whether they would live until the next year's green corn festival. Two heads were used: one red (or white) and one black. The beads were laid on a cloth furnished by the examinee and kept as a token by the conjurer. After a formula was recited, the beads were watched. If a black bead moved the person was sure to die unless a special ceremony was enacted. The person was safe for another year if the red bead moved. Witthoft, 1947a adds that a second portion of the obsolescent green corn ceremony became separated into a second observance. This is the green corn medicine which is prepared in the individual households of the more conservative Cherokees. It is administered to all members of the family as a prerequisite to the eating of the green corn. Mandy (Sequoyah) Walkingstick told the writer that her grandfather gave a nasty-tasting tea to his family once a year before eating the corn. The tea was drunk for breakfast of the day corn was to be eaten. The ingredients which Mandy's grandfather used are the same as those used by Mollie Sequoyah's family. The reason given for the use of the medicine is "to prevent colic", which would plague anyone eating the green corn without previously taking the medicine. It is especially necessary for children. The tea is made of

the leaves of the following plants:

<u>Cucurbita</u> spp.,	gourd . . .	Galuná
<u>Andropogon</u> <u>virginicus</u> L.	bearded grass	Selú kwayá
<u>Impatiens</u> <u>pallida</u> Nutt,	jewel weed .	WalElú anig' Egistí
<u>Zea</u> <u>mays</u> , volunteer corn		Uwágá, or SELu gawata selú

A more complicated medicine was prescribed by Will West Long, to overcome the generative power which corn imparts to intestinal worms. It was (perhaps is) believed that corn silk is transformed into intestinal worms if swallowed.

The plants used in Will West Long's Green Corn Medicine are as follows:

- Andropogon spp., bearded grass; Selùkoyá, "resembling corn"
- Yucca filamentosa L., Adam's needle;
- Amaranthus spinosus L., spring amaranth; Tol^lEtí yustí, "sticks on you like"
- Zea mays L., volunteer corn; αWosa·u^si^hyenehí, "came up by itself"
- Lactuca canadensis L., wild lettuce; Unigisogah^hstí, . . .
- Impatiens capensis Meerb., jewelweed; Walelú UniglEgístí "humming-birds taking sap out of the flower"
- Cucurbita spp., gourd; GEluná,
- Amaranthus retroflexus L., green amaranth; Wats'ká,
- Ambrosia trifida L., ragweed; Ugwas'talu^{va}dá,
- Cynoglossum virginianum L., wild comfrey; UnisEle^{va}stí, "sticking on"
- Ambrosia artemisiifolia L. var. elatior (L.) Descourtil, ragweed; UnistElé histí, "sticking out"

The use of the first three plants is obligatory, and any one of the others may be used as the fourth ingredient, more being added if available. Will West Long explains that these weeds are used because they are rampant weeds in corn fields.

Other green corn medicines are listed in the text.

The following quotation from Coon, 1950 is included in

his discussion of rites of intensification. It is thought applicable at this point.

From time to time crises arise which disturb everyone equally because they come from outside the group concerned; Here the holy man . . . shows his versatility, for he conducts mass ceremonies to allay these dangers by magical means, and actually succeeds in uniting the people into a common effort with zeal replacing fear and confusion. In a country where the seasons differ greatly and the annual cycle involves changes of human activity, such ceremonies become annual.

Appendix C. The Ball Game

This ball game today plays but a small part in the culture of the Cherokee Indian. It was not too long ago, however, when the ball game played a highly important role in Cherokee social life. More than a contest of endurance and skill, the ball game embodied myths, celebrations, ceremonies, dances and gambling. The entire community took a more or less active part in the ball game. The following account is borrowed in part from Mooney, 1890 and from the descriptions of Mandy (Sequoyah) Walkingstick and Minnie Saunooke, who have witnessed the ceremonies.

The season of the ball game was from mid-summer to cold weather. The game provided an activity in the slack season after crops were in (or harvested) when there was nothing to do. The season ended with the coming of cold weather because of the abbreviated costumes in which the natives played.

The weeks prior to the contest were spent in sober preparation. Mooney, 1890 writes:

As speed and suppleness of limb and a considerable degree of muscular strength are prime requisites in the game, the players are always selected from among the most athletic young men, and to be known as an expert player was a distinction hardly less coveted than fame as a warrior. To bring the game to its highest perfection, the best players voluntarily subjected themselves to a regular course of training and conjuring; so that

in time they come to be regarded as professionals who might be counted on to take part in every contest

The night before the game each side held a secret dance. The location of the ceremony was concealed from the rival team lest a spy steal away a trophy insuring his team of success. The location selected, however, was invariably close to a stream. Shortly after darkness fell over the mountains the dance began.

Three fires were kept burning on the ceremonial ground. The spectators, gathering near the fires, came prepared for an all night stay. Near one fire danced seven women, representing the seven clans of the Cherokees. The women danced in a line, moving toward and then away from a frame on which several ball player sticks hung. When the female leader of the group was not dancing she was required to stand on rocks.

Around a second fire danced a circle of men, the ball-players. As the athletes moved about the fire they made feints and motions as though the game were in progress and a ball stick were in each hand. A man with a rattle danced about the ball players in a still larger circle.

The third fire was that of the medicine man's. All fires, this latter one in particular, were closely guarded against "enemies". The theft of a glowing ember meant certain defeat. Providing a steady beat for the dancing was the drummer. The drummer was carefully selected, for his was an important position.

While pounding on his skin drums he sang of the game on the morrow, of the fine things to be won by the men of his party, of the joy with which they will be received by their friends on their return from the field, and of the disappointment of their rivals. These declarations were said in a loud voice with the rhythm to which the Cherokee language so wonderfully lends itself.

"oginæli'í dali^dhEí'gi wigadætal^hæh^h" (Our girl friends will be proud of us when we win the game) (Mandy Walkingstick.)

To the drummer's remarks the dancers would shout in unison, "Ha! Ha!"

The woman leader would also sing her declarations:

"Da^d zænEnu^hí nudadu^hEn^howí" (When your challenger sees you he will tremble) (Mandy Walkingstick)

All the players would shout their approval at such a boast.

A dancer named Talalá (woodpecker) would, during the dance, rush to the edge of the darkness, raise his hands to his mouth and utter four yelps, suggesting the cry of a woodpecker, the last of which was prolonged. He would then rush back to the group and shout:

"DeduniyE'^hæ" (The game is ours!) (Nancy Walkingstick)

The players danced all night and were subjected to strict taboos and observances. The men were not to eat or sit down all night. They could not touch a woman, or vice versa, nor

could they touch a child. Frequently they were taken to the water by the medicine man. The many taboos and beliefs are reflected in an old Cherokee myth: (Ibid)

'Many years ago the animals challenged the birds to a game of ball. The bear, the deer and the terrapin - strong by strength, swiftness and armour - rejected two small players who sought to be on the team. The two tiny beasts turned to the eagle and the hawk. The birds won the contest with the help of their new allies.'

Not too long ago the Cherokee ball players still invoked the aid of the bat and the flying squirrel: a small piece of bat wing was tied to their ball sticks to impart the quality of evasiveness. Additional taboos were observed twenty-four days before the game and involved eating restrictions:

- 1) Rabbit he is easily scared
- 2) Frog . . . his bones are easily broken
- 3) Fish (hog sucker) . . his movements are sluggish
- 4) Atunká salad (*Chenopodium album*) . . . their stems are easily broken
- 5) Salt and hot food.

At daybreak the players were marched to the site of the ball game which was several miles away. The march lasted until noon as every ball player was taken separately to the water on the way.

On arriving at the playing field the ball players were scratched and medicine was applied. In a more recent times the instrument used for scratching was a comb provided with seven sharply pointed teeth of turkey bone. When this was not available it was substituted by broken glass, a brier stem, or a rattlesnake tooth.

A specific pattern of scratching was prescribed. Starting with either arm, the seven pronged instrument was brought down four times from the shoulder to the elbow. The other arm was treated similarly. Taking the first arm again, the motions were repeated four times, as before, from the elbow to the wrist. This was done also to the other arm. This procedure was repeated on the legs, beginning with one leg from thigh to knee, and so on. The instrument was then used to scratch an "X" on the back and the chest. In each case another scratch on the back and the chest joined the tops of the "X". Altogether there were almost 300 scratches on the ball player. These were but skin wounds, but the blood ran freely. The medicines were applied to the scratches.

A variety of herbs were used by the various medicine men in connection with the ball play. A sample list includes the following, all of which were used as tea steeps and applied in one way or another:

Tephrosia virginiana (L.) Pers. the toughness of the root was transferred to the muscles.

Juncus tenuis Willd. the sturdy character of its stems kept the player from falling down.
Carya spp. made the limbs supple.

The players were taken once more to the water, a prayer was said with the black and red beads, and the game began. In more recent times uniforms were donned consisting of a pair of shorts.

The ball game, in one form or another, existed in Indian groups all over North America. In the Cherokee version of the game the number of players is variable, from nine to twelve usually, but an equal number of players are on each side. When the teams have met on the field, excess players are eliminated until the teams match. During the game no substitutions are allowed. If a player on one team should, from one reason or another, have to leave the game, a player on the other team also retires.

The field occupies a flat piece of ground with two uprights at either end resembling the goal posts in football. A goal is scored when the ball passes through the goal regardless of whether it is thrown or carried through. The first team to tally twelve goals wins the contest. The number twelve, as mentioned elsewhere, has a magical significance from this source.

The ball, a rough, leather covered sphere, is about one inch in diameter. The ball must not be picked up with the hands.

Each player carries in each hand a stick which is equipped at the end with a pocket. At the beginning of the game the ball is tossed into the air and the players endeavor to catch it with their sticks. After the ball is thus caught, the player may hold it in his hand or mouth or he may throw it toward the goal or to another player. James Mooney (Ibid) records the following vivid description of a ball game:

An old man now advances with the ball, and standing at one end of the lines delivers a final address to the players. . . . He concludes with a laud "Ha! Taldu gwu!" (now for the l2!) and throws the ball into the air.

Instantly twenty pairs of ball sticks clatter together in the air, as their owners spring to catch the ball in its descent. In the scramble it usually happens that the ball falls to the ground, where it is picked up by the more active than the rest. Frequently, however, a man will succeed in catching it between his ball sticks as it falls, and disengaging himself from the rest, starts to run with it to the goal; but before he has gone a dozen yards they are upon him, and the whole crowd goes down together, rolling and scrambling over each other in the dust, straining and tugging for possession of the ball, until one of the players manages to extricate himself from the struggling heap and starts off with the ball. At once the others spring to their feet and, throwing away their ball sticks, rush to intercept him or to prevent his capture, their black hair streaming out behind and their naked bodies glistening in the sun as they run. It is a very exciting game as well as a very rough one.

In closing this account a quotation from A Reader in General Anthropology (Coon, 1950) is thought fitting:

Among human beings one other kind of competitive effort is universal, besides warfare that of playing games Games serve a number of purposes. . . . They take up slack time . . . They give people a routine to follow when they have come together for

a ceremony They give rival institutions a chance to work off steam, and furnish the routine, the context, of many ceremonial occasions.

Appendix D. Basketry

The following account of Cherokee Basketry is taken from Speck, 1920 and Leftwich, 1952.

To this day many Cherokees, residing in more remote sections of the reservation depend on basket making and other crafts for a portion of their income. Leftwich describes the past and present market outlets for cherokee crafts:

For a long time there were only a few small shops selling handicrafts on the reservation. It was a familiar scene to see Indians traveling along the road from farm to farm and town to town with their backs piled with an assortment of colorful baskets. After the Great Smoky Mountains became a National Park and good roads were built over the surrounding mountains, making it possible for visitors to reach Cherokee easily, it was no longer necessary for the Cherokee to leave the reservation to sell his wares.

Today, Cherokees use a variety of locally growing materials for basketry. Prior to 1924 only three materials were used in the actual construction of baskets: oak and cane were used for splints, and hickory bark for finishing the rims. Add to these honeysuckle stems, a basket material adopted from the Western Cherokees in 1924, and the most used materials are listed. More modern Cherokees use other materials due to the influence of white craftsman and the teaching in the Cherokees School. Such recently exploited materials include willow twigs, pine needles, spruce bark, hemlock barks, etc. A curious note is that no Indian was able to give

a Cherokee name for "honeysuckle". The author, before learning of the 1924 introduction of honeysuckle basketry, thought this very strange.

Quercus alba L. is the most used box splints in Cherokee basketry. The trees selected are straight saplings not over eight or ten inches in diameter. Most basket makers use only sapwood, but sometimes the heartwood is dyed and used. The splints are stripped from sections of green log from which they part quite readily. The strips are smoothed and gauged with a knife prior to the soaking and dying which precedes the actual basket making.

Cane, Arundinaria tecta (Walt.) Muhl. and A. gigantea (Walt.) Chapm., were originally secured along the flats of the Tuckasegee River, where small stands have ~~been~~ seen by the author. Speck states, "the restricted locations which they now occupy are somewhat too elevated and cool for the cane to flourish in the immediate neighborhood".

Cane stalks need only peeling and soaking prior to basket making. Some fifty-four canes, each divided into four pieces are required for a medium size wastebasket.

Of incidental interest in respect to the shortage of cane on the Cherokee Indian Reservation is the treaty signed by the Cherokees and the people of Barbourville, Kentucky in summer, 1950. The treaty agrees to give, free of charge, all the cane which the Cherokees wish to have.

The preamble of the treaty (requoted from Leftwich, 1952) reads:

We, the people of the Cherokee Nation, and the people of Kentucky, in friendly council here assembled, do make this solemn compact, to last until such time as the sun shall no longer shine, the birds no longer sing, and green things no longer grow on earth.

The bark of hickory is made into a withe to bind down the rim hoops. An Indian used this material to repair the broken lid of a wicker handbag owned by the writer's wife. The use of hickory bark in the former manner constitutes an "ear mark" of Cherokee basketry, **distinguishing** it from the basketry of all **other** southeastern tribes.

Speck lists some six types of baskets which were at one time commonly made:

1) Pack baskets - made of oak splints, had deep bodies and flaring necks. Their capacity was about one gallon. A strap worn over the head was used to carry the basket.

2) Fish baskets - made of oak splints, measured from ten to sixteen inches in height. Their bottle neck was preferred by Indian anglers.

3) Rib baskets - made of oak splints, were made by fastening two oak hoops in a perpendicular position, one hoop being the handle and keel, the other being the basket

rim. The spaces in between were filled in with the under one - over one technique. Cherokee women used this type for a market basket.

4) Covered baskets - were made of oak splints. This oblong, peck size basket was used in the household. Its design was the over two, under two weave.

5) Low sided rectangular baskets - were made of either oak or cane splints. Of no particular weave, this basket was used for a variety of household needs: food receptacles, for sifting, straining, etc.

6) Double weave basket - was a cane basket. The splints were laid down diagonally at the bottom and in weaving they are continued obliquely up the sides. The cane strips are sometimes used double, the smooth surface both on the outside and the inside.

Originally only two artificial colors were employed in dyeing Cherokee baskets. These were a black from Juglans nigra L. and a red from Sanguinaria canadensis L. These are now supplemented by a number of other natural stains, listed in the text, and various commercial dyes. Dying takes from one to eight hours depending on the material being dyed, the strength of the dye and intensity of color desired. Cane is quite hard and requires a longer time for processing.

Summarizing the place of basketry in Cherokee culture and giving a comparison with the basketry of other Indians groups, Speck, 1920 writes:

The only industrial art which has endured long enough among the Cherokee people to afford a perspective is that of basketry. Comparing the basketry of the various southern tribes, the perfection of technique seems indeed to improve as we pass from the Cherokee westward in the Gulf culture area. On the whole the Cherokee as a tribe seems to be about the poorest of the cane basket makers. The fact that oak ~~splint~~ basketry is quite common among the Cherokee seems to lend additional weight to the assumption that the cane actually has been for some time in a state of decline among them.

Appendix E. Sacred Formulas of the Cherokees

Probably the most unique records of Indian lore in all North America are the medicinal formulas of the Cherokee Indians. These records are the only ones of their kind so preserved. The manuscripts, as mentioned in the introduction, are written with the characters invented by Sequoyah in 1821.

The shaman, or medicine man, commonly used his formulas in conjunction with a plant medicine, but some of the formulas call for no medicine. Actually, the formula was regarded more important than the simple herb or medicine prescribed. The formula was read or recited in a ritual language (Olbrechts, 1932) the meaning of some of the words being sacrificed for exactness of form. Not one word of the formula can be changed, even though the meaning of a phrase might be obscure.

The shaman uttered the formula in a low voice to conceal it even from the person being treated. Only the shamans knew the formulas, and it was common practice for the old timers to trade or sell their formulas. Many, if not all shamans, recorded their knowledge in note books, some of which were collected by Mooney.

Mooney, 1885 writes of Cherokee religion and the importance it played in the formulas:

Cherokee religion has . . . a wonderful completeness about the whole system which is not surpassed even by the ceremonial religions of the East. It is evident from a study of these formulas that the Cherokee Indian was a polytheist and that the spirit world was to him

only a shadowy counterpart of this. All his prayers were for the temporal and tangible blessings - for health, for long life, for success in the chase, in fishing, in war and in love, for good crops, for protection and for revenge. He had no great spirit, no happy hunting ground, no heaven, no hell, and consequently death had for him no terrors and he awaited the inevitable end with no anxiety as to the future. . . .

Olbrecht, 1932 outlines a pattern which the formulas follow, although " . . . perhaps not one formula is exactly like it, nor does it (the pattern) mention other motives which occur occasionally."

- 1) An exclamation invoking the attention of the spirit.
- 2) An expression praising the spirit's potency.
- 3) The spirit's name, color, and its abode.
- 4) The reason for which the spirit's help is invited,
a statement of the cause of the inequilibrium.
- 5) Some depreciatory remarks leveled at the malignant power.
- 6) Some specific reason why the spirit called upon is expected to effect relief in this particular instance.
- 7) An emphatic statement that relief has been effected.
- 8) A final exclamation.

Throughout the formulas occur numbers and colors which have symbolic significance. The Cherokee symbolism and habitat for each of their colors is listed below. (Mooney, 1885) The Cherokee names for the different colors are not synonymous with English names; some Cherokee names embrace a range of colors which include several

English colors.

Color	Habitat	Symbolism
red	the East	success, triumph
blue-green	the North	defeat, trouble
black	the West	death
white	the South	peace, happiness
brown	above (?)	unascertained, but propitious
yellow-orange	_____	about the same as blue

The sacred numbers are listed below (Olbrecht, 1932).

Several of the old numbers have attained a new significance.

- 4 . . The fundamental sacred number in Cherokee ritual. (from the four compass points?)
- 7 . . From the seven Cherokee clans (or as Mose Owle says, the seven days in which God made the earth).
- 12 . . The number of scores necessary to win the ball game (or, according to Mose Owle, the twelve disciples of Jesus).
- 24 . . The number of taboo days after the delivery of a baby.

Some of the formulas are quite expressive, especially the formulas which are related to winning the love of a maiden. Below is a sample translation of the formula originally recorded in Sequoyah characters. It is a formula recited during childbirth (Mooney, 1885).

Listen! you little man, get up now, at once,
 There comes an old woman.
 The horrible (old thing) is coming, only a little
 way off.
 Listen! Quick! Get your bed and let us run away. Yu!
 Listen! you little woman, get up now, at once

There comes your grandfather.
 The horrible old fellow is coming, only a little
 way off.
 Listen! Quick! Get your bed and let us run away. Yul

This formula is designed to frighten the baby into being born. Both a "little man" and a "little woman" are addressed so that the formula will be effective, no matter what the sex of the newborn may be.

The ninety-six formulas, below, are condensed versions of those discussed more fully in The Swimmer Manuscript, Olbrecht, 1932. Given, in this order, are (1) the disease or condition for which the formula is used, (2) the plant, if any, and how they are used, (3) in quotations, a few words giving the general thought of the formula, which is often lengthy. In some cases the formula is very simple, in which the shaman merely names several plants and says to effect, "This will cure it." The phrases which occur in quotations are not to be taken even as rough translations, they are meant only to convey the general idea of the formula.

Formula 1: For the "Big Chill". A decoction of either Nicotiana rustica L. or Prunus virginiana L. is blown on the patient: "Oh Whirlwind, Thou and I are Powerful!"

Formula 2: For headache. Water and the juice of Panax trifolius L. (Nicotiana rustica L. may be substituted) is blown on the head of the patient: 'The wizards have just passed by, they have caused relief.'

Formula 3: For when they are sick with "sharp pains". The roots of Nicotiana rustica L. and Pastinaca sativa L. are chewed: 'Oh, Black Raven, put this man back on his feet, only a ghost has caused it!'

Formula 4: For itching. The roots of Lappula spp. and Cynoglossum virginianum L. are boiled **into** a tea and applied: 'Use these plants, this is all there is to it.' The itching here is caused by urinating on a fire, or on some object on which urinating is tabooed.

Formula 5: For when he dreams of snakes. A decoction of the roots of Botrychium virginianum (L.) Sw. or Aristolochia Serpentaria L. or the bark of Liriodendron Tulipifera L. is rubbed on to the place where the patient dreamed he was snake bitten. The place is breathed on four times and the patient is given some of the decoction to drink, causing him to vomit: 'Oh, Black men, come help him for it was only a ghost snake which bit him.'

Formula 6: For urinary diseases (when yellow and white mucous is passed). A bruised root infusion of Euphorbia corollata L. and another unidentified Euphorbia is rubbed on and drunk. Fasting is observed until sundown; using two yellow and two red beads on a cloth the shaman prays, 'Hear, Oh Red Kingfisher, make the Yellow Chat and the Yellow Frog - who have put the thing under him - release their hold.'

Formula 7: For vomiting bile and soreness of the navel region. No herbs are used: 'You, Oh Yellow Killdee and Yellow Fish, take away the Black Man to the night land!'

Formula 8: Similar to Formula 7, no medicine used: 'Now then, Red Otter, you will push away the disease spirit with the crown of your head.'

Formula 9: For sore eyes. A piece of bark from Alnus spp. is chewed and the juice is blown into the eye of a person suffering from sensitivity to light caused by seeing a rattlesnake: 'This will cure you of that which the enemy caused in striking you.'

Formula 10: Same disease and cause as Formula 8, no medicine used: 'Oh Miller, Thou wizard, Thou hast originated on high. Relief has been caused.'

Formula 11: As Formulas 7 and 8, no medicine used: 'Ha, Yellow Pigeon and Yellow Goldfinch, take away that which the disease spirit has put under him.'

Formula 12: For an incantation disease caused by a maligning conjurer. A handful of branch tips of Pinus virginiana Hill. From seven different trees are boiled in water and then removed and hidden in a dry place. The water is placed in a cup and passed four times in circles above the patient's head, after which he drinks it: 'Now then, Yellow Dog, thou wizard, you shall undo the work of the Simulator.'

Formula 13: For headache. The medicine is a tea but the original manuscript does not mention what herb is used. 'You merely have to say, Wolf! and blow it on.'

Formula 14: For sore navel, no medicine used: 'As you have passed by Yellow Pigeon and Yellow Goldfinch, you have taken it with you.'

Formula 15: For disordered bile. An infusion of the bark of the bark scrapings of Hydrangea arborescens L. and Clethra acuminata Michx. is drunk to induce vomiting. The disordered bile is thrown off into the river: 'You powerful ones - Yellow Goldfinch, Yellow Pigeon, Long Human Being, White Kingfisher and Red Fish Hawk - have come to push it aside.'

Formula 16: For fainting. An infusion of decoction of four species of Gerardia are drunk for four consecutive mornings, with fasting. The three identified species are: G. pedicularia L., G. virginica (L.) BSP, and G. flava L.: The fourth species has not been determined. 'This is all the different kinds of (Gerardia).

Formula 17: For children's diarrhea. A decoction of Epigaea repens L. is drunk: 'This sickness is in defecating green and white substance.'

Formula 18: For taking a client to the water for various purposes, no medicine used: 'The white thread has come down, the soul has been examined . . .'

Formula 19: For rheumatism. The patient is scratched with a branch of Smilax glauca Walt. and eel oil is rubbed on: 'This is the treatment when they feel tired.'

Formula 20: Medicine for "spoiled saliva" caused by dreaming of snakes. As an emetic, a decoction of Scirpus validus Vahl., Juncus effusus L., Coronilla varia L. Vicia caroliniana Walt., and Rhus radicans L. is drunk for four consecutive days: 'Now then Thunder Boys, remove the snake from under him.'

Formula 21: Prescription for an aggravated hoarseness. A decoction of the inner bark of five trees: Prunus spp., Quercus falcata Michx. (or Q. imbricaria Michx.), Cornus florida L., Pyrus Malus L. and Salix alba L. was drunk and applied to the throat. The bark was collected from the east side of the tree. No formula was recited.

Formula 22: Medicine for milky urine. A decoction of the inner bark of four trees: Betula nigra L., Quercus later two are used: 'Thou on high has caused the white bone to come down on the body.'

Formula 26: For illness with "Yellow" (bile?) No medicine is used, only rubbing with warmed hands: 'Put the Yellow into the lake.'

Formula 27: For a fainting cramp with intense pain. As above, rubbing but no medicine: 'I have pain, I have pain, etc. . . .'

Formula 28: For local pains, twitchings, cramps, etc., caused by dreaming and by revengeful animal spirits. The patient is scratched an infusion of three herbs is rubbed on: Smilax glauca Walt., Vicia caroliniana Walt., and Gnaphalium obtusifolium L.: 'Now then, Red Raven - come take away and eat that which the ghost has put under him.'

Formula 29: For when their breast swells. An infusion of four plants is used four times before noon for four days to cause vomiting: Collinsonia canadensis L., Camptosorus rhizophyllus (L.) Link., Asarum canadense L., and Hepatica acutiloba DC. The whole plant is used in every case except the first plant, in which the leaf or root is used! 'Ha, two little men from the sunland, you are chasing the important thing back to the great lake.'

Formula 30: For fever blisters. A tea of the dried leaves of Castanea pumila (L.) Mill. is blown on the sore spot: 'Now then, little frost and little frog, take it away.'

Formula 31: Same as Formula 25, with a recitation conveying the same idea.

Formula 32: For intestinal worms. A thick, sweetened decoction of Spigelia marilandica L. is taken morning and night with massage and blowing: 'Now then White Bittern, White Sandpiper, and White Mud Snipe, stick your bills into it and cause relief.'

Formula 33: For pain appearing different places. A warm infusion of the roots of Verbascum thapsus L. and Lobelia cardinalis

L. and the bark of Alnus rugosa (DuRoi) Spreng. or A. serrulata (Ait.) Willd. is applied to the ailing spot: 'Now then, Brown Otter, thou wizard, pull out what is under him.'

Formula 34: For vomiting when the stomach is yellow.

The patient drinks a warm decoction made of the inner barks of four trees, after which he goes to the water: Nyssa sylvatica Marsh., Clethra acuminata Michx., Alnus rugosa (Du Roi) Spreng, and Corylus americana Walt.: 'Ha, Weasel, Thou hast pulled out the bile.'

Formula 35: For sore eyes. An infusion of the bark of Alnus rugosa (Du Roi) Spreng is rubbed and blown into the eye of the patient: 'The enemy has hit thee and passed by.'

Formula 36: For shifting pains, as in Formula 33. An infusion of the leaves of Rhododendron maximum L., Kalmia latifolia L., and Veratrum viride Ait. are rubbed on the sore after scratching with a bunch of leaves of Leucothoe editorum Fern. and Schub.: 'Now then Brown Eagle, Blue Eagle, Black Eagle and White Eagle - carry it off!'

Formula 37: For yellow urine. Plants are used with this formula, but are omitted from the Swimmer manuscript: 'This will cure you.'

Formula 38: For stopped urinary passage. To the infusion of Formula 37 is added seven twigs of Oxydendrum arboreum (L.) DC. or Nyssa sylvatica Marsh. This mixture is drunk: 'This, along

with seven twigs will do it.'

Formula 39: For dizziness, fainting, or headaches. An infusion of Aristolochia serpentaria L., warmed by dropping seven live coals into it, is blown on the head, breast and back of the patient: 'The wizard from the forest comes with relief in his hand.'

Formula 40: For arm shakes and trembles. The affect area is scratched. Over the scratches is blown a cold water steep of Lobelia spicata Lam. The formula and four applications of the medicine is repeated four times in the morning for four days, if necessary. The medicine is sometimes drunk: 'Now then, two Red Men, make the Black Man relinquish his grip.'

Formula 41: For chills. A warm infusion of the roots of several ferns: Adiantum pedatum L., Polystichum acrostichoides (Michx.) Schott., Cystopteris fragilis (L.) Bernm., Dennstaetia punctiloba (Milax.) and Osmunda Cinnamomea L. and Moore are blown on the patient from east, north, west and south, in succession, four times in the morning for four days: 'Now, then, Thou Red Man, Blue Man, Black Man and White Man, you will conquer him.'

Formula 42: For fits (apoplexy?) A root infusion of Panax trifolius L. (Nicotiana rustica sometimes added), heated with four or seven live coals, is blown four times on the patient. 'The men have just gone by.'

Formula 43: For taking people to water - an involved formula

without medicine.

Formula 44: For pains appearing in different places. No medicine is used: 'Now then Red Otter, Brown Otter, Blue Otter and Black Otter - take it away.'

Formula 45: For pains in the side. No medicine is used: the formula invokes the help of several "men" for relief.

Formula 46: For indigestion from overeating. The patient bathes in the river; and drinks and bathes in an infusion of the bark of Gleditsia triacanthos L. and the roots of Specularia perfoliata (L.) A. DC. and Aesculus Pavia L.: 'This will cure them.'

Formula 47: For snakebite. The shaman chews a quid of Nicotiana rustica L. and sucks the snakebite. 'Ha. White Fawn and White Lizard, suck it out.'

Formula 48: For fever attacks. The patient is washed with an infusion of Linum usitatissimum L.: 'Now then, White Fish and Blue Man, take it away.'

Formula 49: For diarrhea or dysentery caused by animal or bird spirits. A decoction of seven plants (one unidentified) is drunk for four days: Ulmus rubra Muhl., Platanus occidentalis L., Tilia americana L., Gerardia virginica (L.) BSP. Quercus rubra L., and Q. alba L.: 'Put all these together.'

Formula 50: For stomach trouble caused by bad odors.

A warm infusion of seven plants is drunk to cause vomiting. Only one plant given in the Swimmer manuscript, Eryngium yucifolium L.: 'This will cure it.'

Formula 51: For menstruating women who dream of giving birth to animals or unnatural beings. A root decoction of plants having roots in the water is drunk: Hydrangea arborescens L., Platanus occidentalis L., and Rubus occidentalis L. Salt and hot foods taboos, and partial fasting is prescribed: 'These will cure her.'

Formula 52: For removing worms. A decoction of roots and bark, sweetened with honey is taken morning and night for four days: Spigelia marilandica L., Cypripedium Calceolus L. var parviflorum (Salisb.) Fern., and a third unidentified plant. Water, eggs and greasy foods are tabooed: 'Ha, wizard - cure it!'

Formula 53: For water blisters on the body. A warm bark infusion is poured over the afflicted area until the water ceases to run: Rhus typhina L. or R. glabra L. and R. copallina L.: 'Now then, Blue Man, take away what the sun has caused.'

Formula 54: For abdominal pains caused by the terrapin, or some other animal, spoiling the saliva. The abdomen is rubbed and a plant decoction is drunk to cause vomiting: Asarum canadense L., Hepatica acutiloba DC. and Epigaea repens L.: 'Now, White One, make the terrapin relinquish his grip.'

Formula 55: For when urination is irregular: A bark de-

coction using all or part of the following herbs is drunk: Calcyanthus fertilis Walt., Vitis aestivalis Michx., Rubus allegheniensis Porter, Evonymus americanus L., Vitis Labrusca L., Ampelopsis cordata Michx., and Lysimachia quadrifolia L.: If all seven of the herbs are used, a taboo is placed on salt, hot food and sexual intercourse: 'This will cure it.'

Formula 56: For throat trouble caused by insects (diphtheria?). A poultice of the beaten boiled leaves of Verbascum Thapsus L. is applied to the throat; the liquid is blown on: 'Now then Brown Frog and Blue Frog - chase it away.'

Formula 57: For headache. No medicine is used: 'Now, Little Man, bring relief!'

Formula 58: For diseases caused by magically introduced objects. The shaman holds a cold bark infusion of Alnus rugosa (Du Roi) Spreng. in his mouth and sucks the sore spot. The extracted object is spit out into a bowl: "Thou, Blue Watersnake, Pull out what He has put under him."

Formula 59: For frostbitten feet. No medicine is used: 'Oh Red Mountain Lion, cure it.'

Formula 60: For prevention or cure of frostbitten feet. The patient puts his feet under Andropogon virginicus L., which is believed to warm the feet of wild rabbits: 'Ha rabbit - I have put my feet where it is warm.'

Formula 61: For thrash, or sores in mouth. The inner bark of Carya tomentosa Nutt. is chewed by the shaman who blows it into the mouth of the patient. The family is restricted during the treatment: 'Ha, little snow, scatter it!'

Formula 62: For throat disease (diphtheria?). A warm decoction of Gnaphalium obtusifolium L. is blown into the throat of the patient with a tube of Eupatorium purpureum L.: 'Now then, Fish, scatter them.' (The ailment is believed caused by insects.)

Formula 63: For toothache. No medicine is used: 'White Squirrel, take away what the ghost has put in.'

Formula 64: For breast ache. No medicine is used: 'Ha, Red Man, remove the heat.'

Formula 65: For navel yellowness. A warm bark infusion of Carpinus caroliniana Walt. is applied four times: 'Now then, Yellow Kildee, fan it away with your wings.'

Formula 66: Virtually the same as Formula 44.

Formula 67: For body pains (Rheumatism?). No medicine is used: 'Now Black Man and Red Man, remove it beyond the hills.'

Formula 69: For shot and arrow wounds. A piece of the inner bark of Carya tomentosa Nutt. is chewed and blown on the wound: 'Now, Brown Dog, stop the bleeding.'

Formula 70: For childbirth. A decoction of Xanthorhiza

simplicissima Marsh. is given to the woman in labor: 'jump down little man (woman) grandma is coming.' (A complete translation of this formula is given at the beginning of this section.)

Formula 71: For bowel troubles. A cold infusion of Agrimonia parviflora Ait. is drunk at regular intervals: 'This will cure it.'

Formula 72: For flux. A decoction of Prunus pennsylvanica L. and Diospyros virginiana L. is drunk: 'This will cure it.'

Formula 73: For flux. A steep of Solidago spp. is drunk: 'This will cure it.'

Formula 74: For flux. An unidentified fern is used in a steep: In this case there is no recitation.

Formula 75: For chills. An infusion is blown on four times, consisting of Prunus spp. L., Cimicifuga racemosa (L.) Nutt., Actaea pachypoda Ell. and Phlox stolonifera Sims. An infusion of Veronica officinalis L. is given to the patient if he thirsts. In this case there is no recitation.

Formula 76: For childbirth. No medicine is used. The formula is similar to that in Formula 70.

Formula 77 For sore abdomen caused by an enemy "changing food." No medicine is used. The shaman entreats to various colored dogs to 'remove it.'

Formula 78: For bad diarrhea. A root decoction is boiled

to thick consistency, watered, and again boiled down, for a total of four times and drunk. The decoction consists of the roots of Vitis aestivalis Michx., Ampelopsis cordata Michx., Cornus florida L., Nyssa Sylvatica Marsh, Amelanchier canadensis (L.) Medic., and Oxydendrum arboreum L.: 'Oh Great Spirit, thou has given me permission to use it.'

Formula 79: For children who cry due to persecution by mountain people. An infusion of Nicotiana rustica L. is blown over the body of the child: 'Oh Red Man, break up the ball games which the mountain dwellers play in his stomach.'

Formula 80: For itching privates when one has urinated on a fire. The roots of Aristolochia Serpentaria L. or Liriodendron Tulipifera L. is chewed and the juice is blown into the urethra by a grass stalk or cane tube. An infusion of the same plants is drunk. In this case there is no recitation.

Formula 81: For when he urinates yellow. A root decoction of Acorus Calamus L., Iris verna L., Clematis virginiana L. and Aristolochia durior Hill. is drunk two or four times: 'Cure him, Oh Sun and Little Men!'

Formula 82: For headache. The root of Nicotiana rustica L. or Panax trifolius L. is chewed and the juice is applied to the head and neck: 'The Red and Purple Men have scattered it.' (Compare with

Formula 2.)

Formula 83: For going to the water and examining with the beads. No medicine is used; a prayer is said to the river.

Formula 84: For sore places (rheumatism). A stamper is made of the wood of Diospyros virginiana L., which is pressed to the sore place: 'The Little Wizards have chased it away.' A fee of a knife is charged.

Formula 85: For yellowness of the navel. No medicine is used. The patient is rubbed with warm hands while the shaman entreats to various birds.

Formula 86: For indigestion and biliousness. A root decoction is poured over hot rocks in the sweat house. The decoction, which is also drunk as an emetic, consists of Alnus serrulata (Ait.) Willd., Diospyros virginiana L., Prunus spp., Plantanus occidentalis L., Liriodendron Tulipifera L. and Magnolia acuminata L.: In this case there is no recitation.

Formula 87: For frost bitten feet. No medicine used, the treatment consists of the recitation and sucking: 'I am a wolf, etc.'

Formula 88: For boils caused by caterpillars. No medicine used, the shaman only touches the patient with his heated thumb. The recitation is non-translatable, being a series of magic words.

Formula 89: For headaches. No medicine, the treatment consists of rubbing and blowing: 'Relief is caused.'

Formula 90: For boils. The juice of Nicotiana rustica L. is rubbed on the boil: 'Relief is caused.'

Formula 91: For pains caused by the heat spirit (rheumatism). No medicine is used; the shaman massages the patient: 'Oh Blue Man, cure him.'

Formula 92: For bad dreams. No medicine is used to prevent the ill effects of the dreams, the patient is "taken to the water" by the shaman and the formula, an entreaty to various animals, is recited.

Formula 93: For "going to the water" to help oneself. The person says a prayer to the "Long Man"; takes no medicine.



Figure 1: Mollie Sequoyah



Figure 2: Aggie Lossiah



Figure 3: Mrs. Henry Bradley



Figure 4: Yute Jumper and Neighbor



Figure 5: Noyah Arch

Appendix F: Cross Reference Table

The following table can be used to refer either to a plant or a specific use. For economy of space, certain usages have been lumped into broader categories and a number of abbreviations have been devised. To facilitate use of the table, like abbreviations appear in the same locus on all pages:

E . . .	medicine for ears or eyes
Tth . .	medicine for teeth trouble
Gas . .	medicine for gastric trouble: stomach ache, vomiting, indigestion, colic, etc.
Hd . . .	medicine for headache or fainting
Int . .	medicine for intestinal trouble
Fm . . .	medicine menstruation or menopause
Prg . .	medicine for pregnancy or childbirth
Rhm . .	medicine for rheumatism, soreness, cramps, body aches, etc.
Srs . .	medicine for sores, hives, warts, bee stings, poison ivy, boils, piles, itching, burns, etc. (skin irritation or soreness)
Inj . .	medicine for injury, wounds, or snakebites
Fv . . .	medicine for fever, sickness, chills, colds, etc.
Sup . .	medicines with supernatural powers: ball player medicines, green corn medicines, witchcraft, etc.
Use . .	Plants which are useful as foods or for handcraft
Hrt . .	medicines which are used either for heart trouble or for blood trouble

Ur . . . medicines which are used for urinary trouble

Thr . . . medicines used for sore throats, coughing,
catarrh, etc.

<u>Acer rubrum</u> (Pps. 81,82)	E	Int	Fm	Srs					
<u>A. saccharinum</u> (P. 82)						Fv			
<u>Achillea spp.</u> (P. 124)									Thr
<u>Acorus calamus</u> (Pps. 10,11)			Hd		Srs	Fv			Thr
<u>Actaea pachypoda</u> (P.43)		Tth			Srs	Fv	Sup		
<u>Adiantum pedatum</u> (P.3)				Rhm		Fv		Hrt	
		(A tea is used for paralytic attacks)							
<u>Aesculus spp.</u> (Pps. 82,83)		Gas	Hd	Prg	Srs			Use	
		(A leaf tea for poisoning fish)							
<u>Agave virginica</u> (Pps.19,20)			Int						
<u>Agrimonia parviflora</u> (Pps.59,60)			Int						
		(A medicine used to satisfy excessive hunger)							
"Algae" (P.1)			Hd						
<u>Alnus spp.</u> (Pps.26,27,28,29)	E	Tth	Gas		Fm	Rhm	Srs	Fv	Sup
								Hrt	Ur
									Thr

<u>Amaranthus</u> spp. (P. 41)				Sup	
<u>Ambrosia</u> spp. (Pps. 124,125)		Srs	Fv	Sup	
<u>Amelanchier canadensis</u> (P. 60)		Int			Use
<u>Amianthium Muscaetoxicum</u> (P. 14)		Srs			Use
<u>Ampelopsis cordata</u> (P. 85)		Int			Ur
<u>Amphicarpa bracteata</u> (Pps. 67,68)		Int	Inj		Use
	(Used as a substitute for chewing tobacco)				
<u>Anaphalis</u> spp. (P. 125)	E		Fv		Use Thr
<u>Andropogon virginicus</u> (Pps. 8,9)		Srs		Sup	Use
	(A tea used for snakebite)				
<u>Anemone</u> spp. (P. 44)			Fv	Sup	
<u>Angellica venosa</u> (P. 93)		Prg		Sup	
<u>Antennaria plantaginifolia</u> (P. 126)		Int	Fm		

<u>Aplectrum hyemale</u> (P. 20)	(To fatten children and hogs)								
<u>Apocynum cannabinum</u> (Pps. 104,105)		Rhm				Use		Ur	
<u>Aquilegia canadensis</u> (P. 44)			Int						
<u>Aralia spp.</u> (Pps. 91,92)	Gas (Used to relieve paralysis)	Rhm	Srs				Hrt	Ur	
<u>Arisaema triphyllum</u> (P. 11)			Hd		Srs				Ur
<u>Aristolochia spp.</u> (Pps. 36,37,38)	Tth Gas Hd	(Rhm)	Srs	Inj	Fv		Hrt	Ur	Thr
<u>Artemesia Absinthium</u> (P. 126)	(To remove worms)								
<u>Aruncus dioicus</u> (P. 60)	(Also used for swollen feet)	Prg		Srs					Ur
<u>Arundinaria spp.</u> (P. 9)						Use			
<u>Asarum canadense</u> (Pps. 38.39)	Gas Fm (Also for swollen breasts and as a substitute for snuff)			Inj	Fv		Hrt		
<u>Asclepias spp.</u> (Pps. 105,106)	Int (Also for pleurisy)	Rhm			Fv	Use	Hrt		

Ascyrum Hypericoides
(Pps. 87,88)

Inj Fv Sup

Asimina triloba
(P. 52)

Use

Aster spp.
(P. 126)

Int

Thr

Baptisia tinctoria
(P. 68)

Tth Gas

Use

Betula spp.
(P. 29)

Gas

Int

Sup

Ur

Bignonia capreolata
(P. 119)

Hrt

Elephilia spp.
(P. 108)

Hd

Botrychium spp.
(P. 2)

Gas

Sup

Cacalia atriplicifolia
(P. 127)

(A substitute for salt, for cancer)

Srs Inj

Calycanthus spp.
(Pps. 51,52)

E Gas
(To poison wolves)

Srs

Ur

Campanula divaricata
(P. 122)

Int

<u>Camptosorus rhizophyllus</u> (Pps. 3,4)	(For swollen breasts)								Sup	
<u>Capsella Bursa pastoris</u> (P. 54)									Use	
<u>Carpinus caroliniana</u> (P. 29)		(Int)								Ur
<u>Carya spp.</u> (Pps. 24,25)	(For tuberculosis and poliomyelitis treatment)			Srs	Inj			Sup	Use	
<u>Cassia spp.</u> (Pps. 68,69,70)	(Sexually symbolic)	Hd	Int	Rhm	Srs	Inj	Fv	Sup		Hrt
<u>Castanea spp.</u> (Pps. 30,31)	(For tuberculosis and infant's navel)		Fm	Prg	Srs		Fv		Use	Hrt
<u>Caulophyllum thalictroides</u> (P. 48)		Tth		Prg	Srs					Thr
<u>Ceanothus americanus</u> (P. 85)	(For a "tired chest")		Int							
<u>Cerastium vulgatum</u> (P. 43)	(For worms)									
<u>Cercis canadensis</u> (P. 70)							Fv			
<u>Chenopodium mbrosiodes</u> (Pps. 40,41)	(For worms)	Hd					Fv			

Chimaphila maculata
(P. 97)

Hd

Fm

Fv

Cicuta maculata
(P. 94)

(A poison, to sterilize women, an age indicator)

Cimicifuga racemosa
(P. 44)

Rhm

Fv

Cirsium spp.
(P. 127)

Gas

Srs

Use

Clematis virginiana
(Pps. 44,45)

Gas

Rhm

Sup

Ur

Clethra acuminata
(P. 97)

Gas

Int

Fv

Clitoria mariana
(P. 70)

Srs

Coix Lacryma-Jobi
(P. 9)

Tth

Collinsonia canadensis
(P. 108)

(Used as a deoderant, for swollen breasts)

Comandra spp.
(P. 35)

Srs

Ur

Coreopsis spp.
(P. 127)

Int

Use

<u>Cornus florida</u> (P.96)	Hd Int	Srs Inj Fv	Thr
<u>Coronilla varia</u> (Pps. 70, 71)	Gas	Rhm	Sup
<u>Corylus americana</u> (Pps. 29,30)	Gas (For "yellow")		
<u>Crataegus spp.</u> (P. 61)		Sup	Hrt
<u>Cucurbita Pepo</u> (P. 122)		Sup	Ur
<u>Cynoglossum virginianum</u> (P. 107)	(For cancer)	Srs	Sup Ur
<u>Cypripedium spp.</u> (Pps. 20,21,22)	Gas Hd Fm (Also, medicines for diabetes, worms, nerves and rupture)	Fv	Ur
<u>Cystopteris fragilis</u> (P. 4)		Fv	
<u>Datura Stramonium</u> (P. 114)	(For asthma also)	Srs	
<u>Delphinium spp.</u> (P. 45)	(As a cow poison)		
<u>Dennstaedtia punctiloba</u> (P. 4)		Fv	

<u>Dentaria</u> spp. (P. 55)	Hd			Fv	Use	Thr
<u>Desmodium</u> spp. (P. 71)				Rhm	Sup	
<u>Diospyros virginiana</u> (Pps. 103,104)	Tth	Gas	Int	Rhm	Sup	
<u>Dryopteris</u> spp. (P. 4)	Tth	Gas		Rhm		
<u>Echium vulgare</u> (Pps. 107,108)						Ur
<u>Epigaea repens</u> (P. 98)		Gas	Int			Ur
		(For chest ailment)				
<u>Erigeron pulchellus</u> (Pps. 127,128)			Hd		Fv	
<u>Eriophorum</u> spp. (?) (P. 10)						
<u>Eryngium</u> spp. (P. 94)	Tth	Gas			Fv	Use
<u>Erythronium americanum</u> (P. 14)			Hd	Srs	Fv	Sup
<u>Eupatorium</u> spp. (Pps. 128,129)			Fm	Prg	Fv	Sup Use
						Ur Thr

<u>Euphorbia spp.</u> (Pps. 77,78)	Tth (For gonorrhea)	Int	Prg	Srs		Ur
<u>Evonymus americanus</u> (Pps. 80,81)	Gas (For gonorrhea)		Prg		Fv	Hrt Ur
<u>Fagus grandifolia</u> (Pps. 31,32)	(For tuberculosis)				(Fv)	
<u>Fistulina hepatica</u> (P. 1)					Use	
<u>Galax aphylla</u> (P. 102)						Ur
<u>Gaultheria procumbens</u> (Pps. 98,99)	Gas (Used as a substitute for chewing tobacco)					
<u>Geaster spp.</u> (P. 1)			Prg			
<u>Geranium maculatum</u> (P. 76)				Srs		
<u>Gerardia spp.</u> (P. 116)		Hd Int				
<u>Gillenia spp.</u> (Pps. 61,62)	Tth Gas (Used to make women sterile)	Int		Rhm Srs	Fv	
<u>Glechoma hederacea</u> (P. 109)				Srs	Fv	

Gleditsia triacanthos
(Pps. 71,72)

Gas

Fv Sup

Glycene apios
(P. 72)

Sup Use

Gnaphalium spp.
(P. 129)

Rhm

Fv

Thr

Goodyera pubescens
(P. 22)

E Tth

Fv

Hrt Ur

Habenaria ciliaris
(Pps. 22,23)

Hd Int

Sup

Hamamelis virginiana
(Pps. 57,58)

Fv

Thr

Hedeoma pulegiodes
(P. 109)

Tth Hd Int
(Used as an insect repellent)

Fv

Helenium autumnale
(P. 130)

Prg

Helianthus spp.
(P. 130)

(For sore feet)

Fm

Use

Helianthemum spp.
(Pps. 88, 89)

Ur

Hepatica acutiloba
(Pps. 45, 46)

Tth Gas Int
(For swollen breasts)

Fv Sup

Hrt

Thr

<u>Heuchera americana</u> (P. 56)	Gas	Int	Srs				
	(To remove coat from the tongue)						
<u>Hieracium venosum</u> (P. 130)		Int					
<u>Hosta Japonica</u> (Pps. 14,15)						Sup	
	(For swollen legs, tuberculosis?)						
<u>Hydrangea arborescens</u> (Pps. 56,57)	Gas	(Fm)	Rhm	Srs		Sup	
<u>Hypericum perforatum</u> (P. 88)		Int	Fm				
<u>Ilex opaca</u> (P. 80)			Rhm				Use
<u>Impatiens spp.</u> (Pps. 83,84,85)	Gas		Prg	Srs	Fv	Sup	Use
<u>Ipomea pandurata</u> (P. 106)		Int	Rhm				
	(Used as an insect repellent)						
<u>Juglans cinerea</u> (Pps. 25,26)	Tth	Int					Use
<u>J. nigra</u> (P. 26)					Fv	Sup	Use
	(Used as a fish poison)						
<u>Juncus spp.</u> (P. 13)	(Gas)					Sup	Use

<u>Kalmia latifolia</u> (P. 99)		Rhm	Srs		Sup			
<u>Lactuca canadensis</u> (Pps. 130,131)					Sup	Use		
<u>Lappula spp.</u> (P. 108)			Srs					
<u>Leucothoe editorum</u> (P. 100)	(For dog's mange)	Rhm	Srs					
"Lichens" (P. 2)	(Used for cancer)							
<u>Lilium spp.</u> (Pps. 15,16)		Int	Rhm		Sup	Use		
<u>Lindera Benzoin</u> (Pps. 52,53)			Srs		Fv	Use		
<u>Liparis Loeselii</u> (P. 23)								Ur
<u>Linum usitatissimum</u> (P. 75)					Fv			
<u>Liquidambar Styraciflua</u> (P. 58)	(Used for nervous trouble and for chewing gum)				Fv	Use		
<u>Liriodendron Tulipifera</u> (Pps. 49,50)	(Used against tuberculosis and worms)	Gas	Int	Srs	Inj	Fv	Sup	Use

<u>Lithospermum</u> spp. (P. 108)				Sup
<u>Lobelia Cardinalis</u> (Pps. 122,123)	(For nosebleed)	Rhm		Fv
<u>Lobelia inflata</u> (P. 123)		Rhm	Srs	
<u>L. siphilitica</u> (P. 123)	(For nosebleed)		Srs	Fv
<u>L. spicata</u> (Pps. 123,124)	(For shakes and trembles)			
<u>Lonicera</u> spp. (P. 121)				Use
<u>Lupinus</u> spp. (P. 72)	(For hemorrhage)			
<u>Lycoperdon pyriforme</u> (P. 1)			Srs	
<u>Lycopus virginicus</u> (Pps. 109,110)			Srs	Sup
<u>Lysimachia quadrifolia</u> (Pps. 102,103)		Int	Fm	Ur
<u>Magnolia</u> spp. (Pps. 50,51)	(For sinus trouble)	Tth	Gas	Int

<u>Mentha spp.</u> (P. 110)	Gas					Fv		Use
<u>Mirabilis spp.</u> (Pps. 41,42)	(Used as a fly poison)							
<u>Mitchella repens</u> (P. 120)			Int	Fm				Sup
<u>Menarda spp.</u> (Pps. 110,111)			Hd			Srs	Fv	
	(For nose bleed, a stimulant)							
<u>Monotropa uniflora</u> (Pps. 97,98)	E					Srs		Sup
<u>Nasturtium spp.</u> (P. 55)								Use
<u>Nepeta Cataria</u> (P. 111)	Gas					Srs	Fv	
	(Used in a tonic for nerves)							
<u>Nicotiana rustica</u> (Pps. 114,115)			Hd			Rhm	Srs	Inj Fv Sup
	(Used for apoplexy)							
<u>Nyssa sylvatica</u> (Pps. 90,91)	E	Gas	Int	Fm	Prg		Fv	Ur
<u>Oenothera spp.</u> (P. 91)						Srs		Use
<u>Orontium aquaticum</u> (Pps. 11,12)						Rhm	Fv	Sup

Osmunda cinnamomea
(P. 2)

Fv

Ostrya virginica
(P. 30)

Tth

Oxalis spp.
(P. 75)

Gas
(Used against worms and cancer)

Srs

Oxydendrum arboreum
(Pps. 100,101)

Int

Srs

Sup Use

Ur

Oxypolis rigidior
(Pps. 94,95)

Use

Panax spp.
(Pps. 92,93)

Gas Hd Fm Rhm Srs
(Used for apoplexy, breast pains, venereal disease and "bald hives)

Thr

Panicum spp.
(P. 9)

Use

Passiflora incarnata
(Pps. 89,90)

E
(Used to wean babies)

Srs

Use

Pastinaca sativa
(P.95)

Rhm

Sup

Pedicularis canadensis
(P. 117)

Gas Int

Srs

Thr

Phoradendron flavescens
(P. 36)

Hd
(A cure for lovesickness)

Prg

<u>Phlox</u> spp. (Pps. 106,107)						Fv	Sup												
<u>Phryma</u> <u>Leptostachya</u> (P. 119)							Sup												
<u>Physalis</u> <u>heterophylla</u> (P. 115)																	Use		
<u>Phytolacca</u> <u>americana</u> (Pps. 42,43)				Int		Rhm	Srs										Use	Hrt	Ur
				(Used as medicine for chicken and cattle)															
<u>Picea</u> <u>rubens</u> (P. 5)																	Use		
<u>Pilea</u> <u>pumila</u> (Pps. 34,35)							Srs										Sup		
<u>Pinus</u> spp. (Pps. 5,6,7)				Int		Prg	Srs			Fv	Sup	Use							Thr
<u>Plantago</u> spp. (Pps. 119,120)																			
					Hd		Rhm	Srs	Inj		Sup								
				(For swollen legs)															
<u>Platanus</u> <u>occidentalis</u> (Pps. 58,59)																			
					Int (Fm)	Prg	Srs			Fv	Sup							Ur	
<u>Podophyllum</u> <u>peltatum</u> (Pps. 48,49)																			
					E	Int	Rhm												
				(Used as an insecticide)															
<u>Polygala</u> spp. (Pps. 76,77)					Int														
										Inj									

<u>Polygonatum biflorum</u> (P. 16)	(Gas)		Srs		Sup	Use	
<u>Polygonum</u> spp. (P. 39)		Int	Rhm Srs				Ur
	(Used as a fish poison and to stop children from sucking fingers)						
<u>Polymnia Uvedalia</u> (P. 131)			Prg				
<u>Polystichum acrostichoides</u> (P. 5)	Gas	Int			Fv		
<u>Potentilla</u> spp. (P. 62)			Srs		Fv	Sup	
<u>Prenanthes trifoliata</u> (P. 131)	Gas						
<u>Prunella vulgaris</u> (Pps. 111, 112)			Srs			Use	
<u>Prunus pennsylvanica</u> (P. 63)		Int	Fm				
<u>P. Persica</u> (P. 63)	Gas		Srs				Thr
<u>P. serotina</u> (Pps. 63, 64)			Prg		Fv	Use	Hrt Thr
<u>P. virginiana</u> (Pps. 64, 65)	Gas				Fv		Thr

<u>Pycnanthemum</u> spp. (P. 112)	Hd (For inflamed penis)		Fv		Hrt			
<u>Pyrularia pubera</u> (Pps. 35, 36)			Srs					
<u>Pyrus Malus</u> (P. 65)					Sup	Use		Thr
<u>Quercus</u> spp. (Pps. 32,33,34)	Gas Int Fm (Used for asthma and tuberculosis)	Srs	Fv		Use		Ur	Thr
<u>Rhus</u> spp. (Pps. 78, 79, 80)	Gas Int (<u>R. glabra</u> also used for brain fever, gonorrhea and bed wetting)	Srs		Sup			Ur	Thr
<u>Rhododendron</u> spp. (Pps. 101,102)		Rhm		Sup	Use			
<u>Rosa virginica</u> (P. 65)	Int							Thr
<u>Rubus</u> spp. (Pps. 66,67)	Tth Int (Fm) (Used to clean a coated tongue)	Srs		Sup			Ur	Thr
<u>Rudbeckia</u> spp. (Pps. 131, 132)	E Gas Int (Used for venereal disease)	Srs	Inj		Use			
<u>Rumex</u> spp. (Pps. 39, 40)	Gas Int Prg	Srs				Hrt		
<u>Sagittaria latifolia</u> (P. 8)			Fv	Sup				

<u>Salix</u> spp. (P. 24)								Sup	Use		Thr
<u>Sambucus</u> spp. (P. 121)		Gas	Int		Rhm				Use		
<u>Sanguinaria canadensis</u> (P. 54)									Use		Thr
<u>Sanicula</u> spp. (P. 95)		Gas									
<u>Sarracenia purpurea</u> (Pps. 55, 56)								Sup			
<u>Sassafras albidum</u> (P. 53)	E		Hd	Int		Srs	Inj	Fv		Use	Hrt
<u>Satureja hortensis</u> (P. 112)			Hd								
<u>Saururus cernuus</u> (P. 23)						Srs					
<u>Saxifraga</u> spp. (P. 57)					Rhm				Use		
<u>Scirpus validus</u> (P. 10)		(Gas)							Sup		
<u>Scutellaria</u> spp. (Pps. 113, 114)				Int	Fm	Prg			Sup		Ur
				(For nerves and breast pains)							

Sherardia arvensis Use
(P. 120)

Sisymbrium officinalis Use
(P. 55)

Sisyrinchium spp. Int Use
(P. 20)

Smilacina racemosa E
(P. 17)

Smilax spp. Gas Prg Rhm Srs Fv
(Pps. 17,18)

Solanum carolinense
(P. 115) (Used for dog mange and to stop flow of saliva in babies)

S. nigrum Sup Use
(Pps. 115,116)

Solidago spp. Hd Int Fv
(P. 132) (For tuberculosis)

Specularia perfoliata Gas
(P. 124)

Spigelia marilandica
(P. 104) (For worms)

Spiranthes lucida Sup Ur
(P. 23)

<u>Sreptopus roseus</u> (P. 18)						Use	
<u>Stylosanthes biflora</u> (Pps. 72,73)		Fm					
<u>Tagetes spp.</u> (P. 132)						Use	
<u>Tephrosia virginiana</u> (Pps. 73, 74)		Rhm			Sup		Ur
<u>Thalictrum dioicum</u> (Pps. 46,47)	Gas	Int					
<u>Tiarella spp.</u> (P.57)	(To remove coat from tongue)						
<u>Tilia spp.</u> (Pps. 86,87)		Int		Srs	Inj	Use	
	(For tuberculosis)						
<u>Tovara virginiana</u> (P. 40)					Fv		
<u>Tradescantia spp.</u> (Pps. 12, 13)	Gas	Fm				Use	Ur
	(Used for rupture and cancer)						
<u>Trifolium pratense</u> (P. 74)					Fv		
<u>Trillium spp.</u> (P. 18)						Sup	

<u>Trollius laxus</u> (P. 47)					Srs				
<u>Tsuga canadensis</u> (P. 7P)			Prg		Srs		Use		Ur
<u>Ulmus rubra</u> (P. 34)		Int	Prg		Srs		Sup		
<u>Urtica gracilis</u> (P. 35)	Gas						Use		
<u>Uvularia sessilifolia</u> (P. 19)		Int							
<u>Veratrum viride</u> (P. 19)					Rhm				
<u>Verbascum Thapsus</u> (Pps. 117,118)	(For swollen glands and dropsy)		Fm Prg	Rhm	Srs		Sup		Ur Thr
<u>Vernonia noveboracensis</u> (Pps. 132,133)	Tth Gas		Fm Prg						Ur
<u>Veronica officinalis</u> (P. 118)			Prg						
<u>Viburnum spp.</u> (P. 121)					Srs		Fv		
<u>Vicia caroliniana</u> (Pps. 74,75)	(Gas)			Rhm			Sup		

<u>Viola spp.</u> (P. 89)	(For insecticide)	Srs				
<u>Vitis spp.</u> (Pps. 85,86)		Int		Fv	Use	Ur
<u>Xanthium echinatum</u> (Pps. 133,134)	Gas (Used to dislodge particles stuck in throat)	Rhm	Inj	Sup		
<u>Xanthorrhiza simplicissima</u> (Pps. 47,48)	E (Used for nerves)	Prg	Rhm	Srs	Use	Hrt
<u>Yucca spp.</u> (P. 19)	(For diabetes, soap substitute and fish poison)			Sup		
<u>Xyris caroliniana</u> (P. 12)		Int				
<u>Zea Mays</u> (Pps. 9,10)				Sup	Use	
<u>Zizea aurea</u> (P. 95)				Sup		