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A Guide to MEDICINAL PLANTS of Appalachia

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FOREWORD

THE MEDICINAL or therapeutic uses of the plants described in this guide are not to be construed in any way as a recommendation by the authors or the U.S. Department of Agriculture. Some of the dried crude drugs, which must be modified considerably before commercial use, can be extremely poisonous when not used properly. Readers are cautioned against using these plant drugs for purposes of self-medication.

Besides descriptions of 126 medicinal plants of the Appalachian region, this guide includes a glossary of the terms used, a reference list of publications, and a listing of additional source material.

CONTENTS

INTRODUCTION	1
PLANT DESCRIPTIONS	3
Identification	3
Names	3
COLLECTING PLANTS	4
Time of year	4
Areas	10
Tools	10
PROCESSING	11
Cleaning	11
Drying	11
Packaging and storing	14
COLLECTING POLLEN	15
Methods	15
Drying	16
Grass pollen	17
REFERENCES	18
GLOSSARY	21
GUIDE TO THE PLANTS	27
INDEX OF COMMON PLANT NAMES	281

INTRODUCTION

DESPITE INCREASES in the production of synthetic drugs, natural plant drug materials are still economically significant in the United States, and large quantities are harvested in the southern Appalachian region each year for medicinal purposes. A 1962 survey of 328,599,000 new prescriptions written in the U. S. showed that 25 percent were for drugs from natural plant products.

However, during the past 30 to 50 years, fewer and fewer people have been harvesting wild plants in Appalachia, which is the principal American source, mainly because of families emigrating to more prosperous areas. Between 1950 and 1960, the southern Appalachian region lost through emigration more than a million people, nearly a fifth of the population. Increases in local blue-collar employment opportunities, a growing reluctance to work in the fields and forests, scarcity of some plants because of over-collecting, and land-use changes have also reduced the natural plant harvests for drug materials.

To locate, collect, and prepare plants for market is time-consuming work. Some collectors do not know all the useful plant species and the best markets for them. This manual was prepared to help collectors identify, collect, and handle plants, plant parts, and pollen.

Not all the plants listed are marketable at all times; so the collector would do well to write to one of the collecting houses listed (table 1) for prices and information about market demand. Buyers of such material are helpful in providing other useful information on collecting.

Table 1.—Names and addresses of buying houses*

Names	Addresses
PURCHASERS OF BOTANICALS	
Blue Ridge Drug Company	P. O. Box 234, West Jefferson, North Carolina 28694.
Coeburn Produce Company	Second and Grand Streets, Coeburn, Virginia 24230.
C. R. Graybeal	Roan Mountain, Tennessee 37687.
F. C. Taylor Fur Company	227 E. Market Street, Louisville, Kentucky 40202.
Greer & Greer	Box 307, Princeton, West Virginia 24740.
Greer Drug & Chemical Company	P. O. Box 800, Lenoir, North Carolina 28645.
Nature's Herb Company	281 Ellis Street, San Francisco, California 90025.
Old Fashioned Herb Company	581 N. Lake Avenue, San Francisco, California 90025.
Smoky Mountain Drug Company	935 Shelby Street, Box 2, Bristol, Tennessee 37620.
Wilcox Drug Company	P. O. Box 391, Boone, North Carolina 28607.
Wilcox Drug Company, Inc.	Box 470, Pikeville, Kentucky 41501.
IMPORTERS THAT BUY, SELL, AND PROCESS BOTANICALS	
Hathaway Allied Products	2024 Westgate Avenue, Los Angeles, California 90025.
S. B. Penick & Company	100 Church Street, New York, New York 10007.
VENDORS OF DRUG AND HERB SEED AND OTHER PROPAGATING MATERIALS	
Gardens of the Blue Ridge	Ashford, North Carolina 28603.
Harry E. Saier	Dimondale, Michigan 48821.
Indiana Botanic Gardens	P. O. Box 5, Hammond, Indiana 26325.

*These firms are mentioned for information only, and this mention should not be considered as an endorsement or recommendation by the U.S. Department of Agriculture or the Forest Service.

PLANT DESCRIPTIONS

Identification

To help the collector identify plants, brief descriptions are given in this guide. Some closely related plants, such as *Lobelia* (Indian tobacco), are difficult to identify before the seed capsules have developed; so as a further aid in identification, sketches or photos accompany every plant description.

A collector who wants to identify a plant known only by a common name should locate that name in the index and then refer back to the descriptions and illustrations to identify the plant. If the same common name is applied to more than one plant, this will be shown by the page numbers next to the common name in the index.

Names

Plant names can be confusing. A plant may have many common names, and the same common name may be applied to several unrelated plants. We have tried to show as many common names as possible, listing first the preferred common name suggested by the Subcommittee on Standardization of Common and Botanical Names of Weeds. If this list did not include names for a plant, we used *Standardized Plant Names*. Other references used were *Flora of West Virginia*, *Manual of Cultivated Plants*, *Flora of the Northeastern United States*, and State experiment station bulletins.

Scientific names are also given to simplify proper identification of plants. Although a number of common names may be in use for a given plant, only one scientific name is used.

COLLECTING PLANTS

Time of Year

It is important to collect at the time of the year when the drug contents of the plants are at their peak.

Roots are collected either very early in the spring before growth has begun, or late in the fall. Herbs (the part of the plant above ground) are usually collected during the blooming-fruiting period. Leaves are usually collected before blooming begins and can either be removed from the plant in the field, or the plants can be harvested and the leaves can be removed later at a collection area. Seeds and fruits are best harvested when ripe. Bark should be collected when it slips most easily, during the dormant season or in early spring.

The parts of each plant collected are shown in table 2.

Table 2.—The parts of plants collected

B = Bark.
 BR = Bark of root.
 BU = Buds.
 EP = Entire plant.
 F = Fruit.
 FL = Flowering top.
 H = Herb.
 J/S = Juice or sap.
 L = Leaves.
 RR = Roots, rhizome.
 SE = Seeds.
 ST = Stalk.
 T = Twigs.

Plant	Part collected													
	B	BR	BU	EP	F	FL	H	J/S	L	RR	SE	ST	T	
1. <i>Acer spicatum</i> Lam.	X													
2. <i>Achillea millefolium</i> L.							X							
3. <i>Acorus calamus</i> L.											X			
4. <i>Adiantum capillus-veneris</i> L.									X	X				
5. <i>Adiantum pedatum</i> L.							X							
6. <i>Aesculus hippocastanum</i> L.	X				X									
7. <i>Aletris farinosa</i> L.											X			
8. <i>Alnus serrulata</i> (Ait.) Willd.	X													
9. <i>Amaranthus hybridus</i> L.							X		X					
10. <i>Angelica atropurpurea</i> L.							X			X		X		
11. <i>Aplectrum hyemale</i> (Muhl.) Torr.											X			
12. <i>Apocynum androsaemifolium</i> L.											X			
13. <i>Apocynum cannabinum</i> L.											X			
14. <i>Aralia nudiculis</i> L.											X			
15. <i>Aralia racemosa</i> L.											X			
16. <i>Arctium lappa</i> L.											X			
17. <i>Arctium minus</i> (Hill) Bernh.											X	X		
18. <i>Arisaema triphyllum</i> (L) Schott											X			
19. <i>Aristolochia serpentaria</i> L.											X			
20. <i>Asarum canadense</i> L.										X	X			
21. <i>Asclepias syriaca</i> L.										X	X			
22. <i>Asclepias tuberosa</i> L.											X			
23. <i>Baptisia tinctoria</i> (L.) R. Br.		X					X				X			

CONTINUED

Table 2—Continued

Plant	Part collected												
	B	BR	BU	EP	F	FL	H	J/S	L	RR	SE	ST	T
24. <i>Berberis vulgaris</i> L.	X	X			X					X			
25. <i>Betula lenta</i> L.									X				
26. <i>Caulophyllum thalictroides</i> (L.)										X			
27. <i>Ceanothus americanus</i> L.		X							X	X			
28. <i>Chamaelirium luteum</i> (L.) Gray											X		
29. <i>Chelone glabra</i> L.							X						
30. <i>Chenopodium ambrosioides</i> L.				X	X						X		
31. <i>Chimaphila maculata</i> (L.) Pursh.									X				
32. <i>Chimaphila umbellata</i> (L.) Bart.				X					X				
33. <i>Chionanthus virginicus</i> L.	X	X											
34. <i>Cimicifuga americana</i> Michx.											X		
35. <i>Cimicifuga racemosa</i> (L.) Nutt.											X		
36. <i>Cnicus benedictus</i> L.							X				X		
37. <i>Collinsonia canadensis</i> L.							X				X		
38. <i>Comptonia peregrina</i> (L.) Coult.									X				
39. <i>Corallorhiza</i> spp.											X		
40. <i>Cypripedium calceolus</i> L.											X		
41. <i>Datura stramonium</i> L.									X		X	X	
42. <i>Dioscorea villosa</i> L.											X		
43. <i>Echinacea purpurea</i> (L.) Moench.											X		
44. <i>Eryngium aquaticum</i> L.											X		
45. <i>Euonymus atropurpureus</i> Jacq.	X	X											
46. <i>Eupatorium perfoliatum</i> L.						X	X		X				
47. <i>Eupatorium purpureum</i> L.						X			X	X			
48. <i>Fragaria virginiana</i> Duch.					X				X				
49. <i>Fraxinus americana</i> L.	X												
50. <i>Galium aparine</i> L.							X						

Table 2—Continued

Plant	Part collected												
	B	BR	BU	EP	F	FL	H	J/S	L	RR	SE	ST	T
78. <i>Nasturtium officinale</i> R. Br.							X						
79. <i>Nepeta cataria</i> L.						X	X						
80. <i>Panax quinquefolium</i> L.										X			
81. <i>Passiflora incarnata</i> L.					X	X	X			X			
82. <i>Phytolacca americana</i> L.					X			X	X	X			
83. <i>Pinus palustris</i> Mill.								X					
84. <i>Pinus strobus</i> L.	X		X					X					
85. <i>Plantago</i> spp.									X		X		
86. <i>Podophyllum peltatum</i> L.										X			
87. <i>Polygala senega</i> L.										X			
88. <i>Polygonatum biflorum</i> (Walt.) Ell.										X			
89. <i>Polygonum hydropiper</i> L.							X						
90. <i>Populus balsamifera</i> L.	X		X										
91. <i>Prunella vulgaris</i> L.							X						
92. <i>Prunus serotina</i> Ehrh.	X												
93. <i>Quercus alba</i> L.	X								X	X			
94. <i>Rhus glabra</i> L.	X	X			X				X	X			
95. <i>Rubus</i> spp. L.	X	X			X					X			
96. <i>Rumex crispus</i> L.										X			
97. <i>Salix alba</i> L.	X		X										
98. <i>Salix nigra</i> (Marsh)	X		X										
99. <i>Salvia officinalis</i> L.							X						
100. <i>Sanguinaria canadensis</i> L.										X			
101. <i>Sassafras albidum</i> (Nutt) Nels.		X							X				
102. <i>Scrophularia marilandica</i> L.								X			X		
103. <i>Scutellaria lateriflora</i> L.								X					
104. <i>Senecio aureus</i> (L)							X			X	X		

Only four plants are listed from which sap is collected. *Lactuca scariola* provides a milky juice; the plants are collected in summer for extracting the juice from the stems. The other three are trees. *Liquidambar styraciflua* (sweetgum) exudes balsam into natural pockets between the bark and the wood. Excrescences on the bark are cut for collecting the sap. *Tsuga canadensis* (hemlock) produces an exudate of resin, which occurs on the stem in reddish brown, opaque, or translucent pieces. *Pinus palustris* (long-leaf pine) is a source of turpentine, pine oil, tar, pitch, and rosin.

Collectors are urged to leave enough plants growing in each locality to conserve the plant population for future years.

Areas

The most likely areas where each plant may be found are listed. Time and effort can be saved by narrowing areas of search to those habitats where the plant usually occurs. Residents of a region can often provide information about growing areas. Care should be taken to respect property rights of landowners, and permission should be obtained before entering private land. State and Federal laws regarding plant collecting should be checked for given localities.

Tools

A wide range of tools—from a pocket knife to shovels of one type or another (fig. 1)—can be used by the collector, depending on what plant parts are to be harvested. For example, a shovel or an asparagus knife would be needed to harvest roots—plus a pair of shears to cut the tops. Bark collectors need a sharp knife, the size depending on the thickness of the material to be harvested.

As the collector gains experience, he will be able to determine exactly what tools are required for each kind of material. However, he will always want to carry the minimum number needed. All tools should, of course, be kept oiled and sharp; and they should be cleaned after each use.

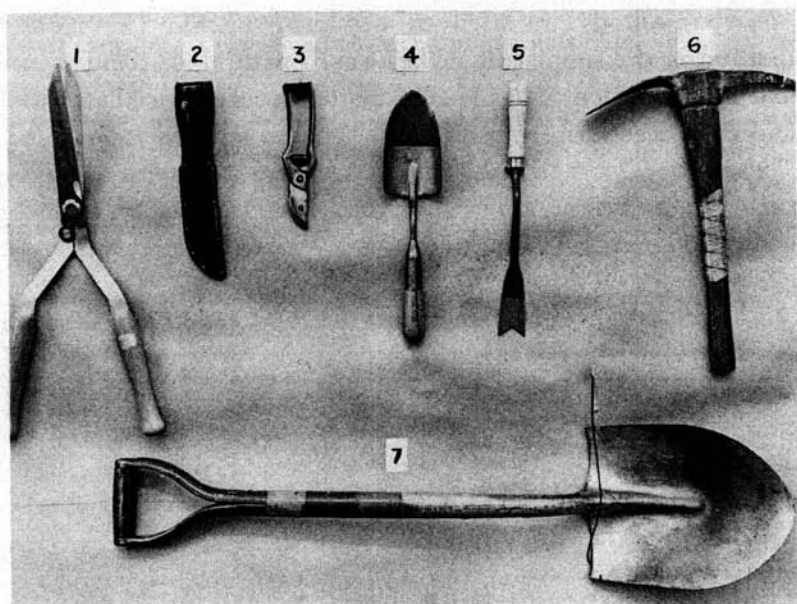


Figure 1.—Harvesting implements: (1) hedge clippers, (2) sheath knife, (3) pruning shears, (4) trowel, (5) asparagus digger, (6) pick, and (7) shovel.

PROCESSING

Cleaning

Cleaning harvested plant materials is called *garbling*. It includes removal of stones, soil, and unwanted plants and plant parts. Roots and underground parts may have to be washed if soil clings to them.

Drying

Rapid drying is needed to preserve green color, to reduce spoilage and molding, to reduce or stop enzyme action that destroys drug constituents of plants, and to make the materials more compact for shipping. This is important because improper drying can result in reduced value, if not complete loss of the material collected.

Two methods are used to dry drug plants. The natural method is the simpler; it makes use of natural air temperature and air movement. The second method uses artificially heated and circulated air. Many different types of equipment are used. These range from simple and inexpensive tools for handling small quantities of a few kinds of plants to the large costly equipment needed for handling many kinds of plants in large lots.

Natural drying.—Natural drying uses the sun's heat plus shade and air movement. A porch or barn floor or almost any shaded area with a dry floor will do. Shallow wire-bottomed trays are cheap to make and can be used to good advantage (fig. 2). Too much exposure to the sun can cause loss of green color, thus decreasing the value and marketability of certain materials.

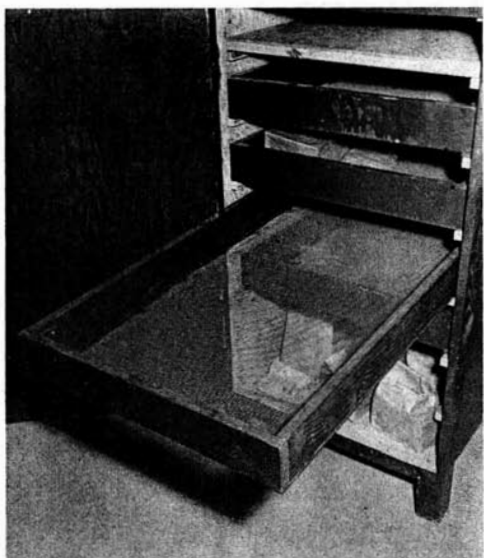


Figure 2.—Shallow wire-bottomed trays can be used for natural drying.

Artificial drying.—A simple and inexpensive drying box can be built for less than \$25, using a standard home-type, fan-driven space heater (fig. 3). This box takes up less floor space than the natural drying method, dries plants more

quickly, and produces a more uniform product. Racks (fig. 4) provide space for drying all types of plant materials.

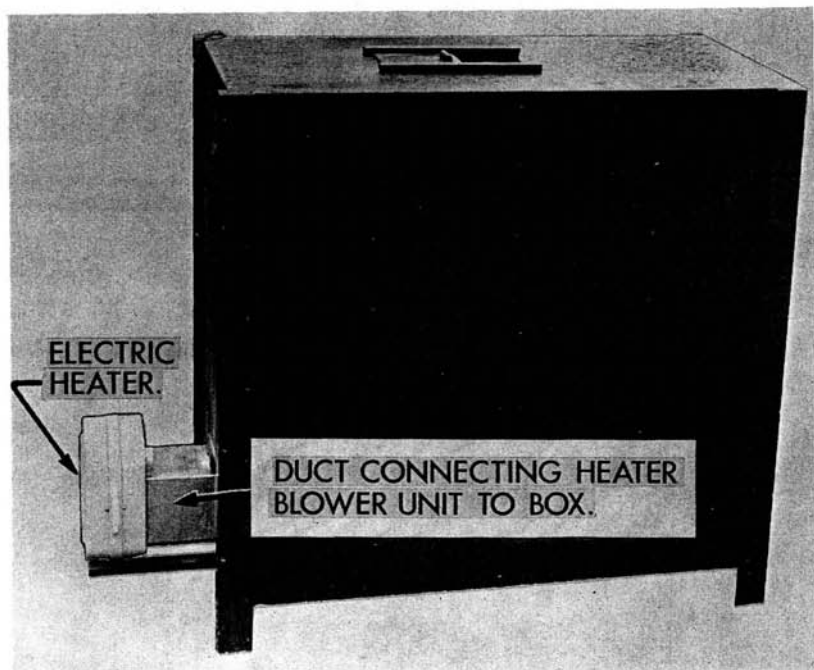


Figure 3.—A drying box, showing heating unit and duct; top shows sliding door used for air circulation.

Processing before drying.—Roots are usually sliced lengthwise or crosswise to hasten drying and to minimize spoilage and molding. (Ginseng roots are not sliced because their shape is important in meeting market demands.) Fleshy fruits, which are particularly apt to spoil, should be cut in halves or quarters and dried in a drying box. Bark can be cut into uniform pieces to hasten drying. Seeds should be spread in a fairly thin layer in aluminum or cardboard pie plates or similar available containers.



Figure 4.—Interior of an artificial drying box, showing drying racks.

Packaging and Storing

Clean burlap sacks, boxes, and paper sacks are all usable for packing dried plant material. Boxes should be dry and lined with clean paper. Collectors should avoid using plastic bags because any excess moisture present when the bags are shut may result in molding.

Plant material should be stored under sanitary conditions that minimize rodent and insect contamination. Clean, dry, ventilated storage areas are best for preserving quality, (fig. 5).



Figure 5.—A buyer of medicinal plants inspects a drying spikenard root.

COLLECTING POLLEN

Pollen is used by drug companies for making preparations to test for pollen allergies. Among the pollens most in demand are ragweeds, sages, magwort, sagebrush, elm, box elder, maple, ash, oak, cocklebur, pigweed, and Russian thistle.

Different kinds of pollen should not be mixed together because pollen buyers inspect shipments with a microscope, and any impure materials are rejected. Pollen should not be collected from plants that have been treated with pesticides.

Methods

The day before pollen is to be collected, tie several blooming heads together with white string to mark the plants wanted and to reduce loss from wind (fig. 6).

Pollen can be harvested from a plant for several days, but when the pollen begins to turn dark another plant should be used.

Harvesting can begin on clear mornings, as soon as the dew is gone; and, depending on the wind, harvesting can continue for about 2 hours. However, if the day is still, harvesting can continue longer.



Figure 6.—One way to collect pollen: roll the heads of the flowers gently over a catching cloth, spreading the blooms with your fingers to release the pollen.

Drying

Immediately after a day's harvesting is finished, the pollen should be spread out on clean, dry, brown wrapping paper (an opened grocery bag will do) in a warm, draft-free room. The pollen should be spread to a depth of about 1/4 inch and left to air-dry for 4 days. Mold may occur on the pollen if it is dried less than 4 days, and moldy pollen will not be accepted by buyers.

When dry, the pollen should be strained through fresh nylon or organdy, and packed in clean, dry, screw-top jars or in clean, dry, strong plastic bags.

Grass Pollen

Because pollen from grasses such as timothy, Johnson and others is difficult to collect in the field, a special harvesting technique has been worked out. As they mature heads of plants are harvested in the field and brought to a shed or protected areas. The stems are placed in a container of water and the pollen is collected on sheets of paper (fig. 7) placed next to the container. The pollen is then cleaned through nylon or organdy and packed for shipment.

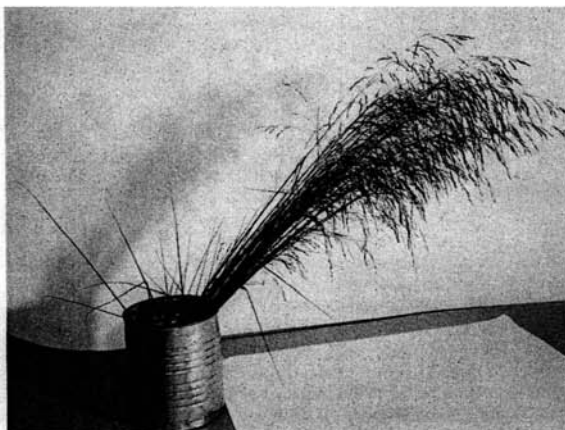


Figure 7.—Grass pollen is collected on sheets of paper after mature heads of plants have been harvested.

REFERENCES

- Bailey, L. H.
1951. *MANUAL OF CULTIVATED PLANTS*. Revised ed., 1116 pp., illus. Macmillan Co., New York.
- Burn, Harold.
1962. *DRUGS, MEDICINE AND MAN*. 248 pp. Charles Scribner's Sons, New York.
- Claus, Edward P., and Varro E. Tyler, Jr.
1965. *PHARMACOGNOSY*. Ed. 5, 572 pp., illus. Lea & Febiger, Philadelphia.
- Collingwood, G. H., and Warren D. Brush.
1937. *KNOWING YOUR TREES*. 109 pp. Amer. Forestry Assoc., Washington, D. C.
- Coon, Nelson.
1963. *USING PLANTS FOR HEALING*. 272 pp. Heartside Press, Inc., New York.
- Curtin, L. S. M.
1947. *HEALING HERBS OF THE UPPER RIO GRANDE*. 281 pp., illus. Lab. Anthrop., Santa Fe, N. M.
- Darlington, William.
1859. *AMERICAN WEEDS AND USEFUL PLANTS*. 460 pp., illus. A. O. Moore & Co., New York.
- Edwards, Bertie.
[n.d.] *METHODS OF COLLECTING, DRYING, CLEANING, AND SELLING POLLEN*. Bull. 1. Lenoir, N. C.
- Fernald, Merritt Lyndon, and Alfred Charles Kinsey.
1943. *EDIBLE WILD PLANTS OF EASTERN NORTH AMERICA*. 452 pp., illus. Cornwall Press. New York.
- Fernald, Merritt Lyndon.
1950. *GRAY'S MANUAL OF BOTANY*. Ed. 8, 1632 pp., illus. American Book Co., New York.
- Ford, Thomas R.
1962. *THE SOUTHERN APPALACHIAN REGION*. 308 pp. Univ. Ky. Press, Lexington, Ky.
- Fowells, H. A.
1965. *SILVICS OF FOREST TREES OF THE UNITED STATES*. U. S. Dep. Agr. Agr. Handb. 271, 762 pp., illus.
- Gibbons, Euell.
1966. *STALKING THE HEALTHFUL HERBS*. 303 pp., illus. David McKay Co., New York.
- Gleason, Henry A.
1952. *THE NEW BRITTON AND BROWN ILLUSTRATED FLORA OF THE NORTHEASTERN UNITED STATES AND ADJACENT CANADA*. 1733 pp., illus. (3 vols.) N. Y. Botanical Garden, New York.
- Gosselin, Raymond.
1962. *THE STATUS OF NATURAL PRODUCTS IN THE AMERICAN PHARMACEUTICAL MARKET*. *Lloydia* 24(4):241-243.
- Greer Drug and Chemical Corporation.
[n.d.] *INSTRUCTIONS FOR COLLECTING AND DRYING SHORT RAGWEED POLLEN*. 13 pp. Lenoir, N. C.
- Grieve, M.
1959. *A MODERN HERBAL*. 888 pp., illus. (2 vols.) Hafner Publ. Co., New York.
- Hardin, James W.
1961. *POISONOUS PLANTS OF NORTH CAROLINA*. N. C. State Coll. Agr. Exp. Sta. Bull. 414, 128 pp.
- Hardin, James W.
1964. *NORTH CAROLINA DRUG PLANTS OF COMMERCIAL VALUE*. N. C. State Coll. Agr. Exp. Sta. Bull. 418, 34 pp.
- Harding, A. R.
1936. *GINSENG AND OTHER MEDICINAL PLANTS*. 367 pp., illus. A. R. Harding Publ., Ohio.
- Hocking, George.
1955. *A DICTIONARY OF TERMS OF PHARMACOGNOSY AND OTHER DIVISIONS OF ECONOMIC BOTANY*. 484 pp. Charles C. Thomas Publ., Bannerstone House, Ill.
- Imbesi, A.
1964. *INDEX PLANTARUM QUET IN OMNIUM POPULORUM PHARMACOPOEIS SUNT*. 771 pp. Adhuc Receptae, Messina, Sicily, Italy.
- Jacobs, Marion Lee, and Henry M. Burlage.
1958. *INDEX OF PLANTS OF NORTH CAROLINA WITH REPUTED MEDICINAL USES*. 322 pp. Chapel Hill, N. C.
- Jaques, H. E.
1959. *HOW TO KNOW THE WEEDS*. 230 pp., illus. Wm. C. Brown Co., Dubuque, Iowa.
- Kelsey, Harlen P., and William A. Dayton.
1942. *STANDARDIZED PLANT NAMES*. Ed. 2, 675 pp. J. Horace McFarland Co., Harrisburg, Pa.
- Kingsbury, John M.
1964. *POISONOUS PLANTS OF THE UNITED STATES AND CANADA*. 626 pp. Prentice-Hall, Inc., Englewood Cliffs, N. J.
- Kreig, Margaret.
1964. *GREEN MEDICINE*. 462 pp., illus. Rand McNally & Co., Chicago.
- Krochmal, Arnold.
1968. *MEDICINAL PLANTS IN APPALACHIA*. *Econ. Bot.* 22(4):332-337.

- Little, Elbert L., Jr.
1953. CHECK LIST OF NATIVE AND NATURALIZED TREES OF THE UNITED STATES (INCLUDING ALASKA). U. S. Dep. Agr. Agr. Handb. 41, 472 pp.
- Massey, A. B.
1942. MEDICINAL PLANTS. Va. Polytech. Inst. Bull. 30, 52 pp., illus.
- Meyer, James F.
1960. THE HERBALIST. 304 pp., illus. Rand McNally & Co., New York.
- Miller, James F.
[n.d.] WEED IDENTIFICATION. 97 pp., illus. Univ. Ga. Coop. Ext. Serv.
- Osol, Arthur, and George Farrar.
1950. THE DISPENSATORY OF THE UNITED STATES OF AMERICA. Ed. 24, 2155 pp. (2 vols.) J. P. Lippincott Co., Philadelphia.
- Osol, Arthur, Robertson Pratt, and Mark D. Altschule.
1967. THE UNITED STATES DISPENSATORY. Ed. 26, 1277 pp. J. P. Lippincott Co., Philadelphia.
- Quer, P. Font.
1962. PLANTAS MEDICINALES. 1033 pp., illus. Editorial Labor, S. A., Barcelona, Spain.
- Radford, A. W., H. E. Ahles, and C. R. Bell.
1964. GUIDE TO THE VASCULAR FLORA OF THE CAROLINAS. 383 pp. Univ. N. C. Bot. Dept., Raleigh.
- Sargent, C. R.
1965. MANUAL OF THE TREES OF NORTH AMERICA. 1367 pp., illus. (2 vols.) Dover Publ., New York.
- Shelton, Ferne.
1965. PIONEER COMFORTS AND KITCHEN REMEDIES. 24 pp. Hutcraft, High Point, N. C.
- Steinmetz, E. F.
1957. CODES VEGETABILIS. 149 pp. Steinmetz Publ., Amsterdam, Netherlands.
- Steinmetz, E. F.
1959. DRUG GUIDE 1959. 382 pp. Steinmetz Publ., Amsterdam, Netherlands.
- Strausbaugh, P. D., and Earl L. Core.
1952. FLORA OF WEST VIRGINIA (Part I). W. Va. Univ. Bull. 52 (12):1-273, illus.
- Strausbaugh, P. D., and Earl L. Core.
1953. FLORA OF WEST VIRGINIA (Part II). W. Va. Univ. Bull. 53 (12):275-570, illus.
- Strausbaugh, P. D., and Earl L. Core.
1958. FLORA OF WEST VIRGINIA (Part III). W. Va. Univ. Bull. 58 (12):571-860, illus.
- Strausbaugh, P. D., and Earl L. Core.
1964. FLORA OF WEST VIRGINIA (Part IV). W. Va. Univ. Bull. 65 (3):861-1075, illus.
- Strausbaugh, P. D., and Earl L. Core.
1964. FLORA OF WEST VIRGINIA (Introductory Section). W. Va. Univ. Bull. 65 (3):i-xxxii.
- Subcommittee on Standardization of Common and Botanical Names of Weeds.
1966. WEEDS. 14 (4):347-386.
- Tehon, Leo R.
1951. THE DRUG PLANTS OF ILLINOIS. Ill. Nat. Hist., Surv. Cir. 44, 135 pp., illus.
- Todd, R. G. (ed.).
1967. EXTRA PHARMACOPEIA. 1804 pp. Pharmaceutical Press. London.
- Williams, Louis O.
1960. DRUG AND CONDIMENT PLANTS. U. S. Dep. Agr. Agr. Handb. 172, 37 pp., illus.

Useful Serials

- Acta Phytotherapeutica.
1954-68. E. F. Steinmetz, Publ., Amsterdam.
- American Journal of Pharmacy.
1825-68. Phila. Coll. Pharm. & Sci., Philadelphia.
- American Perfume and Essential Oil Review.
1906-68. New York.
- Bibliography of Forest and Forestry Products.
1948-68. Food and Agr. Organ., United Nations, Rome.
- Biologia (monthly suppl. to Chronica Botanica).
1947-68. Waltham, Mass.
- Bulletin of Miscellaneous Information.
1896-1954. Roy. Bot. Gard., Kew, London.
- Bulletin of the Lloyd Library and Museum of Botany, Pharmacy, and Materia Medica.
1934-68. Cincinnati.
- Chemurgic Digest.
1942-68. Nat. Farm Chemurgic Council, New York.
- Digest of Comments on the Pharmacopoeia of the United States and on the National Formulary.
1905-22. U. S. Public Health Serv. Hygienic Lab. Bull., Washington, D.C.

- Drug and Cosmetic Industry.
1914-68. Pittsburgh, Mass., and New York.
- Drug Topics.
1883-1968. New York.
- Drug Trade News.
1925-168. New York.
- Drug Treatises.
1904-11. Lloyd Bros., Inc., Cincinnati.
- Economic Botany.
1947-68. Bot. Gard., New York.
- Excerpta Botanica Sectio A.
1959-68. Gustav Fischer, Stuttgart.
- Farmacognosia.
1938-68. Instituto Jose Celestino Mutis, de Farmacognosia, Madrid.
- Fitoterapia.
1929-68. Inverni & Della Beffa S.p.a., Milan.
- Lloydia.
1937-68. Lloyd Library, Cincinnati.
- Qualitas Plantarum et Materiae Vegetabiles.
1953-68. W. Junk, publ., The Hague.
- Quarterly Journal of Crude Drug Research.
1961-68. E. F. Steinmetz, publ., Amsterdam.

GLOSSARY

Botanical and Pharmacological Terms

- Acute.** Sharp-pointed.
- Ague.** Old word for fever, usually malaria.
- Allergenic.** Produces allergy.
- Alterative.** Changes a condition gradually.
- Ament.** Catkin.
- Annual.** A plant that completes its development from germination of the seed through flowering and death in one growing season.
- Anodyne.** Relieves or quiets pain.
- Antacid.** Neutralizes excess acidity in the alimentary canal.
- Anthelmintic.** Capable of expelling or destroying intestinal worms.
- Antiasthmatic.** Relaxes bronchial muscles and relieves labored breathing.
- Antidiarrheal.** Counteracts diarrhea.
- Antidote.** Counteracts the action of a poison.
- Antiemetic.** Lessens the tendency to vomit.
- Anti-infective.** Prevents or inhibits infection.
- Anti-inflammatory.** Reduces inflammation and swelling.
- Antinauseant.** Stops or lessens the tendency to become nauseated.
- Antipruritic.** Prevents or relieves itching (antipsoriatic).
- Antipyretic.** Reduces fever.
- Antirheumatic.** Reduces pain in the joints.
- Antiseptic.** Checks or inhibits the growth of microorganisms.
- Antispasmodic.** Reduces spasm or prevents convulsion.
- Antitussive.** Relieves or prevents coughing.
- Aquatic.** Growing in water.
- Aromatic.** Agreeable, usually spicy, odor.
- Astringent.** Causes the contraction of tissue.
- Axil.** Angle between stem and leaf stalk.
- Axis.** Main line of growth.
- Balsam.** An aromatic substance produced in certain plants.
- Basal.** Occurring at the bottom.
- Biennial.** A plant that requires 2 growing seasons to complete its development from germination of the seed through flowering and death.
- Bract.** Modified leaf, often below a flower petal.
- Branchlet.** A small branch growing from a large branch or tree trunk.
- Bristly.** Having short, stiff hairs.
- Bur.** Prickly seed envelope such as that of burdock (*Arctium*).
- Buttressed.** With projecting parts, usually refers to trunk of trees such as Cypress.
- Capsule.** A closed container bearing seeds; also a dry fruit with more than one part.
- Carcinogenic.** Causing cancer.
- Cardio.** Referring to heart action.
- Carminative.** Used to relieve gas and colic.
- Catarrhal.** Related to inflammation of the respiratory tract.
- Cathartic.** Causes an evacuation of the bowel.
- Catkin.** A scaly, drooping spike of flowers, such as that of willow.

Caustic. Destroys tissue.

Central nervous depressant. Depresses central nervous system activity.

Central nervous stimulant. Increases central nervous system activity.

Cholagogue. Increases the flow of bile.

Clasping. Partly or wholly surrounding the stem.

Cleft. With a space or division in the middle.

Clover-like. With leaves in three parts.

Cluster. A number of similar flowers or fruits growing closely together.

Composite. Refers to a structure apparently simple but made up of several distinct parts.

Compound. Two or more similar parts of a plant, especially fruits or leaves, united together into one whole.

Constituent. A component.

Corm. An enlarged solid bulb-like stem, usually underground.

Corolla. Usually petals.

Corona. An appendage borne between corolla and stamens in some flowers.

Corrective. Used to correct or make more pleasant the action of other remedies, especially purgatives. (Now called flavoring.)

Counterirritant. Causes irritation of the surface of an area with the object of relieving a deep-seated congestion.

Creeping. Spreading over the ground or other surface.

Cumarin. A toxic white crystalline lactone found in many plants; used to make perfume and soap.

Cylindrical. Having the form of a cylinder.

Cyme. Broad, flat flower cluster.

Cytotoxic. Poisonous to cells.

Demulcent. Substance used to protect or soothe the mucous membrane.

Dental obtundant. Used to dull or soothe acute toothache.

Depurative. Removes impurities and waste materials and purifies the blood.

Detachable. Removable.

Diaphoretic. Used to increase perspiration.

Digestant. Aids in the digestion of foods.

Disinfectant. Destroys or inhibits the growth of harmful microorganisms.

Diuretic. Increases the volume of urine.

Dormant. Resting or non-vegetative stage, usually during winter.

Downy. Covered with soft hairs.

Drab. Dull brown, or gray.

Drupe. Fleshy seeded fruit with one seed enclosed in a stony cover; peach, apricot.

Dyspepsia. A disturbed digestive condition characterized by nausea, gas, and heartburn.

Ellipsoid. Solid with elliptical outline.

Elliptical. Shaped like an elongated circle.

Elongate. Stretched out.

Emetic. An agent that causes vomiting.

Emmenagogue. An agent that induces menstrual flow.

Emmolient. Used externally to soften the skin and protect it.

Enzyme. Organic substance causing chemical changes without undergoing any change of its own.

Excrescence. An outgrowth or enlargement.

Expectorant. An agent that causes expulsion of mucous from respiratory tract.

Exudate. Discharge in layers or flakes.

Febrifuge. Reduces fever (antipyretic).

Flatulence. Stomach discomfort caused by gas.

FronD. Leaf of fern or palm.

Fungicide. An agent that destroys fungi.

Furrowed. Wrinkled, corrugated, grooved.

Garbling. Process of sorting out and cleaning the usable parts of plants.

Genera. Groups of related plants.

Habitat. Particular location where plant usually grows.

Hemostatic. An agent used to stop internal hemorrhage.

Herbaceous. Dying down annually at onset of winter.

Herb. Leafy upper portion of plant, minus roots.

Humus. Organic portion of the soil, usually dark colored.

Husk. Outer covering of seed or fruits.

Hypnotic. An agent that induces sleep without delirium.

Incision. A sharp, narrow notch or separation, as in the margin of a leaf.

Insecticide. An agent that kills insects.

Intoxicant. An agent that produces mental confusion with subsequent loss of muscular control.

Irritant. Causes inflammation of, or stimulation to, the tissues.

Lanceolate. Much longer than broad; lance-shaped.

Lateral. Occurring on a side.

Laxative. A cathartic that causes a more or less normal evacuation of the bowel without griping or irritation.

Leaflet. Part of a compound leaf.

Leafstalk. Stem of a leaf.

Linear. Going in a straight line.

Lobe. Rounded part or segment of an organ, usually part of a leaf or petal.

Mucilaginous. Slimy.

Narcotic. An agent that relieves distress and induces sleep.

Nodding. Drooping.

Node. The often swollen point on a stem at which a leaf is joined.

Oblanceolate. Having the broadest part of a lanceolate body above the middle.

Oblong. Longer than broad.

Opposite. Situated in pairs on an axis, each being separated from the other by half the circumference of the axis.

Ophthalmiatric. Used in the treatment of eye diseases.

Ovate. Resembling hen eggs split lengthwise.

Palmate. Resembling a hand with fingers spread.

Panicle. Loosely branched flower cluster, pyramidal shaped.

Parasiticide. An agent that destroys animal or vegetable parasites.

Pectoral. Usually an expectorant, used for diseases of the chest and lungs.

Perennial. Continuing or lasting for several years.

Petal. Usually colored part of a flower.

Petiole. Leafstalk.

Pod. A dry seed vessel or fruit.

Pollen. Shed by male flowers, usually yellow dust; male reproductive agent.

Protective. Used locally to protect and soothe the skin and mucous membranes.

Pungent. A sharp sensation as to taste, smell, feeling.

Purgative. Increases peristalsis (contraction of the bowel).

Pustulant. Causes severe irritation of the skin, especially the sweat glands, and results in pustule formation.

Raceme. An elongated axis bearing flowers on short stalks.

Reclining. Bent down.

Refrigerant. Allays thirst and gives a sensation of coolness to the body.

Resinous. Characteristic of resin, a solid to semi-solid yellowish brown plant substance.

Respiratory sedative. Used to allay coughs.

Respiratory stimulant. Stimulates the respiratory centers.

Rhizome. Underground stem.

Rhombic. Having the form of an equilateral parallelogram.

Rootstock. Rhizome.

Rosette. Leaves originating from a center point, or short intermode, often close to the ground.

Ross. To remove coarse outer bark.

Rubifacient. Causes reddening and mild irritation of the skin.

Saprophyte. A plant living on dead or decaying plant material.

Scale. Small leaves or bracts.

Sedative. Used to quiet the individual.

Serrate. Saw-toothed margin of a leaf.

Sessile. Lacking a stalk, hence directly attached to a main stem or branch.

Sheath. A long or tubular structure surrounding a stem.

Sialagogue. Causes an increase in the flow of saliva.

Simple leaf. A leaf that is not divided into leaflets even though lobed.

Solitary. Borne alone.

Somnifacient. Produces sleep without delirium; a soporific.

Soporific. Tending to cause sleep.

Spike. Usually an axis bearing flowers without stalks.

Spiny. Bearing sharp-pointed prickles or woody bodies.

Stalk. Stem on which a leaf, flower, or other organ is attached.

Stimulant (cerebral). An agent that stimulates the activity of the cerebellum, especially the centers of reason, thought, etc.

Stimulant (general). A substance which increases general functional activity.

Stomachic. Stimulates appetite and increases secretion of digestive juices.

Strict. Straight and upright; few if any branches.

Subtend. Below and close to, such as a bract below a petal.

Sudorific. Increases perspiration.

Taeniafuge. A tapeworm expellant.

Taenicide. As agent that destroys tapeworms.

Taproot. A main root growing down, with small lateral roots.

Terminal. At the tip.

Tonic. Stimulates the restoration of tone to the muscles.

Toothed. Indented.

Trifoliate. Having three leaflets.

Tubular. Tube-shaped; hollow cylinder.

Tufted. Having small bunches of hair close together.

Twining. Twisting and winding.

Umbel. A flat-topped cluster of flowers arising from a common point.
Urinary antiseptic. Retards the growth of microorganisms in the urinary tract.
Vasoconstrictor. Narrows the passageway of the blood vessel.
Vermicide. An agent that destroys worms.
Vesicant. Causes irritation to the skin, resulting in blisters.
Viscous. Sticky and thick.
Vulnerary. An agent that promotes healing of open wounds.
Whorl. Three or more flowers or leaves at a node forming a circle.
Winged. Having wings, such as the thin dry extensions on a maple seed.

Meanings of Terms Used in Plant Names

Acutiloba. Having sharp lobes.
Alba. White.
Albidum. Whitish.
Ambrosioides. Fragrant, like ambrosia.
Americanus. American.
Androsaemifolium. Having leaves like those of *Androsaemum*.
Aparine. Bedstraw.
Arborescens. Tree-like.
Atropurpurea. Very dark purple.
Aureus. Gold.
Balsamifera. Producing balsam.
Benedictus. Blessed.
Benzoin. A plant of the laurel family.
Biflorum. Having two flowers.
Calamus. Reed.
Canadense. Of Canada.
Capillus veneris. Hair-like.
Cardiaca. Heart-like.
Carolinense. Of Carolina.
Cataria. Catnip.
Cerifera. Wax-producing.
Cinerea. Grayish.
Clava-Herculis. Hercules club.
Communis. In groups.
Cordifolia. Heart-shaped.
Crispus. Waved and twisted.
Didyma. In pairs.
Diphylla. Two-leaved.
Erectum. Erect.
Farinosa. Covered with whitish mealy powder.
Froncosa. Full of leaves.
Glabra. Smooth.
Hastata. Triangular halberd-shaped lobes.
Hippocastanum. Horse-chestnut.
Hybridus. Mixed or impure.
Hydropiper. Water pepper.
Hyemale. Of the winter evergreen.

Incarnata. Flesh-colored.
Inflata. Expanded.
Lappa. Bur-like.
Lateriflora. Having flowers on the side.
Lenta. Pliant, tough.
Luteum. Yellow.
Maculata. Spotted.
Marilandica. Of Maryland.
Medica. Middle.
Millefolium. Very many leaved.
Minus. Lesser or smaller.
Nigra. Black.
Nudicaulis. Naked-stemmed.
Nudum. Bare.
Odoratissima. Very fragrant.
Officinale. Used medically.
Palustris. Of swamps.
Parviflorum. Small-flowered.
Pedatum. Like a bird's foot.
Peltatum. Shield-shaped.
Peregrina. Traveling from a strange country.
Perfoliatum. Having pierced leaves.
Piperita. Peppery.
Pratense. Of meadows.
Procumbens. Flat, prostrate.
Prunifolium. Plum-like leaves.
Pulegioides. Like Pennyroyal.
Quinquefolium. Five-leaved.
Racemosa. Full of clusters.
Repens. Creeping.
Rubra. Red.
Scariola. Papery, scaly.
Sempervirens. Evergreen.
Serotina. Late-flowering.
Serpentaria. Snake bite cure.
Serrulata. Finely serrated.
Simplicissima. Undivided.
Spicata. Bearing a spike.
Stramonium. Swelling.
Strobis. Overlapping scales; cone.
Sylvatica. Of the forest, wild.
Styraciflua. Flowering gum.
Syriaca. Of Syria.
Thalictroides. Like meadow rue.
Thapsus. Of ancient Thapsus.
Tinctoria. Of dyes.
Triphyllum. Three-leaved.
Tuberosa. Having tubers.
Umbellata. Having flowers arranged in umbels.
Villosa. Shaggy, hairy.
Viride. Green.
Vulgare. Common.

GUIDE TO THE PLANTS

In the following pages you will find descriptions and illustrations—either drawings or photographs—of 126 medicinal plants that grow in the Appalachian region. Here you will find the names of the plants, a description that will help you identify the plant, information about when the plant flowers, where to look for it, what part to harvest, and what it has been used for.

ACER SPICATUM LAM.

(ACERACEAE)

COMMON NAMES: Mountain maple, goosefoot maple, low maple, mountain maple bush, spiked maple.

DESCRIPTION:* A tall shrub or small tree that grows to 30 feet in height. Bark is drab-colored, flaky, or furrowed. Young branchlets are downy near tips. Leaves are thin, downy beneath, 3-lobed or sometimes 5-lobed, with coarse-toothed margins. Flowers are small, greenish-yellow, and generally in upright narrow spikes 3 to 5½ inches long. Fruit, which is red or yellow, matures from July through October; it is about ¾ inch long at maturity.

FLOWERING PERIOD: Late May to early October.

HABITAT: Cool woods.

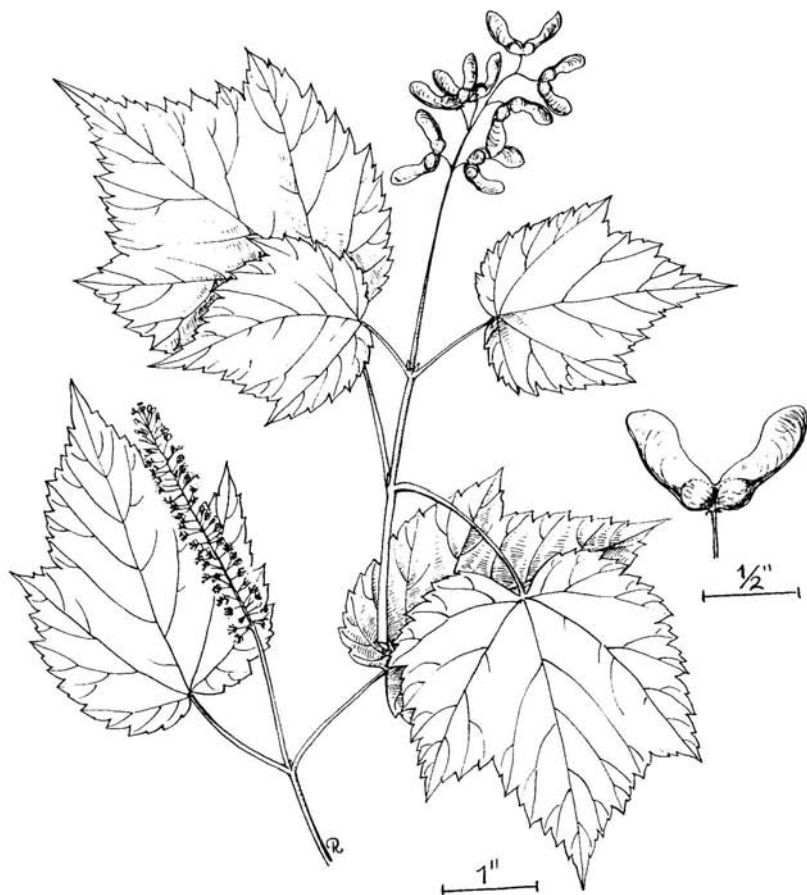
HARVEST: Bark.

USES: The bark of this plant is used as an anthelmintic, tonic, and ophthalmic. In Colonial times the bark was used for a rose-tan dye.

*See glossary (page 21) for definitions of terms used to describe the plants and their uses.

ACER SPICATUM LAM.

(ACERACEAE)



ACHILLEA MILLEFOLIUM L.

(ASTERACEAE)

COMMON NAMES: Common yarrow, bloodwort, carpenter's grass, dog daisy, gordoloba, green arrow, milfoil, nosebleed, old man's pepper, sanguinary, soldier's woundwort, thousand-leaf, thousand-leaved clover, thousand-seal, yarrow.

DESCRIPTION: A perennial that grows to 1 to 3 feet in height. Foliage is finely cut. Leaves are aromatic, and have simple stems without stalks. Flowers are flattish and mostly white, passing to shades of deep rose-purple, clustered densely and flatly on top.

FLOWERING PERIOD: April to October.

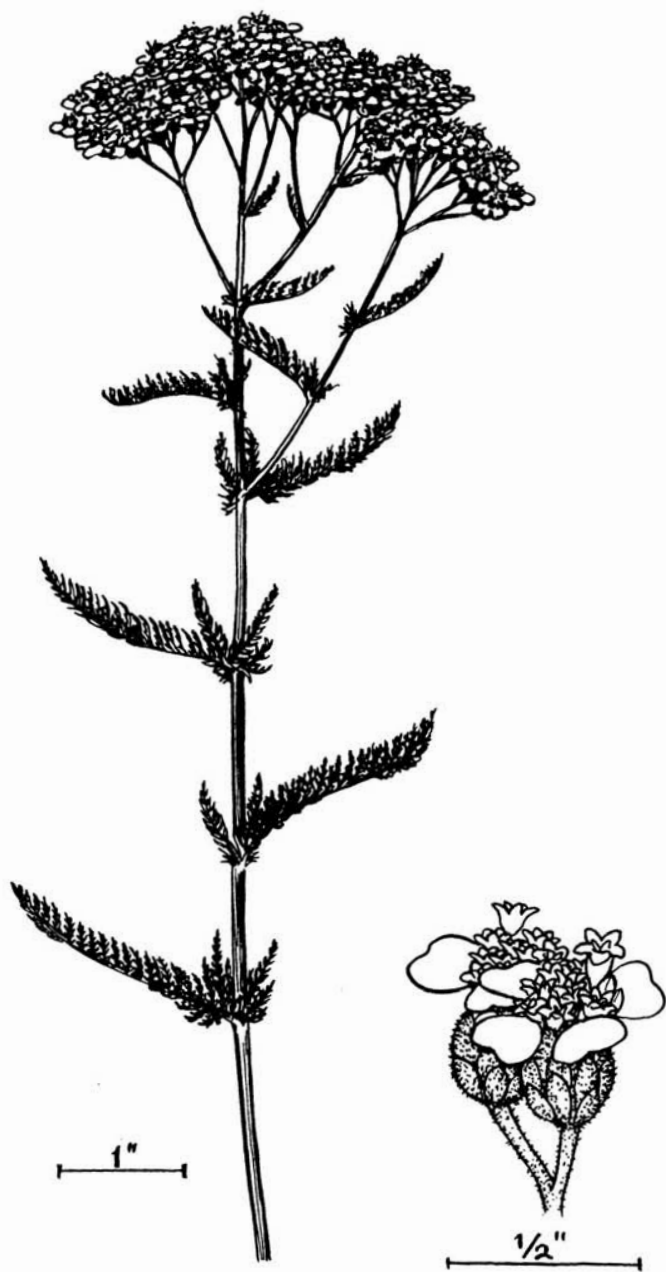
HABITAT: Abundant in pastures, old fields, roadsides, and waste places.

HARVEST: Herb and leaves in August when in flower.

USES: The herb is an aromatic with diaphoretic and emmenagogue activity; it has been used as a vulnerary.

ACHILLEA MILLEFOLIUM L.

(ASTERACEAE)



ACORUS CALAMUS L.

(ARACEAE)

COMMON NAMES: Sweet flag, beewort, bitter pepper root, calamus, drug sweetflag, flagroot, Myrtle flag, pine root, reed acorus, sweet cane, sweet cinnamon, sweet flagroot, sweet grass, sweet Myrtle, sweetroot, sweet rush, sweet sedge, sweet segg.

DESCRIPTION: A perennial. Leaves are long, narrow, and sharp-edged, and have a distinct fragrance. Flower stalk, which is 2 or 3 inches long and club-like, appears halfway up the leaf. Stalk is covered with tiny crowded greenish-yellow flowers. Plant has creeping rhizome.

FLOWERING PERIOD: May to July.

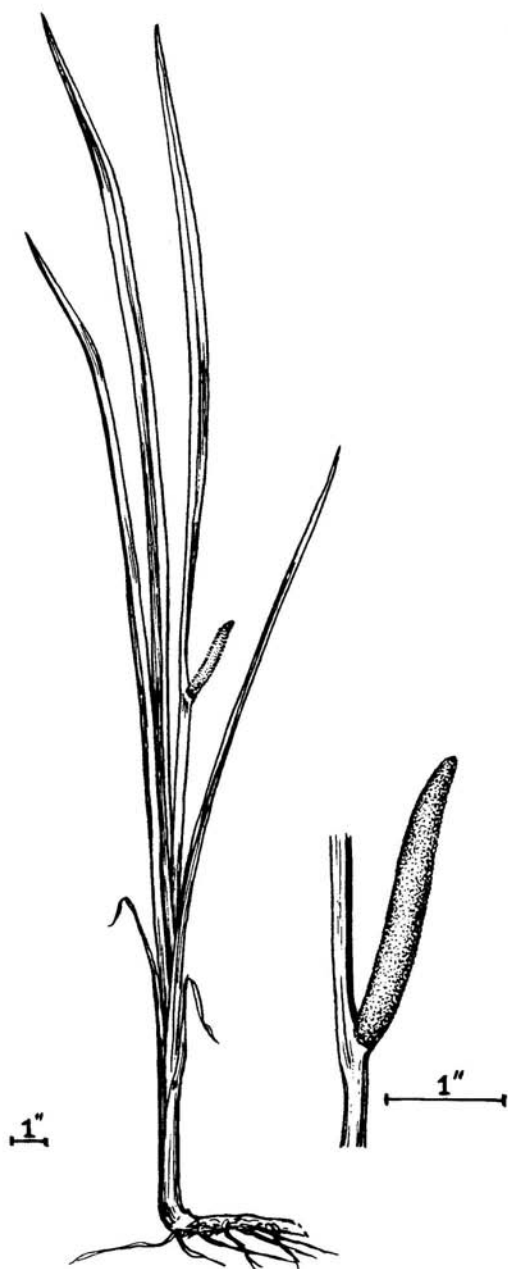
HABITAT: Swamps and edges of streams, marshes, and pond margins.

HARVEST: Rhizomes in early spring, or root in August.

USES: Plant has many uses, ranging from a flavoring agent and insecticide to tonic. In Appalachia, the root is chewed to clear the throat and to cure stomach gas; and the powdered or ground plant is used in sachets.

ACORUS CALAMUS L.

(ARACEAE)



ADIANTUM CAPILLUS-VENERIS L.

(POLYPODIACEAE)

COMMON NAMES: Southern maidenhair, black maiden's hair fern, lady's hair, maidenhair, venus' hair fern.

DESCRIPTION: A perennial fern with fronds, or stems of small leaflets, arranged alternately along a continuous stem. The pale green leaflets are fan-shaped with blunt lobes on outer curved edge. Stems are deep red-brown to shiny black. Rhizomes are creeping.

FLOWERING PERIOD: Non-flowering plant.

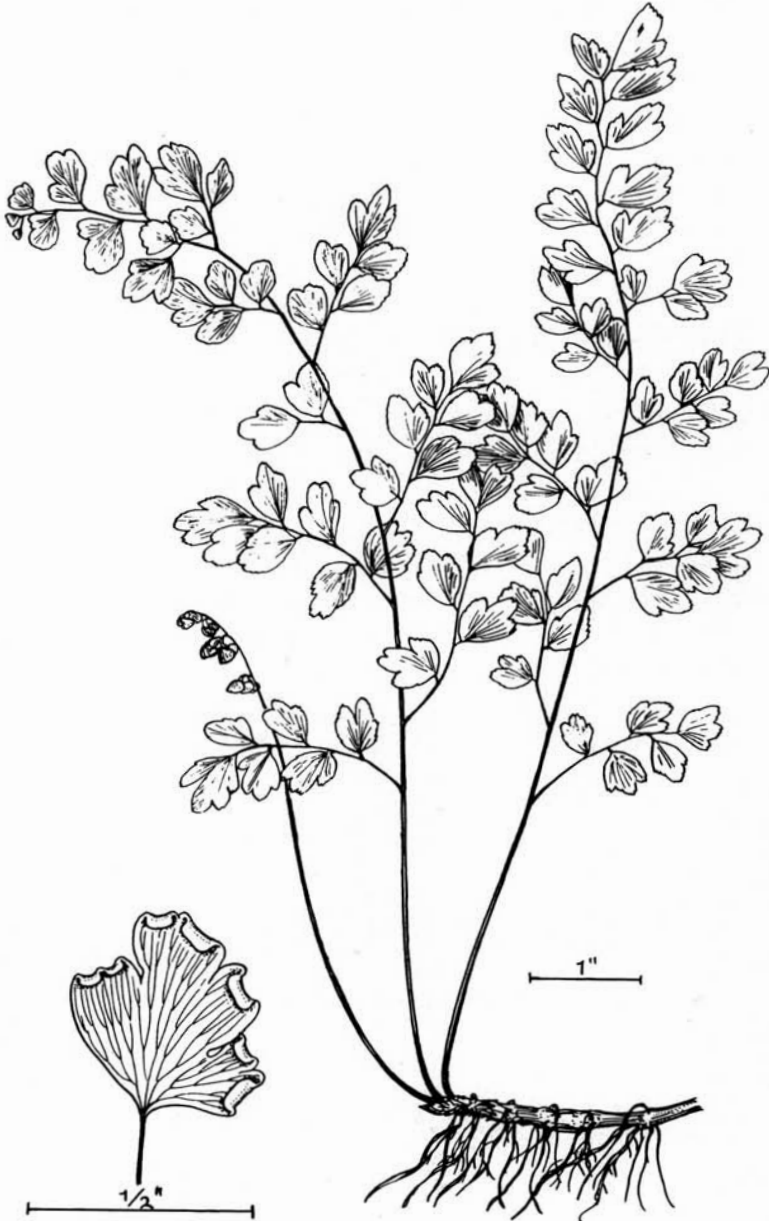
HABITAT: Moist, shaded, and limy rocks or steep banks; humus-rich woods.

HARVEST: Roots and leaves.

USES: According to existing sources, this plant has been used for an expectorant, tonic, and astringent. In Europe a tea of the herb is used to treat coughs, catarrh, and respiratory infections as well as menstrual discomfort.

ADIANTUM CAPILLUS-VENERIS L.

(POLYPODIACEAE)



ADIANTUM PEDATUM L.

(POLYPODIACEAE)

COMMON NAMES: American maidenhair, hair fern, maidenhair, maidenhair fern, rock fern, sweet fern.

DESCRIPTION: A perennial fern with fronds, or stems of small leaflets arranged alternately along a continuous stem. The pale green leaflets are fan-shaped with blunt lobes on outer curved edge. Stems are deep red-brown to shiny black. Rhizomes are creeping.

FLOWERING PERIOD: Non-flowering plant.

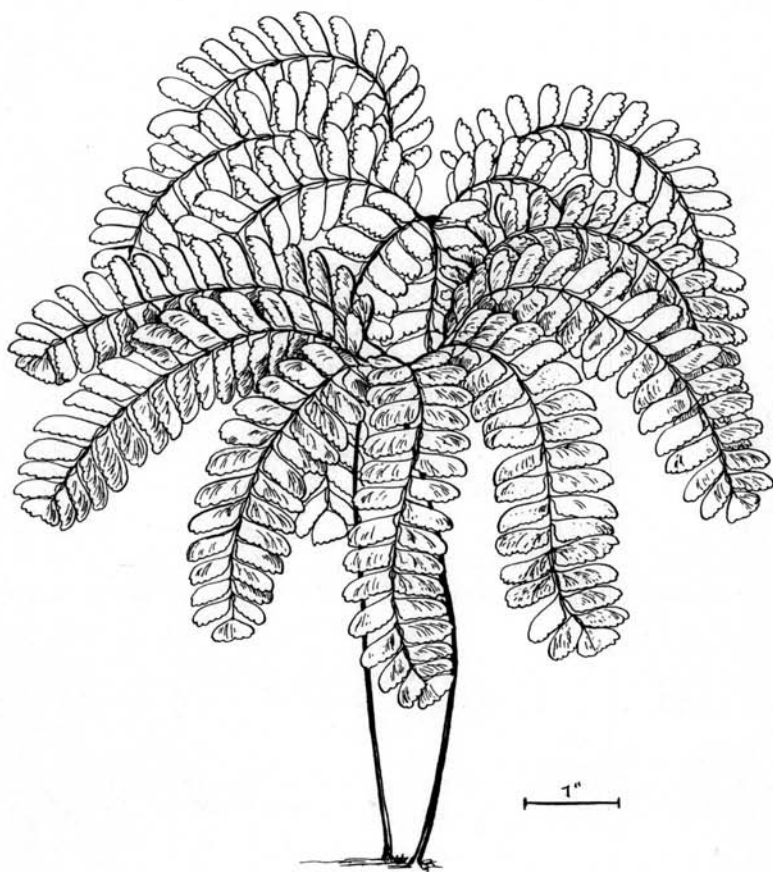
HABITAT: Moist, shaded, and limy rocks or steep banks; humus-rich woods.

HARVEST: Leaves.

USES: This herb is used as a refrigerant, expectorant, and tonic. A tea of this herb is used to treat coughs, nasal congestion or catarrh, and hoarseness.

ADIANTUM PEDATUM L.

(POLYPODIACEAE)



AESCULUS HIPPOCASTANUM L.

(HIPPOCASTANACEAE)

COMMON NAMES: Common horsechestnut, buckeye tree, horsechestnut.

DESCRIPTION: A large tree that grows to 100 feet in height. Buds are large and sticky, nearly black. Leaves have 5 to 7 pointed leaflets 4 to 8 inches long and broader at top than at base. Flowers have large spreading white petals with red markings at base; the flowers occur in showy clusters up to 1 foot long. The fruit is round and prickly and contains a round shiny brown nut 2 inches long.

FLOWERING PERIOD: April to May.

HABITAT: Cultivated areas and some wooded areas.

HARVEST: Bark and fruit in the fall.

USES: The bark is reported to have value as a tonic and febrifuge. Traditionally, people of Appalachia have carried a nut to prevent rheumatism. In Europe, an alcohol extract of the nut was used to treat hemorrhoids and is considered a vasa-constrictor.

AESCULUS HIPPOCASTANUM L.

(HIPPOCASTANACEAE)



ALETRIS FARINOSA L.

(LILIACEAE)

COMMON NAMES: Whitetube stargrass, ague grass, ague horn, agueroot, aletris root, aloe, aloeroot, backache root, blazing star, colicroot, crow corn, devil's bit, false unicorn root, huskwood, huskwort, mealy starwort, rheumatism root, stargrass, starwort, true unicorn root, unicorn's horns, unicorn plant, unicorn root, white colicroot.

DESCRIPTION: A perennial with wide, grass-like leaves spreading in a flat rosette around the base of a spike-like stem. White to yellow tubular flowers are arranged along the stem. Flowers have 6 lobes. Plant has a short thick root or rhizome.

FLOWERING PERIOD: May to July.

HABITAT: Moist locations in woods and meadows.

HARVEST: Rhizomes and roots in fall.

USES: The rhizomes and roots are reported to have therapeutic use as a diuretic tonic and sedative. The plant is known as colicroot because it has been used to treat colic, and ague-root because of its value in treating rheumatism, often called ague in Colonial times. In Appalachia a mixture of roots and brandy or whisky is drunk as a treatment for rheumatism.

ALETRIS FARINOSA L.

(LILIACEAE)



ALNUS SERRULATA (AIT.) WILLD.

(CORYLACEAE)

COMMON NAMES: Hazel alder, alder, American alder, black alder, candle alder, common alder, green alder, notch-leaved alder, red alder, smooth alder, speckled alder, swamp alder, tag alder.

DESCRIPTION: A shrub or small tree 4 to 25 feet in height with smooth, brownish-gray bark, which is strongly aromatic. The finely sawtoothed leaves are somewhat leathery, 2 to 4½ inches long, oval in shape, and broadest at the middle. Male flowers are borne in drooping catkins, female flowers in small, erect, oval cone-like catkins that turn hard and woody and remain on the shrub throughout winter.

FLOWERING PERIOD: February to May.

HABITAT: Swamps, wet woods, stream margins, and moist areas.

HARVEST: Bark of stems in early spring or late fall.

USES: The bark has been used as an alterative and the powdered drug as an ophthalmiatric. In Appalachia, the chewed bark is used to treat wounds and ulcers. The bark has also been used for brown dye.

ALNUS SERRULATA (AIT.) WILLD.

(CORYLACEAE)



AMARANTHUS HYBRIDUS L.

(AMARANTHACEAE)

COMMON NAMES: Smooth pigweed, amaranth, careless, green amaranth, green opened amaranth, hybrid amaranthus, love lies bleeding, pigweed, prince's feather, red cockscomb, slender pigweed, slim amaranth, spleen amaranth, wild beet.

DESCRIPTION: An annual 1 to 6 feet in height, erect, branched above. Leaves are alternate, petioled, 3 to 6 inches long, dull green, rough, hairy, ovate or rhombic, with wavy margins. Flowers are small, with greenish or red terminal panicles. Taproot is long, fleshy, red or pink.

FLOWERING PERIOD: June to October.

HABITAT: Waste places, cultivated fields, and barn yards.

HARVEST: Leaves and herb.

USES: Because of its astringent quality, this plant has been used in treating dysentery, ulcers, and hemorrhage of the bowel.

AMARANTHUS HYBRIDUS L.

(AMARANTHACEAE)



ANGELICA ATROPURPUREA L.

(UMBELLIFERAE)

COMMON NAMES: Purplestem angelica, alexanders, American angelica, angelica, archangel, Aunt Jerichos, bellyache root, common angelica, dead nettle, great angelica, high angelica, masterwort, masterwort aromatic.

DESCRIPTION: A shrub that grows to 7 feet in height. Stem is purplish. Three saw-toothed leaves occur at the tip of each leaf-stem. Leaves are alternate and compound; leaflets are 3-parted with serrate margins. White or greenish flowers occur in terminal clusters at the end of stalk. Stalks and clusters are arranged in a semicircle or umbel.

FLOWERING PERIOD: June to August.

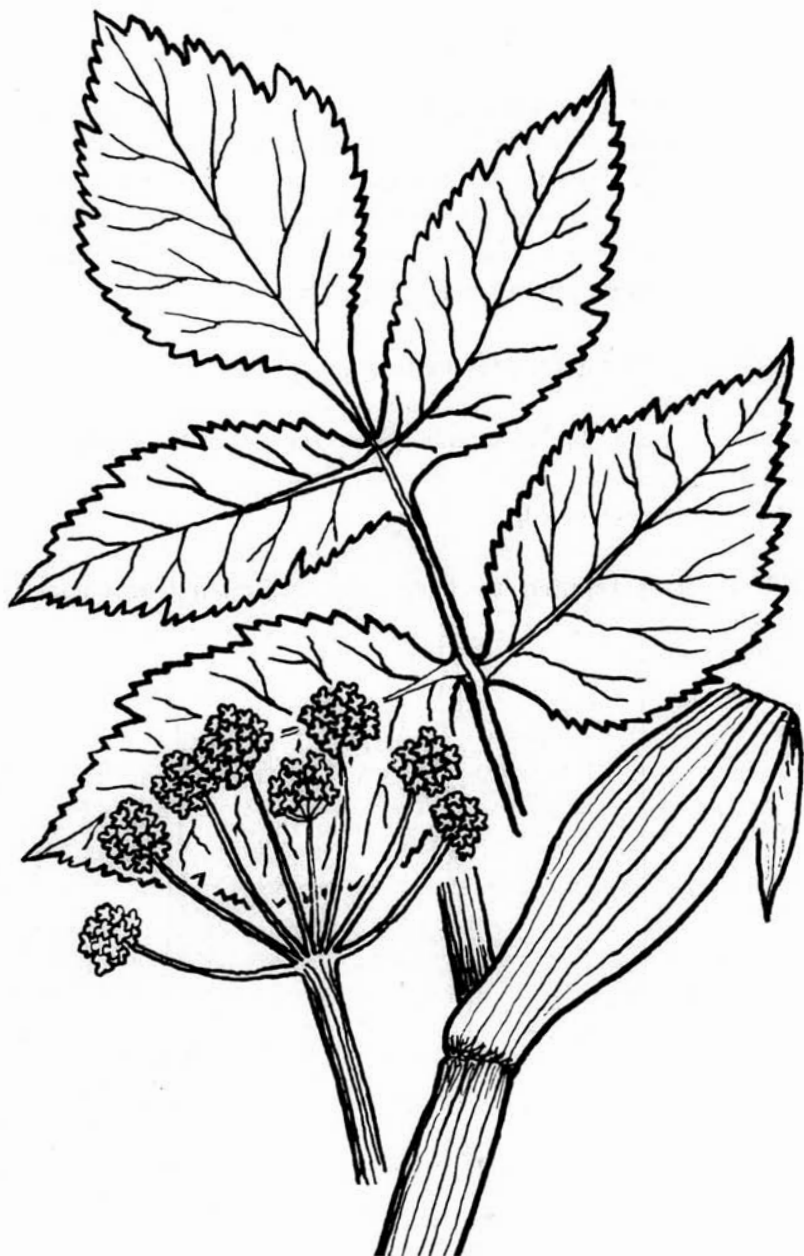
HABITAT: Mostly cultivated in gardens; in rich low grounds, and near streams and swamps.

HARVEST: Root in fall.

USES: The drug contains volatile oil that is used as a flavoring agent and in treating colic and flatulence. Some sources list it as an expectorant. A confection prepared by sugaring the boiled stems is considered a gourmet favorite. In Europe a root infusion is used to treat dyspepsia and stomach diseases and is considered diuretic and expectorant.

ANGELICA ATROPURPUREA L.

(UMBELLIFERAE)



***APLECTRUM HYEMALE* (MUHL.) TORR.**

(ORCHIDACEAE)

COMMON NAMES: Puttyroot, Adam-and-Eve-root.

DESCRIPTION: A perennial orchid that grows from a series of bulb-like roots attached by narrower roots. The plant has a single, broad, elliptical pointed leaf at the base. Flower spike, which arises from the root, has small leaflike structures enclosing the stem. Flower is purplish toward its base and brown toward its summit, with white lip.

FLOWERING PERIOD: May to June.

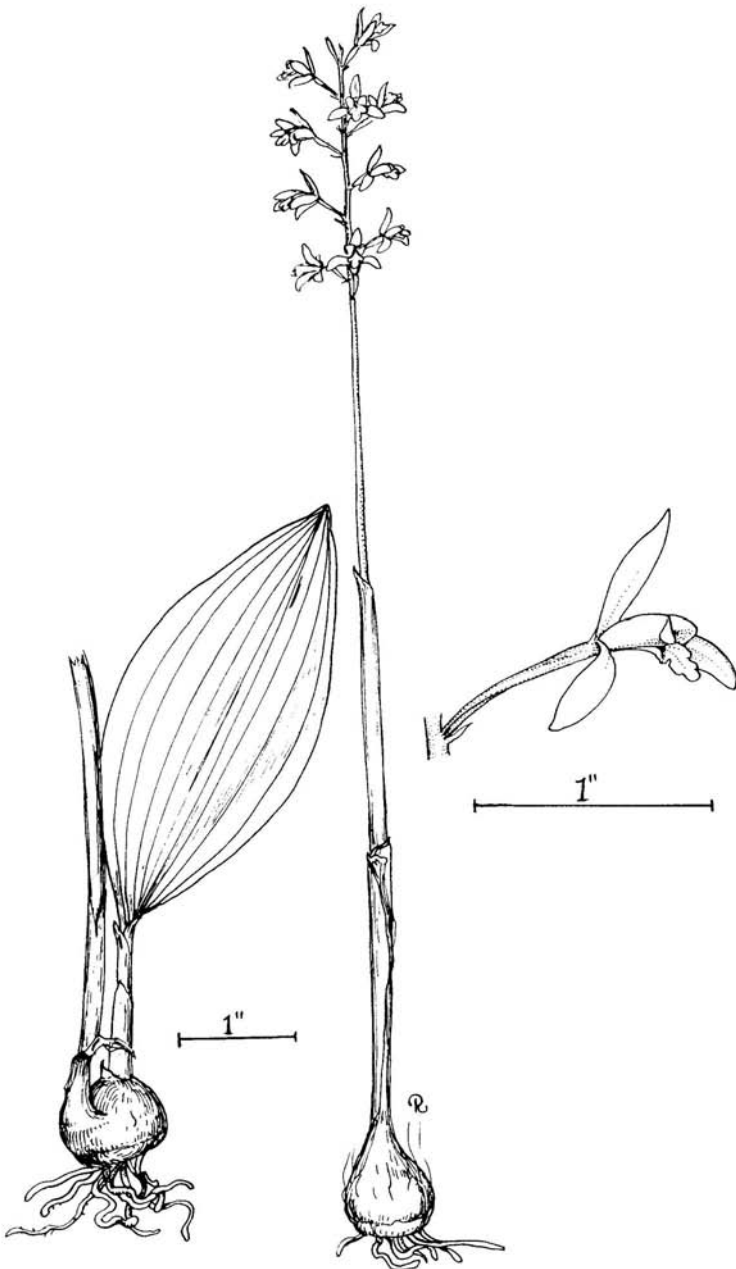
HABITAT: Moist shaded woods and in set soil of flood plains.

HARVEST: Roots in fall.

USES: Plant is reputed to have value in treating bronchial ailments.

APLECTRUM HYEMALE (MUHL.) TORR.

(ORCHIDACEAE)



APOCYNUM ANDROSAEMIFOLIUM L.

(APOCYNACEAE)

COMMON NAMES: Spreading dogbane, American ipecac, bitter dogbane, bitter-root, black Indian hemp, catch fly, colicroot, common dog's-bane, dogbane, fly trap, honey bloom, Indian hemp, milk ipecac, milkweed, rheumatism wood, wandering milkweed, western wallflower, wild ipecac.

DESCRIPTION: A perennial that grows to 3 to 6 feet in height, and is widely spread from horizontal rootstock. Leaves opposite, nearly sessile. Flowers large, oval, and whitish. The pods are double, 4 to 6 inches long, and slender. The plant produces a milky juice.

FLOWERING PERIOD: June to August.

HABITAT: Open woods, roadside banks, meadows, thickets, and stream banks.

HARVEST: Roots and rhizomes in late fall.

USES: This plant, which is extremely poisonous, is a cardioactive drug. It has been used also as a tonic, diuretic, and purgative.

APOCYNUM ANDROSAEMIFOLIUM L.

(APOCYNACEAE)



APOCYNUM CANNABINUM L.

(APOCYNACEAE)

COMMON NAMES: Hemp dogbane, American hemp, amyroot, bitter-root, Bowman's root, Canadian hemp, choctaw root, glabrous hemp, Indian hemp, Indian physic, milkweed, rheumatism weed, silkweed, wild cotton.

DESCRIPTION: This perennial is generally 3 to 6 feet in height, and is unbranched except near the top. It has large elliptical, opposite leaves with short stalks. It produces whitish-green flowers borne on terminal clusters, and a milky juice. The pods are double, 4 to 6 inches long, and slender. The seeds are tufted.

FLOWERING PERIOD: May to July.

HABITAT: Dry waste places and forest borders.

HARVEST: Roots and rhizomes in late fall.

USES: This plant is a cardiotonic drug that is extremely poisonous. It has been used as a diuretic, diaphoretic, expectorant, and emetic. Because of its use by American Indians in treating dropsy, it has been called dropsy weed. Indians also used the tough fibrous bark to make fishing nets, and some western Indians chewed dried bits of the latex. The plant exhibits cytotoxicity but no antitumor activity.

APOCYNUM CANNABINUM L.

(APOCYNACEAE)



ARALIA NUDICAULIS L.

(ARALIACEAE)

COMMON NAMES: Wild sarsaparilla, American sarsaparilla, American spikenard, false sarsaparilla, rabbit's foot, sarsaparil, sarsaparilla, sarsaparilla root, shotbush, small spikenard, small spikeweed, spignet, spikenard, sweetroot, Virginian sarsaparilla, wild licorice.

DESCRIPTION: A short-stemmed perennial that grows to 1 foot in height. Flowers are small and greenish-yellow in 3 clusters of 12 to 30 flowers on the stalk. Plant produces purplish-black berry-like fruits.

FLOWERING PERIOD: May to July.

HABITAT: Deep mountain woodlands.

HARVEST: Roots in late summer and fall.

USES: The roots and rhizomes have been used as a diuretic, diaphoretic, and cough remedy.

ARALIA NUDICAULIS L.

(ARALIACEAE)



ARALIA RACEMOSA L.

(ARALIACEAE)

COMMON NAMES: American spikenard, American sarsaparilla, Indian root, life-of-man, old man's root, petty morrel, pigeon weed, spignet, spikenard.

DESCRIPTION: A perennial 1 to 9 feet in height, with a single leaf stalk. Leaf is divided into 3 parts, each with five leaflets. Flowering stalk is elongated, with small greenish-yellow flowers in clusters. Produces a blackish or purplish berry. Root is larger than the root on *nudicaulis*.

FLOWERING PERIOD: June to August.

HABITAT: Bluffs, deep woods, and river banks.

HARVEST: Roots in summer and fall.

USES: Roots and rhizomes have been used to treat rheumatism, syphilis, coughs, and shortness of breath. In Appalachia, a tea made of roots is used for backache.

ARALIA RACEMOSA L.

(ARALIACEAE)



ARCTIUM LAPPA L.

(ASTERACEAE)

COMMON NAMES: Great burdock, beggar's buttons, burdock, clotbur, lappa.

DESCRIPTION: A biennial or perennial 3 to 8 feet in height, with many flowered heads. Leaves are large, broad, and rounded—like those on rhubarb. The tube-shaped flowers are pale pink, deep purple, or white. Big brown, round, bristly burrs are a common characteristic of the plant.

FLOWERING PERIOD: July to October.

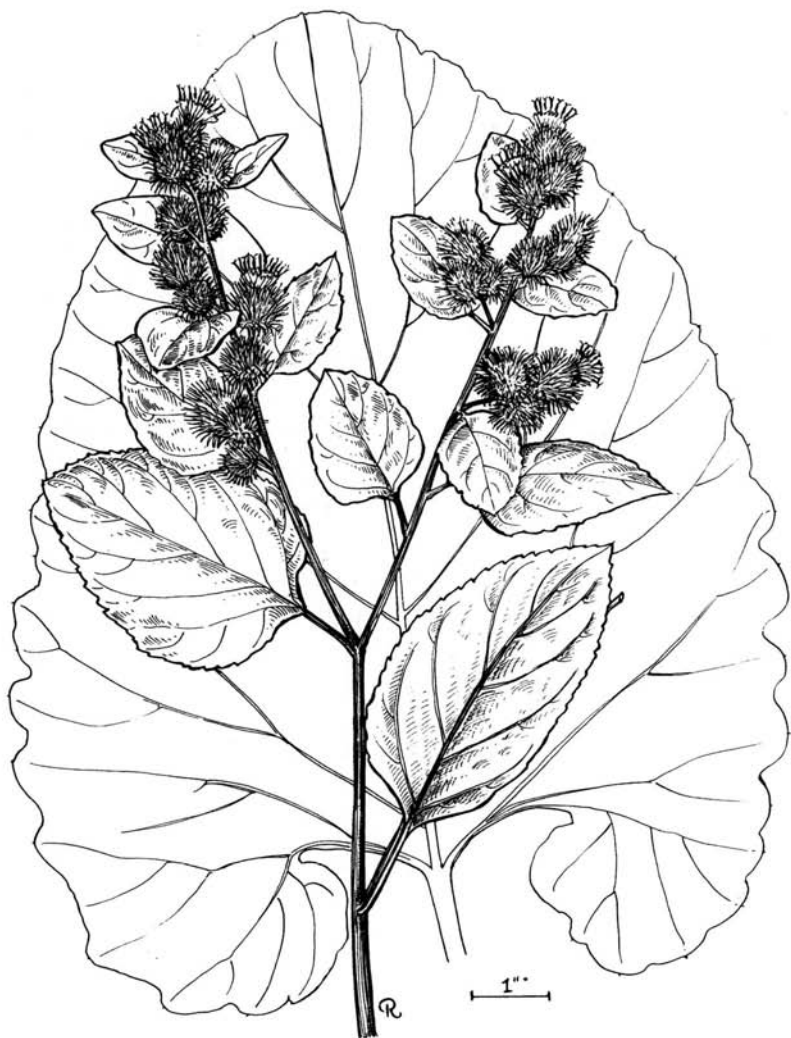
HABITAT: Fields and roadsides.

HARVEST: Root of plant's first year of growth; can be harvested anytime.

USES: The United States Dispensatory no longer lists this herb as medicinally valuable, but in the past it was quite popular for treating many ailments. In Spain and France it has been used to purify the blood and to cure skin blemishes and minor wounds. In 18th Century America it was prescribed as a cure for gonorrhoea and syphilis. In Appalachia, a tea of roots or seeds is used to treat rheumatism and to purify the blood.

ARCTIUM LAPP L.

(ASTERACEAE)



ARCTIUM MINUS (HILL) BERNH.

(ASTERACEAE)

COMMON NAMES: Common burdock, burdock, clotbur, cuckoo button, smaller burdock.

DESCRIPTION: A biennial or perennial 3 to 8 feet in height, with many flowered heads. Leaves are large, broad, and rounded—like those on rhubarb. The tube-shaped flowers are pale pink, deep purple, or white. Big, brown, round, bristly burrs are a common characteristic.

FLOWERING PERIOD: June to October.

HABITAT: Fields and pastures.

HARVEST: Roots in the fall of plant's first year of growth; seeds the second year of growth.

USES: Plant is a diaphoretic, diuretic, alterative, and depurative. It is used externally in salves or as a wash for burns, skin irritations, and minor wounds.

ARCTIUM MINUS (HILL) BERNH.

(ASTERACEAE)



***ARISAEMA TRIPHYLLUM* (L.) SCHOTT.**

(ARACEAE)

COMMON NAMES: Indian Jack-in-the-pulpit, bog onion, cuckoo plant, dragon root, dragon turnip, Indian turnip, Jack-in-the-pulpit, lords and ladies, meadow turnip, memory root, pepper turnip, priest's pintle, small Jack-in-the-pulpit, starchwort, swamp turnip, thrice-leaved arum, wake robin, wild turnip.

DESCRIPTION: A perennial that has 2 stalks of 3 leaves each, and grows another stalk topped with a green tubular pulpit, which has a hood turned down over it that protects an inside green or dark purple tube. The pulpit stalk has brilliant crimson berries in dense clusters.

FLOWERING PERIOD: April to June.

HABITAT: Rich damp woodlands and bogs.

HARVEST: Corm in summer or fall.

USES: The boiled corms of this plant were a mainstay in the diet of the American Indians. Because of the needle-like calcium oxalate crystals, the raw corm is extremely irritating and toxic. The plant has been used as an expectorant, irritant, and diaphoretic.

ARISAEMA TRIPHYLLUM (L.) SCHOTT.

(ARACEAE)



ARISTOLOCHIA SERPENTARIA L.

(ARISTOLOCHIACEAE)

COMMON NAMES: Virginia snakeroot, birthwort, Dutchmans-pipe, pelican flower, sangrel, sangrel-root, serpentaria, serpentine root, snakeroot, snakeweed, thick birthwort.

DESCRIPTION: This perennial is 1 to 2 feet in height. It has an erect stem and heart-shaped leaves that taper to a point at the tip. Brownish pipe-like flowers grow from base of the plant stem.

FLOWERING PERIOD: May to June.

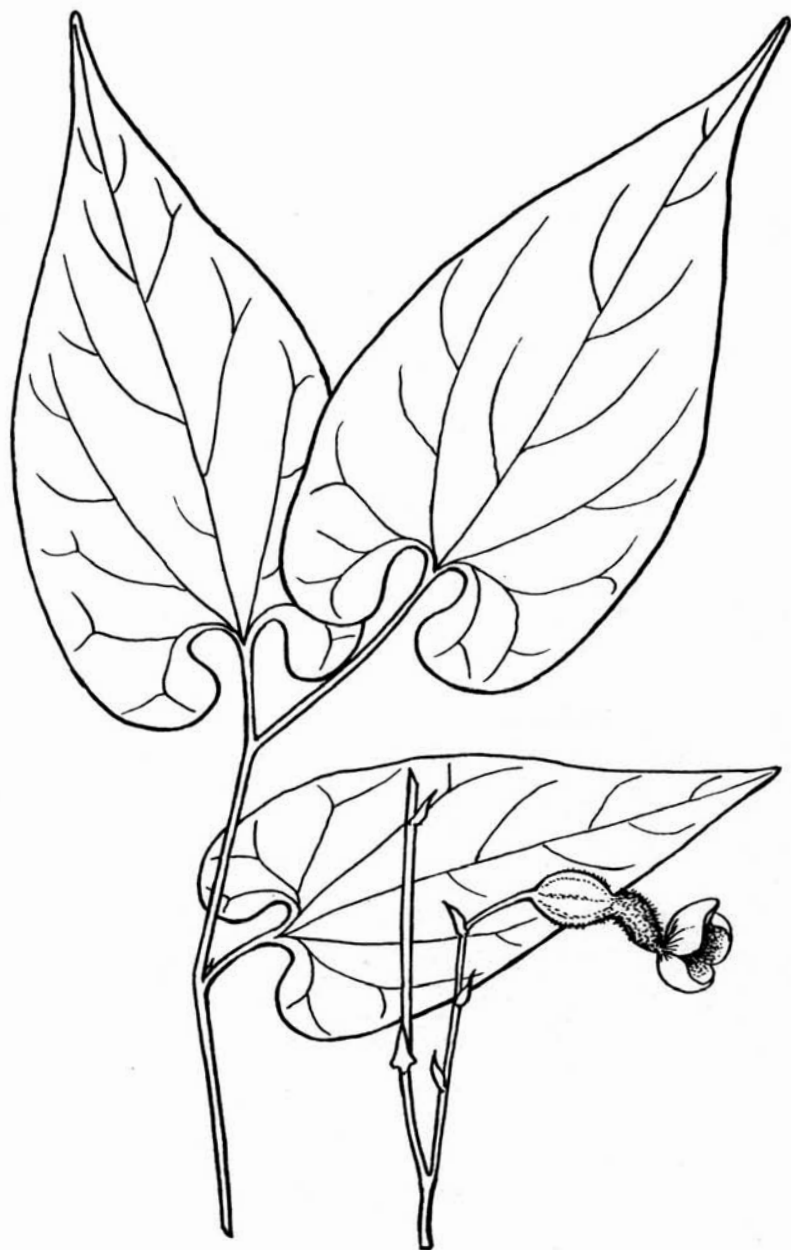
HABITAT: Forests, woodlands, and stream banks.

HARVEST: Rootstock and roots in fall.

USES: Preparations from this herb have been used as aids in dyspepsia, as antispasmodics, diaphoretics, and emmenagogues.

ARISTOLOCHIA SERPENTARIA L.

(ARISTOLOCHIACEAE)



ASARUM CANADENSE L.

(ARISTOLOCHIACEAE)

COMMON NAMES: Canada wild ginger, black snakeroot, black snakeweed, broad-leaved sarabacca, Canada snakeroot, cat-foot, colicroot, coltsfoot, coltsfoot snakeroot, false colt's foot, heart snakeroot, Indian ginger, southern snakeroot, wild ginger.

DESCRIPTION: A low-growing stemless perennial with heart-shaped soft leaves growing from a rhizome. Thick, brownish, bell-shaped flowers, purple inside, are found near the root. The flowers are often hidden under dry leaves. The stem has a spicy odor.

FLOWERING PERIOD: April to May.

HABITAT: Cool, moist, deep woods and slopes.

HARVEST: Rhizome in spring or fall, and roots anytime.

USES: The first common name of this plant, Canada wild ginger, indicates the aromatic quality of its rhizome. It was used as a flavoring agent in Colonial America in place of Jamaica ginger. The rhizome has value as an expectorant, antiseptic, and tonic. In Appalachia a root tea is used to relieve stomach gas.

ASARUM CANADENSE L.

(ARISTOLOCHIACEAE)



ASCLEPIAS SYRIACA L.

(ASCLEPIADACEAE)

COMMON NAMES: Common milkweed, common silkweed, cottonweed, milkweed, silkweed, silky swallow-wort, wild cotton.

DESCRIPTION: A perennial that generally grows to 4 to 5 feet in height. Leaves are broadly oval, opposite, or whorled, pubescent beneath, and measure 4 to 8 inches long. Dull greenish-purple flowers are clustered in a head.

FLOWERING PERIOD: June to August.

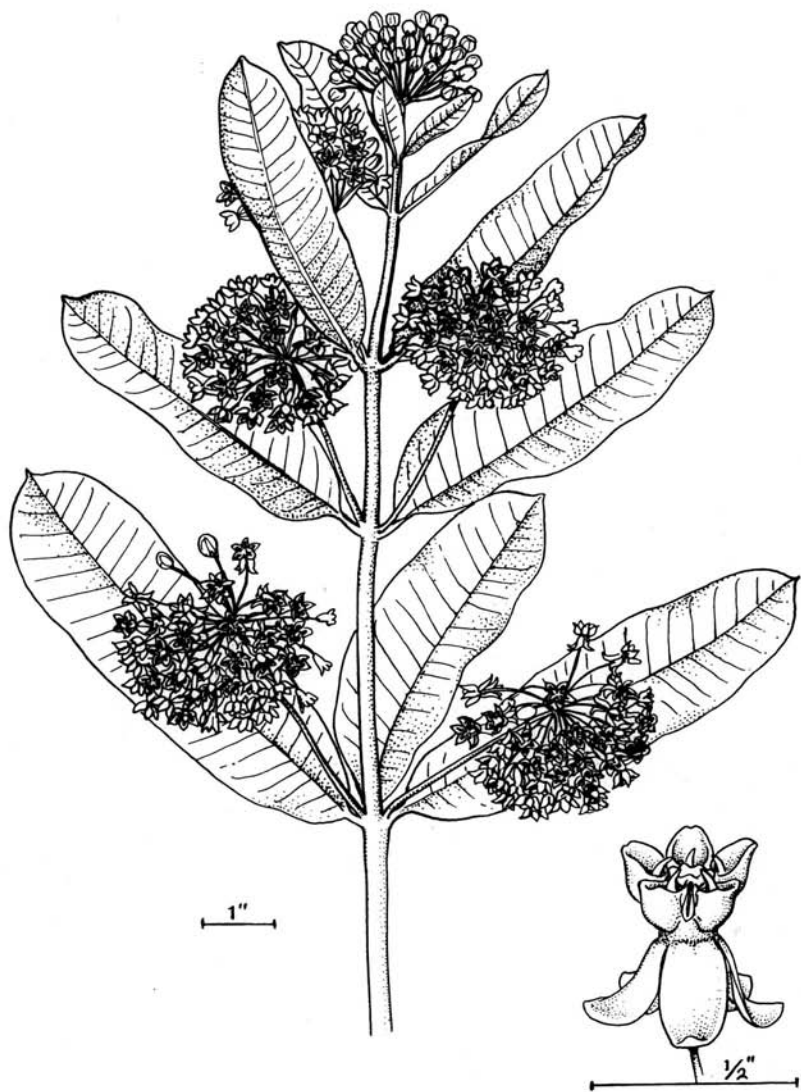
HABITAT: Thickets, meadows, fields, orchards, and along roadsides.

HARVEST: Roots in fall.

USES: Reputedly this plant is valuable as an expectorant, antirheumatic, diaphoretic, and diuretic. It is also a source of glucoside and alkaloid. In Appalachia it is used to treat warts and moles. The white juice of this plant is extremely irritating to the eyes.

ASCLEPIAS SYRIACA L.

(ASCLEPIADACEAE)



ASCLEPIAS TUBEROSA L.

(ASCLEPIADACEAE)

COMMON NAMES: Butterfly milkweed, butterfly weed, Canada root, chigger flower, fluxroot, Indian nosy, orange apocynum, orange milkweed, orangeroot, orange swallow-wort, pleurisy root, rubber root, silkweed, swallow-wort, tuberous-rooted swallow-wort, tuber root, white root, wind root, wind weed, wine tree.

DESCRIPTION: A very leafy, slightly hairy perennial that grows to 2 to 3 feet in height. Leaves are 2 to 6 inches long, narrow, alternate, and short petioled. Orange-yellow flowers are in umbels. Fruit is a pod. Seeds have white silky hairs.

FLOWERING PERIOD: May to August.

HABITAT: Sandy, dry open soils, pastures, and roadsides.

HARVEST: Roots in fall.

USES: The plant has been used as an expectorant, diaphoretic, and emetic, and to treat rheumatism. Indians of Appalachia made a tea of the leaves to induce vomiting.

ASCLEPIAS TUBEROSA L.

(ASCLEPIADACEAE)



***BAPTISIA TINCTORIA* (L.) R. BR.**

(FABACEAE)

COMMON NAMES: Wild indigo, clover bloom, dyer's baptisia, false indigo, horsefly weed, indigo broom, indigo weed, rattlebush, rattleweed, yellow broom, yellow wild indigo.

DESCRIPTION: A perennial that grows 2 to 4 feet in height. Stem is erect, and has alternate branches that contain several whorls of 3 clover-like leaflets. Each branch has a whorl of 3 leaflets where it attaches to the stem. Leaves are nearly sessile. Yellow flowers, which are arranged at the tops of the highest branches, are $\frac{1}{2}$ inch long, and form brown $\frac{1}{2}$ -inch cylindrical pods.

FLOWERING PERIOD: April to August.

HABITAT: Mostly in dry open woods and clearings.

HARVEST: Roots in fall, herb in summer.

USES: Most authors agree that the herb has value as a febrifuge, tonic, purgative, and antiseptic.

BAPTISIA TINCTORIA (L.) R. BR.

(FABACEAE)



***BERBERIS VULGARIS* L.**

(BERBERIDACEAE)

COMMON NAMES: European barberry, American barberry, barberry, common barberry, dragon grape, guild tree, jaundice barberry, jaundice berry, pepperidge bush, sow berry, wood sour, yellow root.

DESCRIPTION: A perennial shrub that grows to 8 feet in height. Leaves are small, ovate, grayish below; leaves on young sprouts are spiny. Yellow flowers are in racemes 1 to 2 inches long. Fruit is oblong, scarlet to purple. Inner wood is yellow. Bark is gray, having sharp spines at nodes.

FLOWERING PERIOD: May to July.

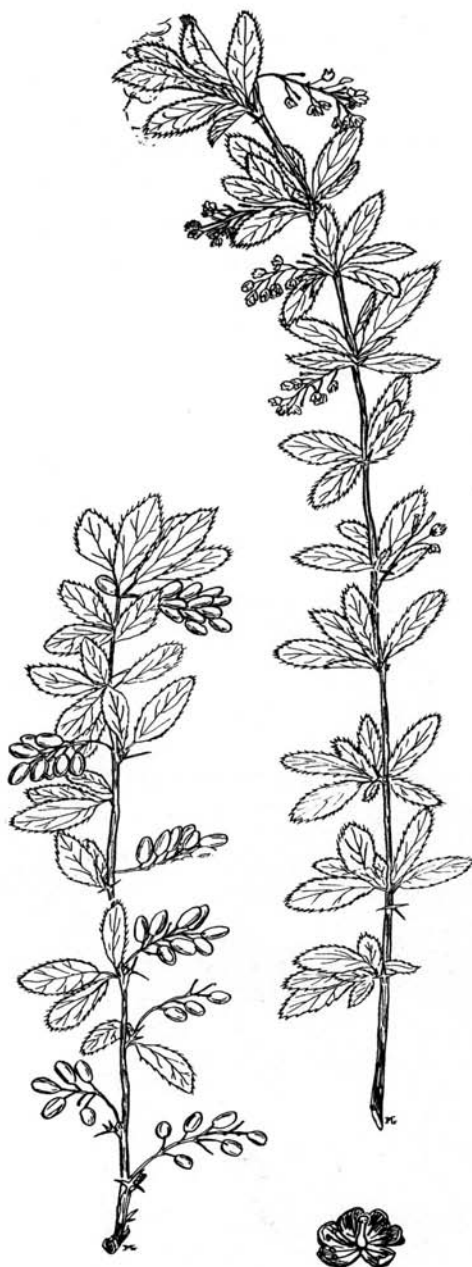
HABITAT: Pastures, thickets, and fence rows.

HARVEST: Root and stem, root bark, and fruit in fall.

USES: The fruit is rich in Vitamin C and has been used in treating certain vitamin deficiencies. The root bark, which is astringent, has been used to treat diarrhea, dysentery, and jaundice. In Europe, a root infusion is used to treat chronic dyspepsia.

BERBERIS VULGARIS L.

(BERBERIDACEAE)



BETULA LENTA L.

(CORYLACEAE)

COMMON NAMES: Sweet birch, black birch, cherry birch, mountain mahogany, river birch, spice birch.

DESCRIPTION: A tree that grows to 80 feet in height. Bark is dark reddish-brown, close-fissured into thick plates on old trunks. Leaves are 2½ to 5 inches long and 1½ to 3 inches wide (widest near the base); they are also finely toothed on the edges, and rounded at the base. Bark and leaves are sweet and aromatic. Tree bears both male and female flowers in catkins or caterpillar-like spikes ½ inch long.

FLOWERING PERIOD: April to mid-May.

HABITAT: Rich woods and moist, well-drained to shallow soils.

HARVEST: Bark and twigs from May to late September.

USES: The bark of this plant contains small quantities of methyl salicylate and has a pleasant aromatic flavor similar to wintergreen. The bark has been used as an astringent, antiseptic, antipyretic, and antirheumatic. The sap may be made into vinegar. Birch beer is also made from this tree.

BETULA LENTA L.

(CORYLACEAE)



CAULOPHYLLUM THALICTROIDES
(L.) MICHX.

(BERBERIDACEAE)

COMMON NAMES: Blue cohosh, blueberry cohosh, blueberry root, blue ginseng, papoose root, squaw root, yellow ginseng.

DESCRIPTION: A perennial that grows to 3 feet in height. It has an almost sessile leaf at top, and leaflets are either 2- or 3-lobed. In spring, plant sends up a small, elongated axis of yellowish-green flowers. Rootstock is knotty and matted.

FLOWERING PERIOD: April to early June.

HABITAT: Richly wooded mountains and hardwood glades.

HARVEST: Rhizomes and roots in the fall.

USES: This herb has been called papoose root or squaw root because of its use by American Indians to facilitate childbirth. The rhizome has been used to treat chronic rheumatism, bronchitis, and colic.

CAULOPHYLLUM THALICTROIDES
(L.) MICHX.

(BERBERIDACEAE)



CEANOTHUS AMERICANUS L.

(RHAMNACEAE)

COMMON NAMES: Jersey tea ceanothus, New Jersey tea, red root, wild snowball.

DESCRIPTION: A shrub that grows to 2 to 3 feet in height. It has straggling, downy, alternate, ovate, finely-toothed leaves that are pale green below and dark green above. The plant produces white flowers on long stalks at upper axils.

FLOWERING PERIOD: May to September.

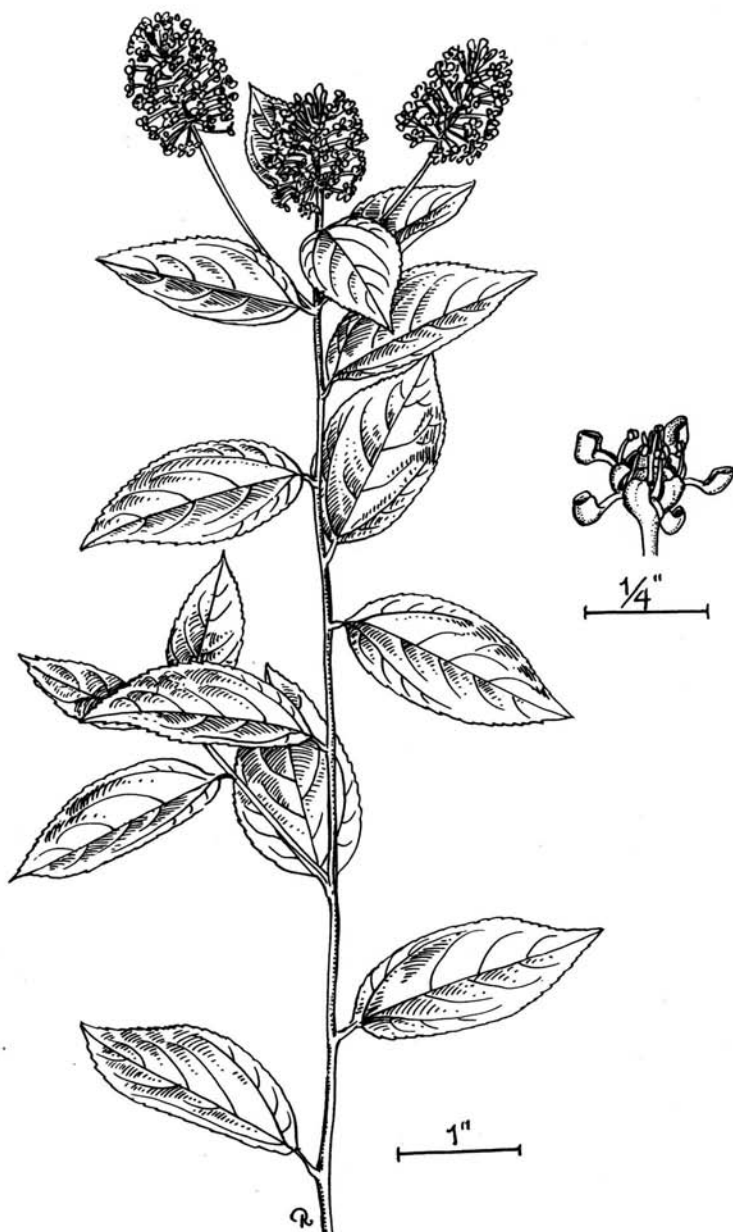
HABITAT: Upland deciduous forests, roadsides, dry open woods, and rocky banks.

HARVEST: Bark of root, root, and leaves.

USES: The root is reportedly used as an astringent, stimulant, antispasmodic, expectorant, and sedative. According to one authority, the root is also used to treat respiratory ailments. In Europe it has been used to reduce high blood pressure and to treat enlarged spleen. The leaves are used for a tea.

CEANOTHUS AMERICANUS L.

(RHAMNACEAE)



CHAMAEIIRIUM LUTEUM (L.) GRAY

(LILIACEAE)

COMMON NAMES: Fairywand, blazing star, devil's bit, false unicorn, grub root, helonias, rattlesnake root, star root, starwort.

DESCRIPTION: A perennial that grows to 4 feet in height. Plant produces a rosette of basal leaves from which a spike rises. A few narrowly linear leaves may be found on the spike. Male and female flowers are on different plants. The male flowers are white and, when dried, yellowish; the female flowers are greenish.

FLOWERING PERIOD: April to July.

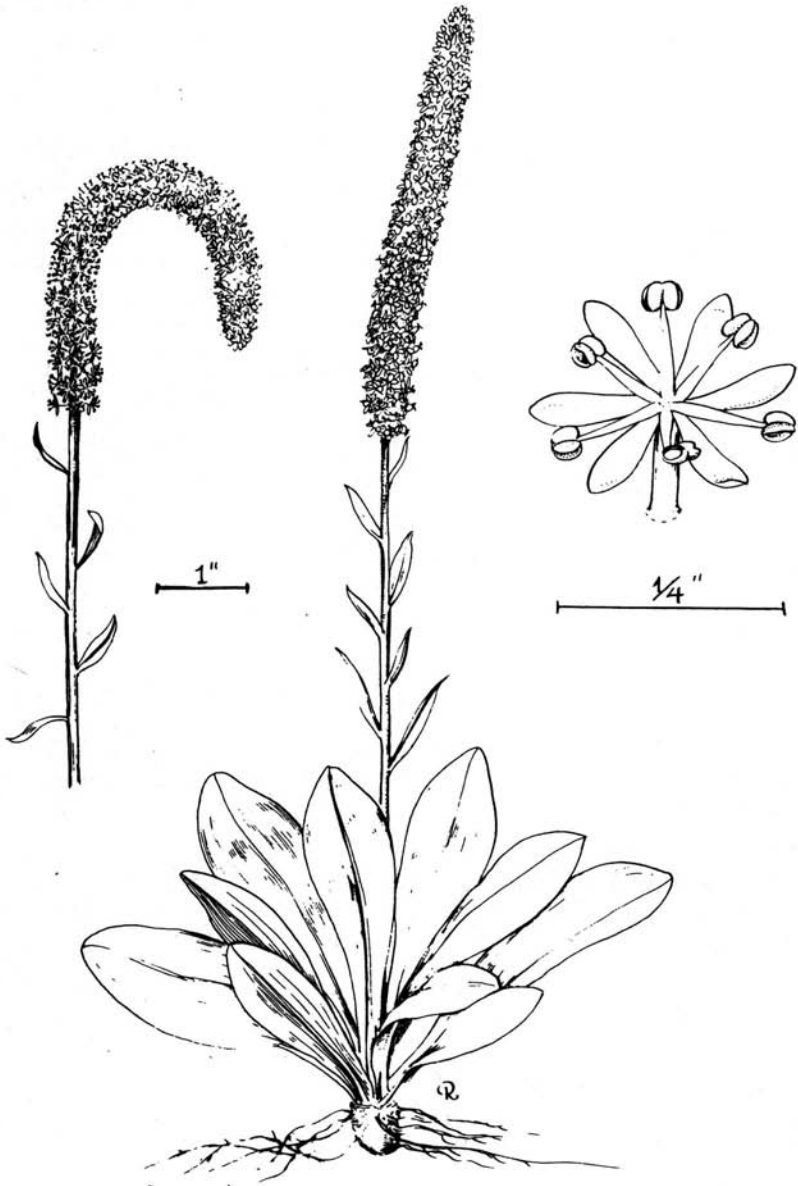
HABITAT: Bogs and wet places in woodlands, meadows, and thickets.

HARVEST: Rootstock in fall.

USES: This herb has been used as a diuretic, diaphoretic, anthelmintic, purgative, and tonic.

CHAMAELIRIUM LUTEUM (L.) GRAY

(LILIACEAE)



CHELONE GLABRA L.

(SCROPHULARIACEAE)

COMMON NAMES: White turtlehead, balmony, bitter herb, fishmouth, salt-rheum weed, shellflower, smooth snakehead, snakehead, snakemouth, true snakehead, turtle bloom, turtlehead.

DESCRIPTION: A perennial that grows to 3 feet in height. Leaves are opposite, narrow, and 2 to 6½ inches long. Flowers are rose-white and about 1 inch long. A pale, beard-like structure is found within the turtlehead flower tube.

FLOWERING PERIOD: August to October.

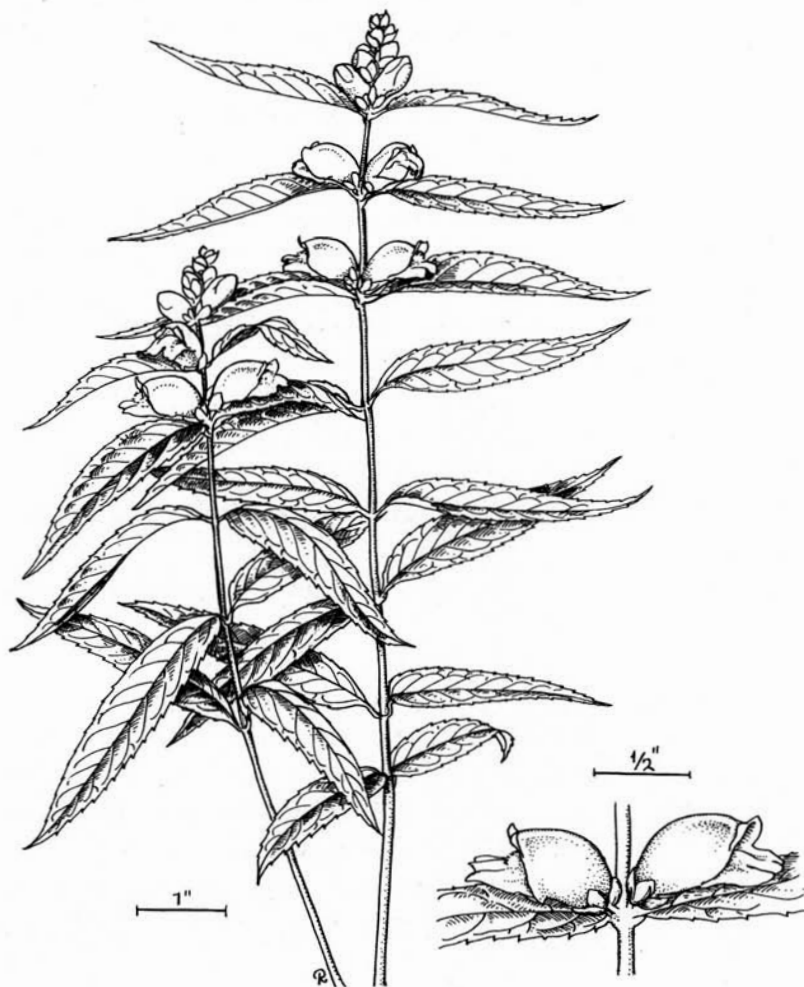
HABITAT: Low grounds, woodland, margins of streams, and wet thickets.

HARVEST: Herb at flowering time; leaves in spring.

USES: The leaves have been used for reducing inflammation, and as an anthelmintic and tonic.

CHELONE GLABRA L.

(SCROPHULARIACEAE)



CHENOPODIUM AMBROSIOIDES L.

(CHENOPODIACEAE)

COMMON NAMES: Mexican tea, ambrosia, ambrosia-like chenopodium, American wormseed, goose foot, Jerusalem oak seed, Jerusalem tea, jesuit tea, Spanish tea, stickweed, stinking weed, wild wormseed, wormseed, wormseed goose-foot.

DESCRIPTION: An annual that grows to 3½ feet in height. Branches sprout profusely from the base. Leaves are alternate, ovate to lanceolate in shape, and about 5 inches long. Small, greenish flowers grow along small, leafless spikes in the axils of the leaves.

FLOWERING PERIOD: July to October.

HABITAT: Waste places, cultivated ground, abandoned fields.

HARVEST: Fruit in summer, entire plant or seed from August to November.

USES: Primary use is in the manufacturing of chenopodium oil, which is used to treat intestinal worms, both in humans and animals. The pollen is allergenic. In Mexico it is cooked and eaten as a vermifuge, and in Europe it is used as an infusion. In New Mexico, Spanish speaking people use a tea made of the leaves to encourage milk flow and to relieve post-delivery pains.

CHENOPODIUM AMBROSIOIDES L.

(CHENOPODIACEAE)



***CHIMAPHILA MACULATA* (L.) PURSH.**

(PYROLACEAE)

COMMON NAMES: Spotted wintergreen, dragon's tongue, pepsissewa, ratsbane, rheumatism root, spotted pipsissewa, wild arsenic, wintergreen.

DESCRIPTION: An evergreen perennial that grows to 10 inches in height. Leaves are dark green, blunt-toothed, and wedge-shaped. Flowers are about ½ inch in size, flesh-colored, with violet pollen sacs.

FLOWERING PERIOD: May to June.

HABITAT: Coniferous and hardwood forests.

HARVEST: Leaves.

USES: According to at least two authorities, this plant is used as a diuretic, tonic, and astringent. It is used also, according to other authorities, to treat skin eruptions, certain types of cancer, acute rheumatism, and syphilis. Still other uses are as an aromatic and alterative.

CHIMAPHILA MACULATA (L.) PURSH.

(PYROLACEAE)



***CHIMAPHILA UMBELLATA* (L.) NUTT.**

(PYROLACEAE)

COMMON NAMES: Common pipsissewa, bitter wintergreen, fragrant wintergreen, ground holly, king's cure, love-in-winter, noble pine, pine tulip, pipsissewa, prince's pine, princess pine, pyrole, rheumatism weed, waxflower, wintergreen.

DESCRIPTION: An evergreen perennial that grows to 10 inches in height. Leaves are dark green, blunt-toothed, and wedge-shaped. Flowers are about ½ inch in size, flesh-colored, with violet pollen sacs.

FLOWERING PERIOD: May to June.

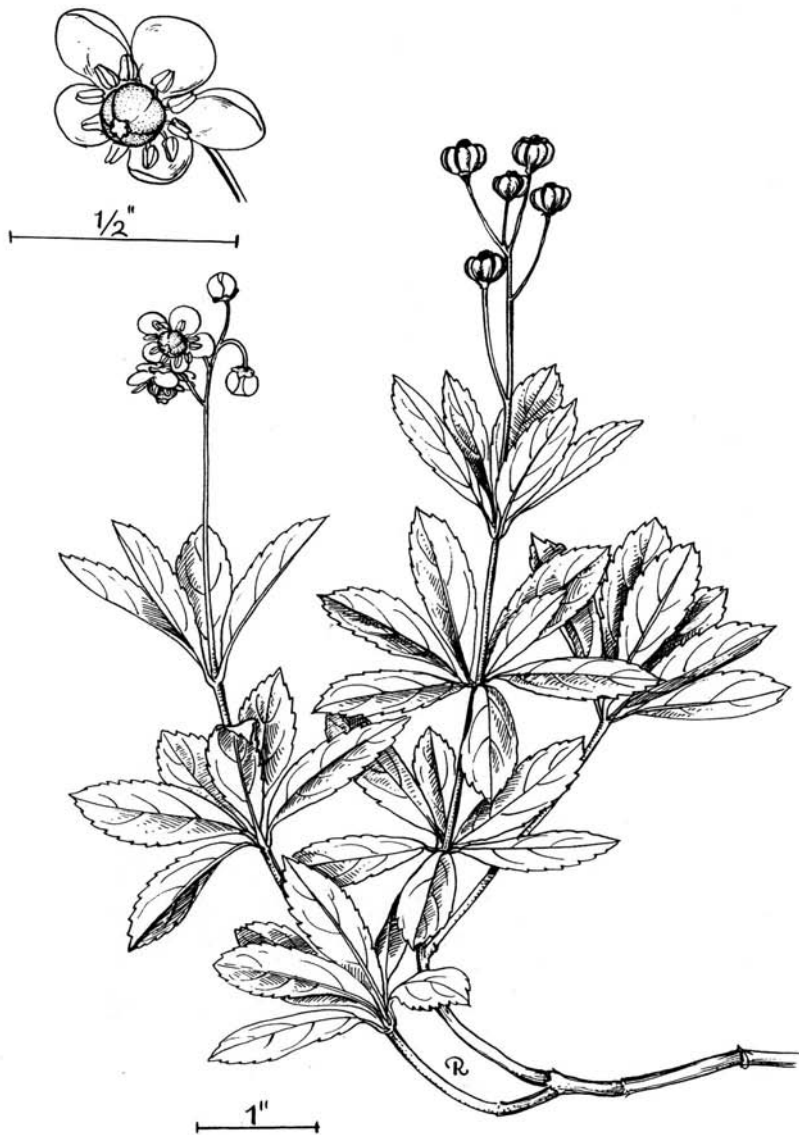
HABITAT: Coniferous and hardwood forests, and acid woodlands.

HARVEST: Leaves and herbs in late summer or early fall.

USES: The dried leaves are reportedly used as a diuretic, astringent, tonic, and antirheumatic.

CHIMAPHILA UMBELLATA (L.) NUTT.

(PYROLACEAE)



CHIONANTHUS VIRGINICUS L.

(OLEACEAE)

COMMON NAMES: Fringe tree, American fringe tree, flowering ash, graybeard tree, old man's beard, poison ash, shavings, snowdrop tree, snowflowers, white fringe, white fringe tree.

DESCRIPTION: A shrub or tree about 35 feet in height. Leaves are opposite. Produces many white flowers on long stems, in panicles. Berries are fleshy, globular, and purple.

FLOWERING PERIOD: April to May.

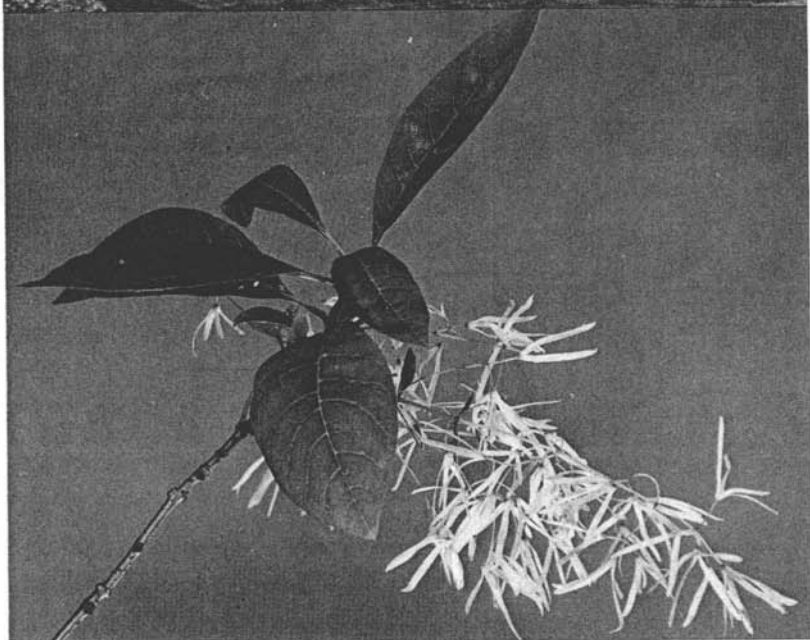
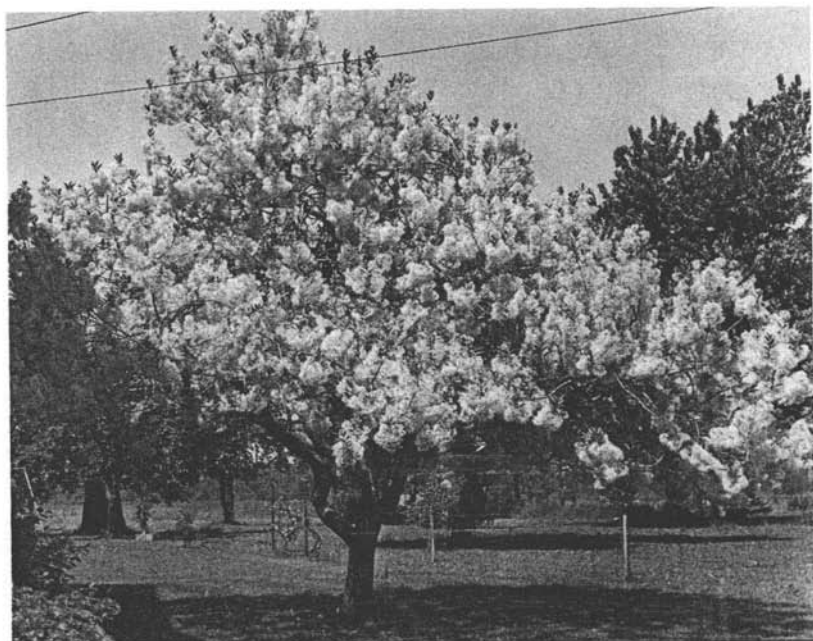
HABITAT: Damp woods, thickets, bluffs, and dry woods.

HARVEST: Root bark and fresh bark of trunks in the fall.

USES: The bark is used as a tonic, diuretic, and astringent; it is also used to reduce fever. In Appalachia a liquid of boiled root bark is applied to skin irritations.

CHIONANTHUS VIRGINICUS L.

(OLEACEAE)



***CIMICIFUGA AMERICANA* MICHX.**

(RANUNCULACEAE)

COMMON NAMES: American bugbane, bugbane, mountain bugbane, mountain rattle-top, summer cohosh.

DESCRIPTION: A perennial shrub that grows to 3 to 4 feet in height. The plant resembles *C. racemosa* (L.) Nutt but is not as tall; and it has shorter lateral spikes of small, white flowers plus a terminal spike.

FLOWERING PERIOD: July to September.

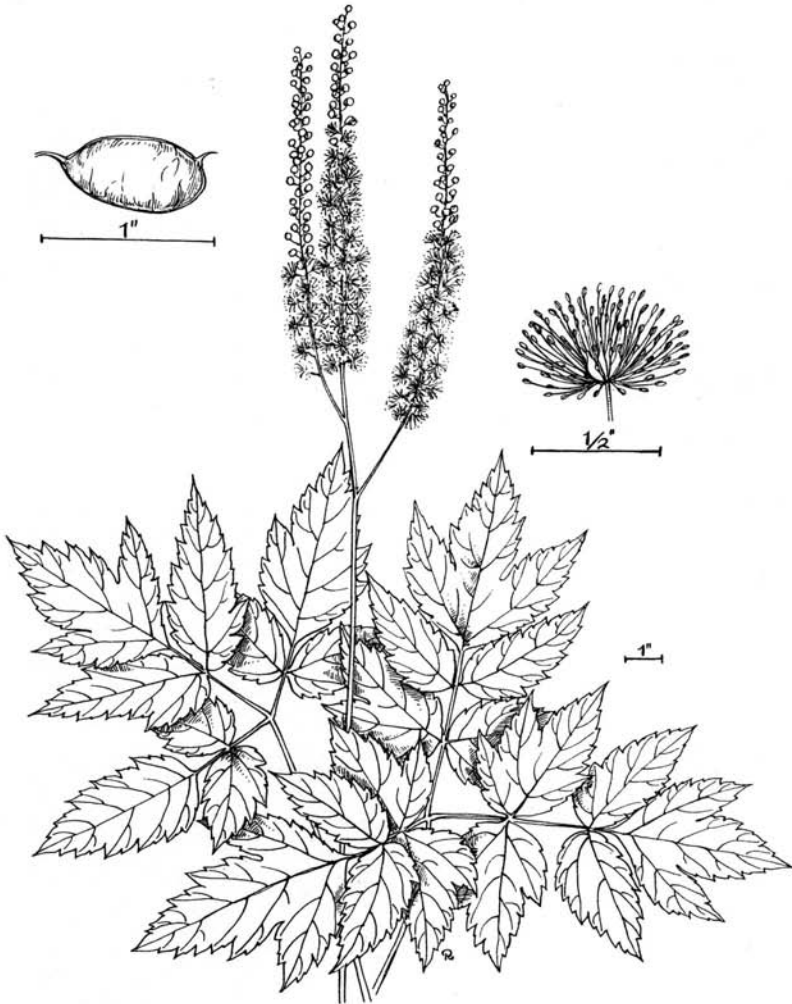
HABITAT: Moist woods.

HARVEST: Rhizomes and roots at end of growing season.

USES: This plant is used as an antispasmodic in some areas. (See *C. racemosa*.)

CIMICIFUGA AMERICANA MICHX.

(RANUNCULACEAE)



CIMICIFUGA RACEMOSA (L.) NUTT.

(RANUNCULACEAE)

COMMON NAMES: Cohosh bugbane, battle weed, black cohosh, black snakeroot, blueberry, blue ginseng, bugbane, cohosh, columbine-leaved leontice, cordate rattle-top, false cohosh, heart-leaved rattle-top, heart-leaved snakeroot, meadow rue leontice, papoose root, rattle root, rattlesnake root, rattle-top, rattleweed, richweed, squaw root, yellow ginseng.

DESCRIPTION: A perennial shrub that grows to 8 feet in height. Each of the leaf stems holds 2, 3, or 5 leaflets. The plant is topped with a slender spike of small, white flowers. The rhizome or root is knotted.

FLOWERING PERIOD: June to August.

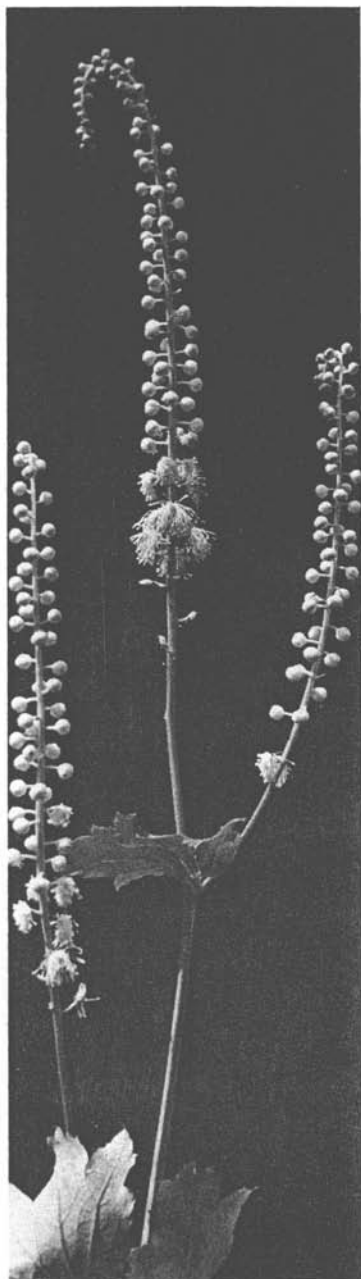
HABITAT: Rich, open woods.

HARVEST: Rhizomes and roots in the fall.

USES: The roots and rhizomes are considered valuable in treating chronic rheumatism. The plant is also used as an expectorant, astringent, emmenagogue, and bitter tonic. In Appalachia, a tea made from the root is used to treat sore throat.

CIMICIFUGA RACEMOSA (L.) NUTT.

(RANUNCULACEAE)



CNICUS BENEDICTUS L.

(ASTERACEAE)

COMMON NAMES: Blessed thistle, bitter thistle, bitterweed, blessed carduus, carduus, cursed thistle, holy thistle, our-lady's thistle, spotted carduus, spotted thistle, St. Benedict's thistle.

DESCRIPTION: This annual grows to about 2 feet in height. Leaves are thistle-like, toothed, lobed, and spiny. Plant produces many flowered yellow heads.

FLOWERING PERIOD: April to August.

HABITAT: Roadsides and waste places.

HARVEST: Herbs and tops in bloom; ripe seed.

USES: The upper portion of this plant has been used to treat worms; and it is also used in an emmenagogue, stimulant, tonic, and emetic. Because it is hemostatic, the seed is also useful as an emetic. In Europe, ground parts of the plant are mixed with wine for use as an aperitif.

CNICUS BENEDICTUS L.

(ASTERACEAE)



***COLLINSONIA CANADENSIS* L.**

(LAMIACEAE)

COMMON NAMES: Citronella horse balm, broadleaf collinsonia, Canadian collinsonia, citronella, hard hack, heal-all, horse balm, horseweed, knob grass, knobroot, ox balm, richweed, stone root.

DESCRIPTION: A perennial that grows to 3 feet in height. Leaves are opposite, large, coarsely toothed, and roughly ovate in shape. Strongly scented lemon-yellow flowers are arranged vertically along opposite branches of the main stem. Plant rises from a thick, woody rhizome.

FLOWERING PERIOD: July to September.

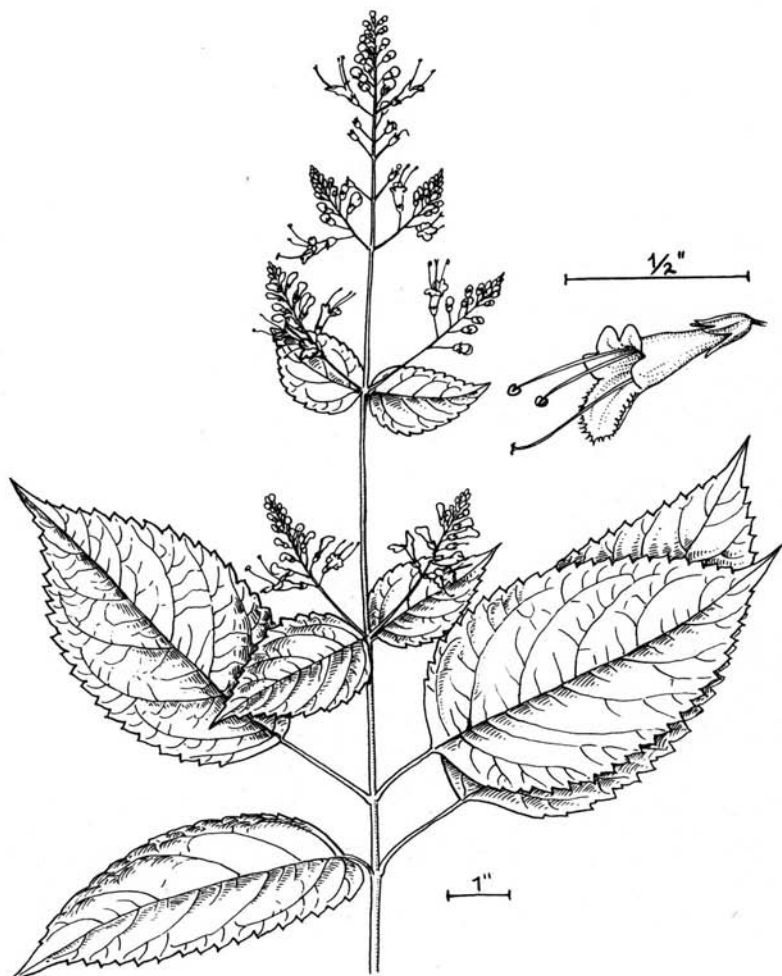
HABITAT: Rich, moist woods.

HARVEST: Herb at flowering; root in fall.

USES: Roots are used as a sedative and antispasmodic, diuretic, astringent, and tonic.

COLLINSONIA CANADENSIS L.

(LAMIACEAE)



COMPTONIA PEREGRINA (L.) COULT.

(MYRICACEAE)

COMMON NAMES: Sweet fern, Canadian sweetgale, fern bush, ferngale, ferngate, meadow fern, shrubby fern, shrubby-sweet fern, spleen fern, spleenwort bush, spleenwort fern, sweet bush, sweet ferry.

DESCRIPTION: A sweet-smelling, many-branched, perennial shrub that grows to 3 feet in height. Small branches are lightly hairy. Leaves are alternate, 3 to 6 inches long, linear, and deeply cleft. Produces fuzzy pistillate flowers in catkins, and $\frac{1}{4}$ inch shiny, brown nutlets.

FLOWERING PERIOD: April.

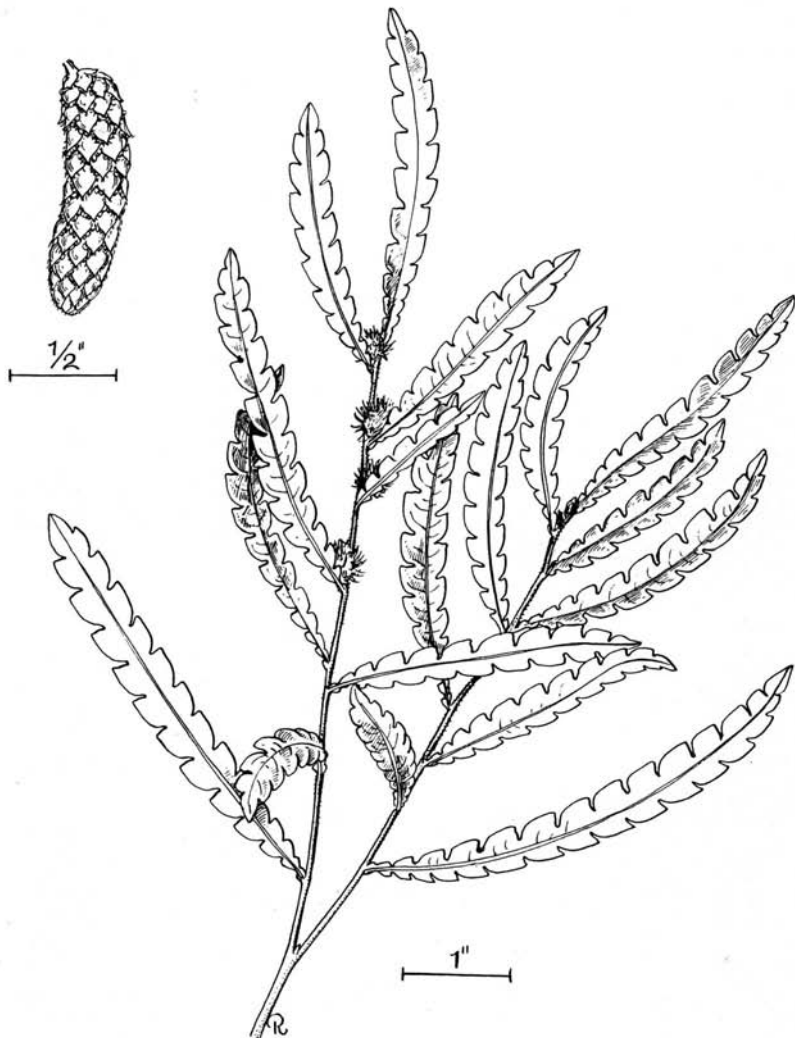
HABITAT: Open, sterile woodlands; clearings, pastures, and dry woods.

HARVEST: Leaves.

USES: The U.S. Dispensatory states that a decoction of the plant is used to treat diarrhea. Another authority says the plant has value in treating poison ivy.

COMPTONIA PEREGRINA (L.) COULT.

(MYRICACEAE)



CORALLORHIZA (CHAT.)

(ORCHIDACEAE)

COMMON NAMES: Coralroot, crawleyroot, dragon's claws.

DESCRIPTION: A perennial saprophytic orchid that has no green foliage. Produces spike-like flowering stem, with yellow, brown, or purplish flowers arranged along the stem. Rhizomes are coral-like, and clustered.

FLOWERING PERIOD: July to September.

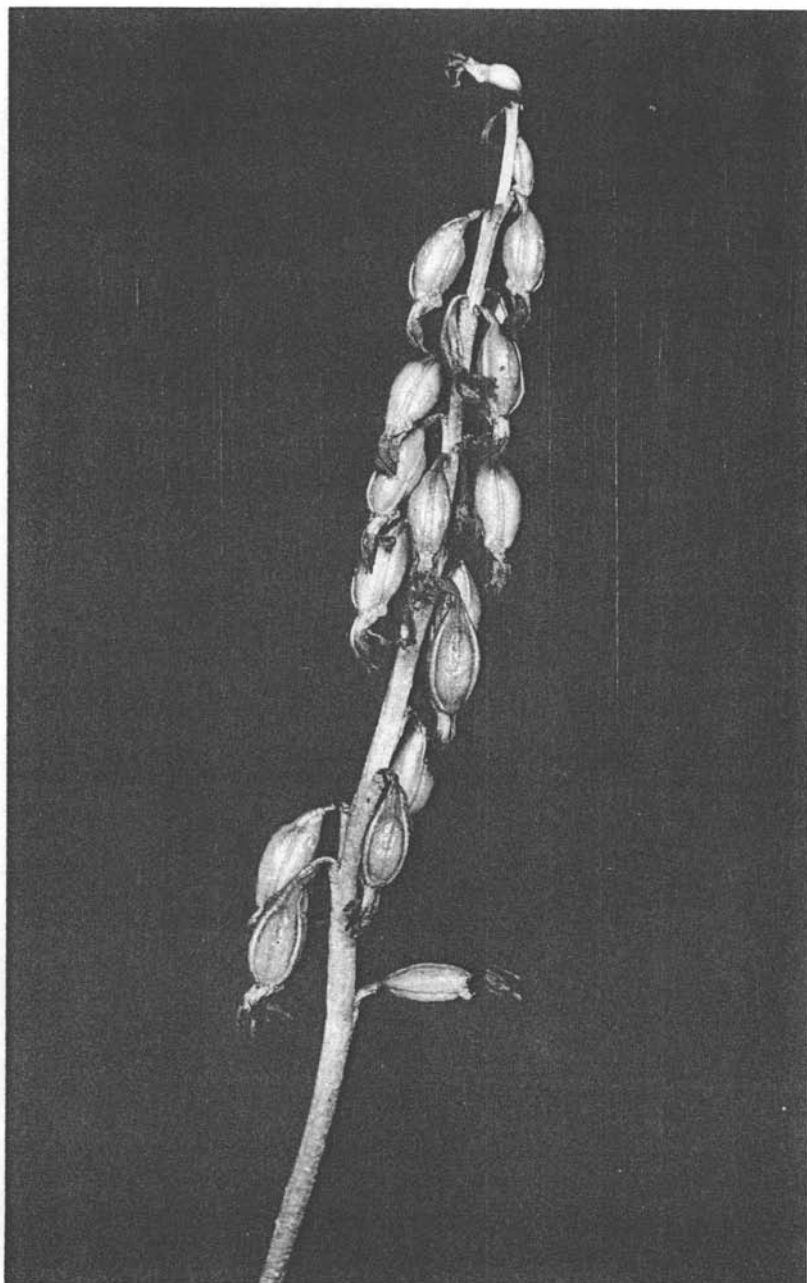
HABITAT: Uplands, damp woods, thickets, swamps, coniferous and deciduous woods.

HARVEST: Root.

USES: The plant is diaphoretic, and is used as a sedative.

CORALLORHIZA (CHAT.)

(ORCHIDACEAE)



CYPRIPEDIUM CALCEOLUS L.

var. *PARVIFLORUM* (SALISB.) FERN.

(ORCHIDACEAE)

COMMON NAMES: Yellow lady's slipper, American valerian, lady-slipper, nerve root, small golden slipper, small moccasin flower, small yellow lady's slipper, yellow Indian shoe, yellow moccasin.

DESCRIPTION: An aromatic perennial that grows to 4 to 28 inches in height. Ovate, alternate leaves grow from sheaths around stem of plant. It has large, sac-like yellow "slippers". Flower petals range from greenish yellow to purplish brown.

FLOWERING PERIOD: April to June.

HABITAT: Bogs and moist places.

HARVEST: Roots in fall.

USES: The plant is used as a sedative and in treating neuralgia. In Appalachia, a root tea is used to treat nervous ailments and headaches.

CYPRIPEDIUM CALCEOLUS L.

var. *PARVIFLORUM* (SALISB.) FERN.

(ORCHIDACEAE)



***DATURA STRAMONIUM* L.**

(SOLANACEAE)

COMMON NAMES: Jimsonweed, apple of Peru, apple Peru, devil's trumpet, Jamestown weed, jimsonweed datura, mad apple, stink apple, stinkweed, stinkwort, stramonium, thorn apple.

DESCRIPTION: An ill-scented annual weed that grows 1 to 5 feet in height. Leaves are 4 to 6 inches long, broad, unevenly and largely toothed. Flowers are long, tubular, pale blue in leaf axils or stem forks. Plant produces large prickly capsules as fruit.

FLOWERING PERIOD: July to October.

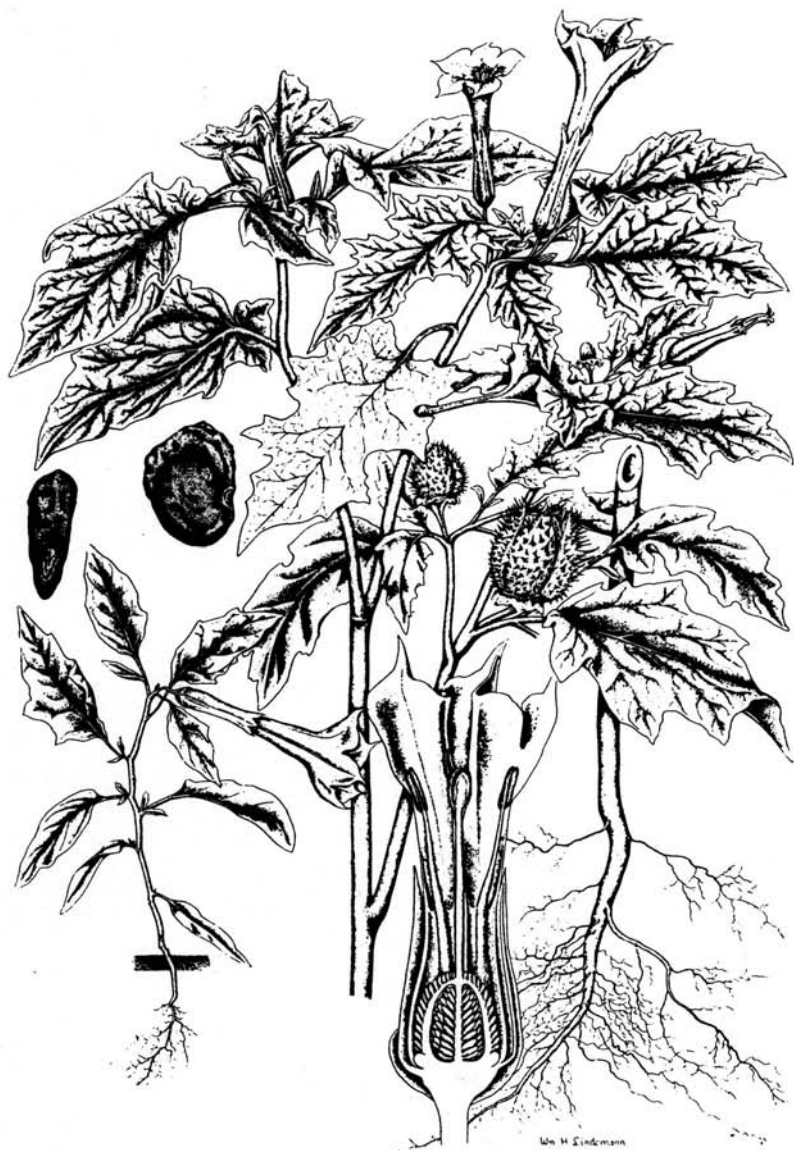
HABITAT: Forest edge, fields, roadsides, and waste ground.

HARVEST: Leaves and tops when plant is in flower; seeds when mature.

USES: This extremely poisonous plant is used as an antispasmodic, antiasthmatic, and anodyne sedative. The dried leaves are frequently mixed with saltpeter and burned in a treatment for asthma. In Appalachia, a poultice made from blossoms is used to treat wounds and to kill pain; also, dried leaves are smoked in a pipe to relieve asthma. In the Southwest, the plant is used by Zuni Indians as a hallucogenic. In Europe, where the plant has been known for centuries, it is used to treat pulmonary disease, nervous afflictions, and nymphomania. And legend has it that the Delphic Oracle inhaled smoke from burning *Datura* leaves to induce visions.

DATURA STRAMONIUM L.

(SOLANACEAE)



***DIOSCOREA VILLOSA* L.**

(DIOSCOREACEAE)

COMMON NAMES: Atlantic yam, China root, colicroot, devil's bones, dioscorea, rheumatism root, wild yam, yam.

DESCRIPTION: A twining perennial vine that grows to 15 feet in height. Bottom 3 leaves are sometimes whorled. Plant has an alternate heart-shaped leaf base; and stems of tiny, greenish flowers grow opposite some of the leaves. Produces triangular capsules as fruit. Rootstock is slender, infrequently branched.

FLOWERING PERIOD: May to July.

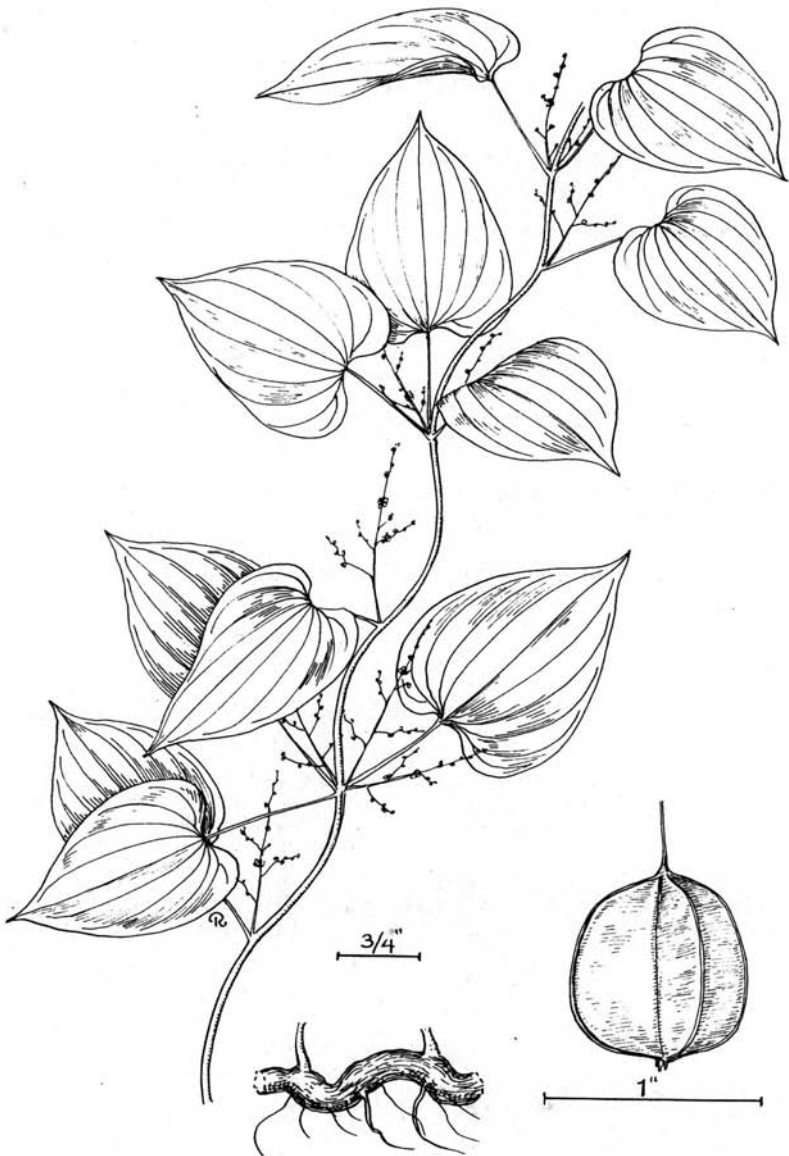
HABITAT: Deciduous woods, thickets, swamps, and wet woods.

HARVEST: Roots in fall.

USES: This herb is used as an expectorant, emetic, antispasmodic, and diaphoretic.

DIOSCOREA VILLOSA L.

(DIOSCOREACEAE)



ECHINACEA PURPUREA (L.) MOENCH

(FABACEAE)

COMMON NAMES: Purple echinacea, black Sampson, comb-flower, hedgehog, purple cone flower, red sunflower.

DESCRIPTION: A perennial that grows to 2 to 5 feet in height. Leaves are alternate, ovate to lanceolate in shape; bases contract abruptly to long, sometimes winged stems; leaf margins are toothed; and uppermost leaves have no stems. Flower heads are purple to white. Plant has thick, acid-tasting black roots.

BLOOMING PERIOD: June to August.

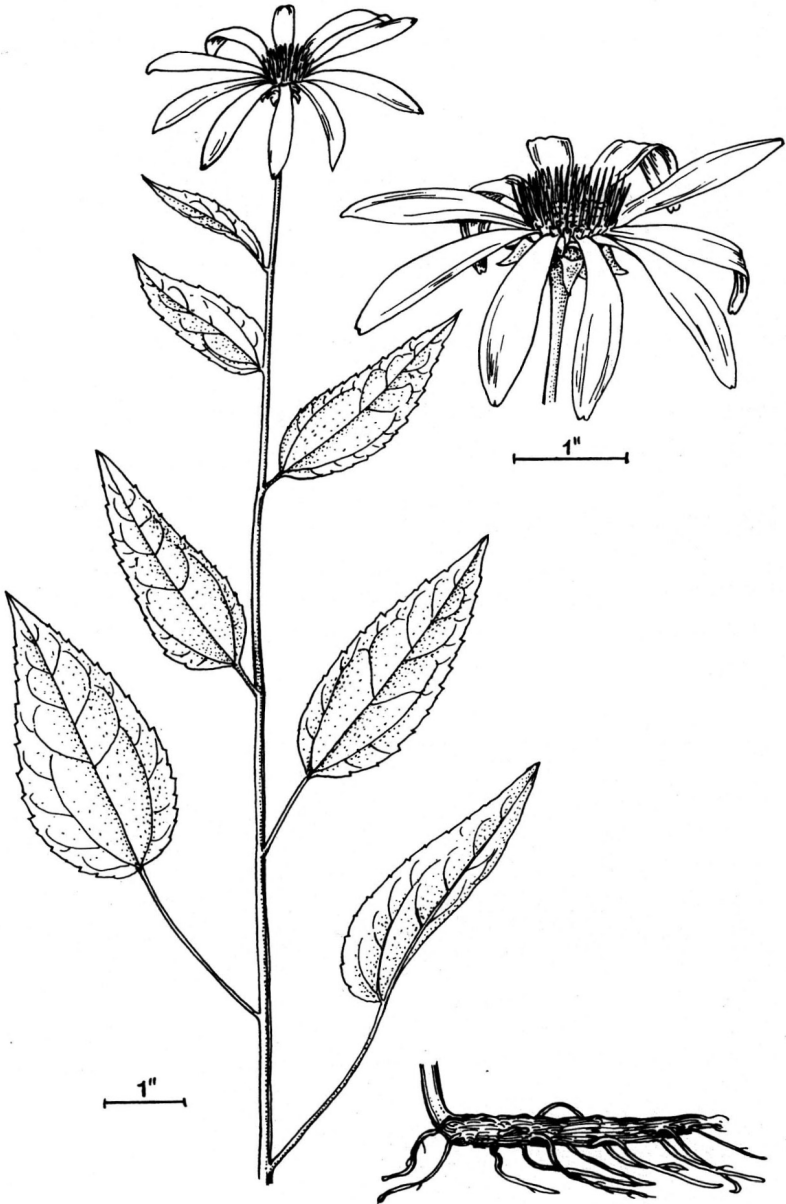
HABITAT: Dry open woods and road banks.

HARVEST: Roots in fall.

USES: U.S. Dispensatory states that this plant reportedly increases the body's resistance to infection. Tinctures of *Echinacea* species have been used in corn remedies.

ECHINACEA PURPUREA (L.) MOENCH

(FABACEAE)



ERYNGIUM AQUATICUM L.

(APIACEAE)

COMMON NAMES: Button snakeroot eryngo, button snake-root, corn snakeroot, eryngo, feverweed, rattlesnake flag, rattlesnake master, rattlesnake weed, water eryngo.

DESCRIPTION: An erect, coarse-branched, perennial that grows to ½ to 5 feet in height. It has firm elongate-to-lanceolate lower leaves; upper leaves are sessile. The plant bears fruit from September to November.

FLOWERING PERIOD: Late July to September.

HABITAT: Fresh to brackish marshes, streams, ponds and bogs, and wet pinelands.

HARVEST: Rootstock in fall.

USES: In large doses, infusions have been used as emetics. Also used as a diaphoretic and expectorant.

ERYNGIUM AQUATICUM L.

(APIACEAE)



EUONYMUS ATROPURPUREUS JACQ.

(CELASTRACEAE)

COMMON NAMES: Eastern wahoo, American spindle tree, arrow-wood, bitter ash, bleeding heart, burning bush, bursting heart, Indian arrow-wood, pegwood, purple strawberry bush, skewerwood, spindle tree, strawberry bush, wahoo.

DESCRIPTION: A shrub or small tree that grows to 25 feet in height. It has green 4-sided branches and purplish flowers. Produces seeds in prominent scarlet 4-lobed fruit.

FLOWERING PERIOD: May to July.

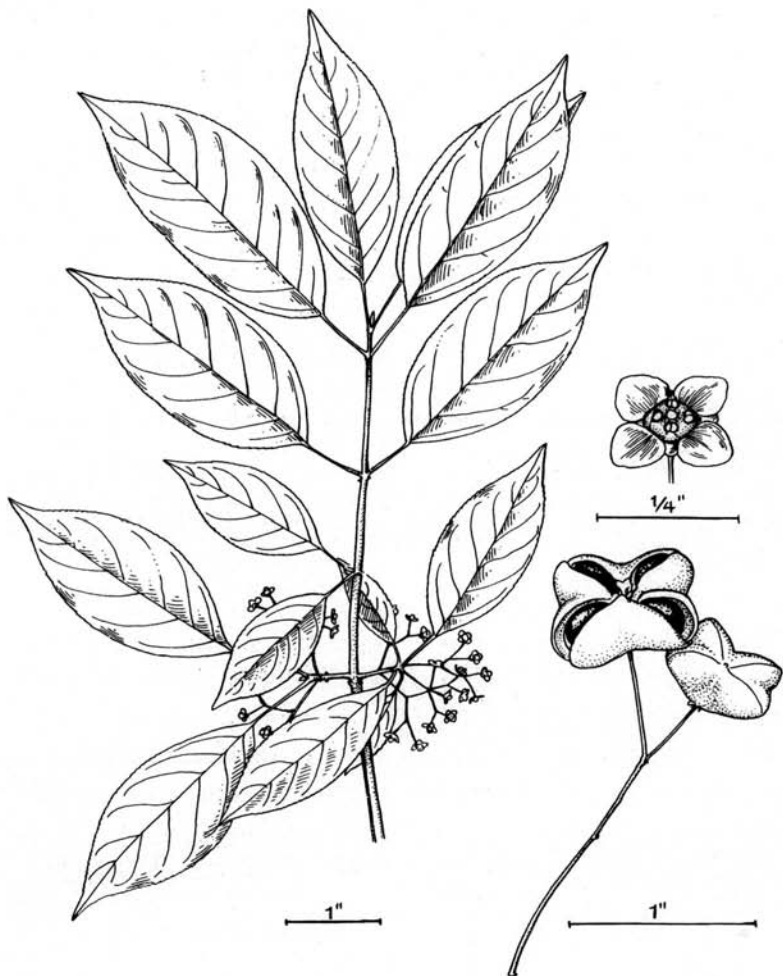
HABITAT: Rich woods and thickets, stream banks, swamps, and forests.

HARVEST: Bark of root and stem any time of the year.

USES: The bark is reported to be of value as a drastic purgative.

EUONYMUS ATROPURPUREUS JACQ.

(CELASTRACEAE)



EUPATORIUM PERFOLIATUM L.

(ASTERACEAE)

COMMON NAMES: Boneset, ague-weed, common boneset, crosswort, feverwort, Indian sage, Joepye, sweating plant, sweating weed, teagel, thorough-stem, thoroughwax, thoroughwort, throughstem, vegetable antimony, wild Isaac, wild sage.

DESCRIPTION: A perennial that grows to 1 to 5 feet in height. Heavy stems are lightly hairy. Leaves are opposite, and grow completely together at the base. Produces flat heads of white- or purple-tinged flowers.

FLOWERING PERIOD: Late July to October.

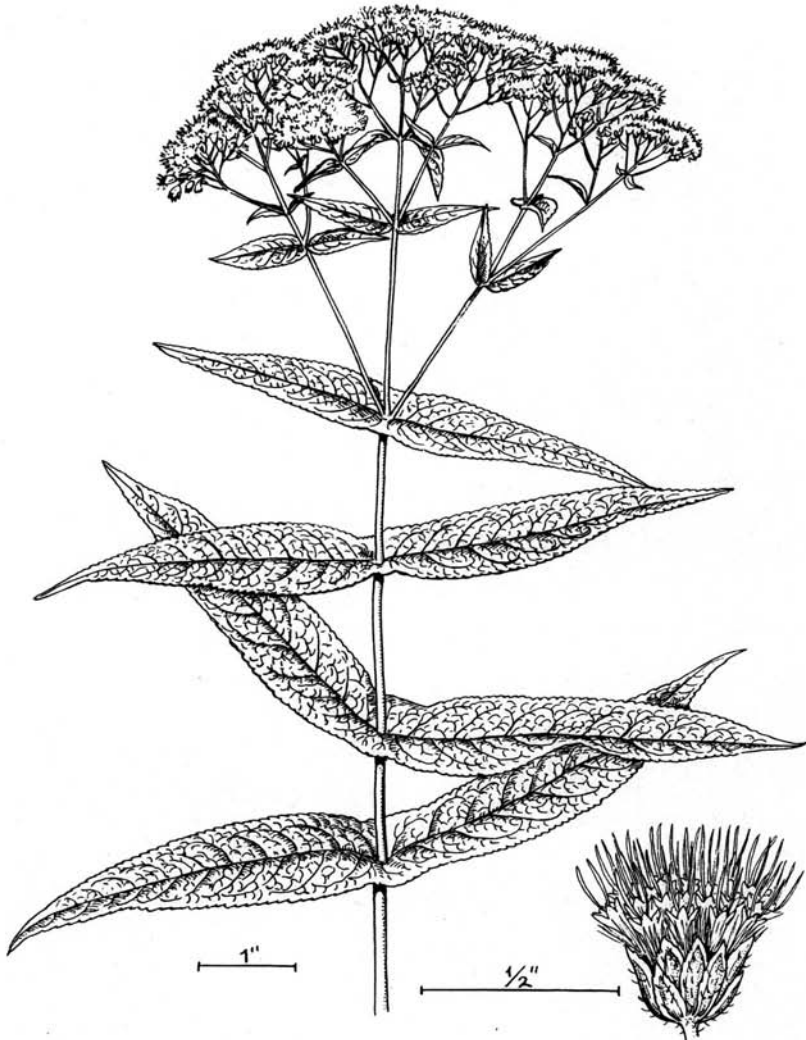
HABITAT: Swamps, marshes, low ground, alluvial woods, damp areas, and pastures.

HARVEST: Herb in spring, leaves and flowering tops in late summer (Avoid coarse stems.)

USES: This plant is used as a stimulant to promote digestion, strengthen the viscera, and restore body tone. It is also considered sudorific, alterative, antiseptic, cathartic, emetic, febrifuge, diuretic, and astringent. In Appalachia, a tea made of the leaves is used to treat coughs and consumption, and it is used as a laxative.

EUPATORIUM PERFOLIATUM L.

(ASTERACEAE)



EUPATORIUM PURPUREUM L.

(ASTERACEAE)

COMMON NAMES: Bluestem Joe-pyeweed, gravelroot, greenstemmed Joe-pyeweed, hempweed, Indian gravelroot, Joe-pyeweed, jopiroot, jopiweed, kidneyroot, king-of-the-meadow, marsh milkweed, motherwort, niggerweed, purple boneset, purple thoroughwort, queen-of-the-meadow, quillwort, stinkweed, sweet Joe-pyeweed, tall boneset, trumpetweed.

DESCRIPTION: This perennial grows to 3 to 10 feet in height. Leaves are in two's and five's, and in whorls to 1 foot long; they are coarsely toothed, and smell like vanilla. Stem is solid in cross-section and tinged with purple. Heads of flowers range from creamy white to purple-tinged.

FLOWERING PERIOD: July to September.

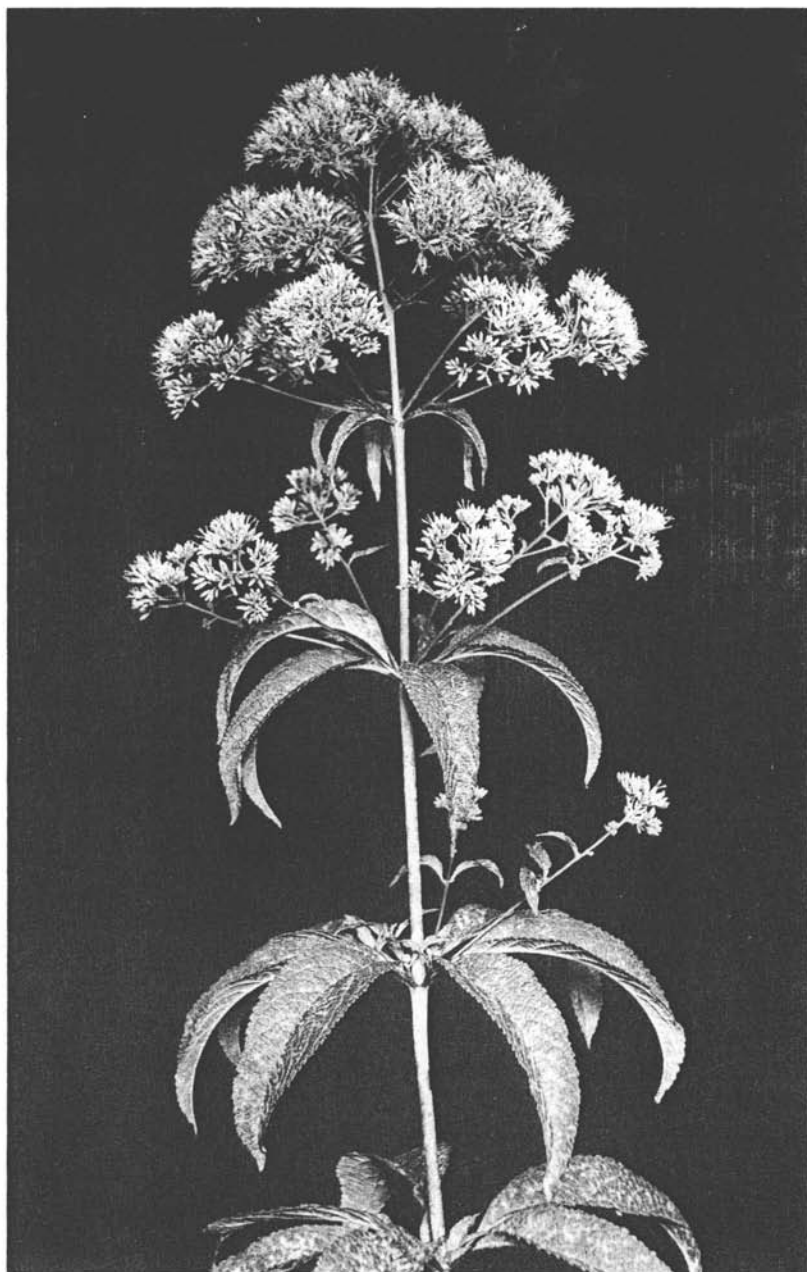
HABITAT: Rich, dry to moist, chiefly calcareous woods.

HARVEST: Rhizome in fall; leaves and flowering tops in summer and fall (Avoid coarse stems.)

USES: This plant is used for urinary disorders. The roots and herb are diuretic, stimulant, tonic, and astringent; they were used by American Indians, who also used the fruit for red or pink dye.

EUPATORIUM PURPUREUM L.

(ASTERACEAE)



***FRAGARIA VIRGINIANA* DUCHESNE.**

(ROSACEAE)

COMMON NAMES: Virginia strawberry, Indian strawberry, scarlet strawberry, strawberry, wild strawberry.

DESCRIPTION: A low-running perennial with 3 ovate toothed leaflets. The flowers have 5 white petals, and the fruit is red.

FLOWERING PERIOD: March to June or later.

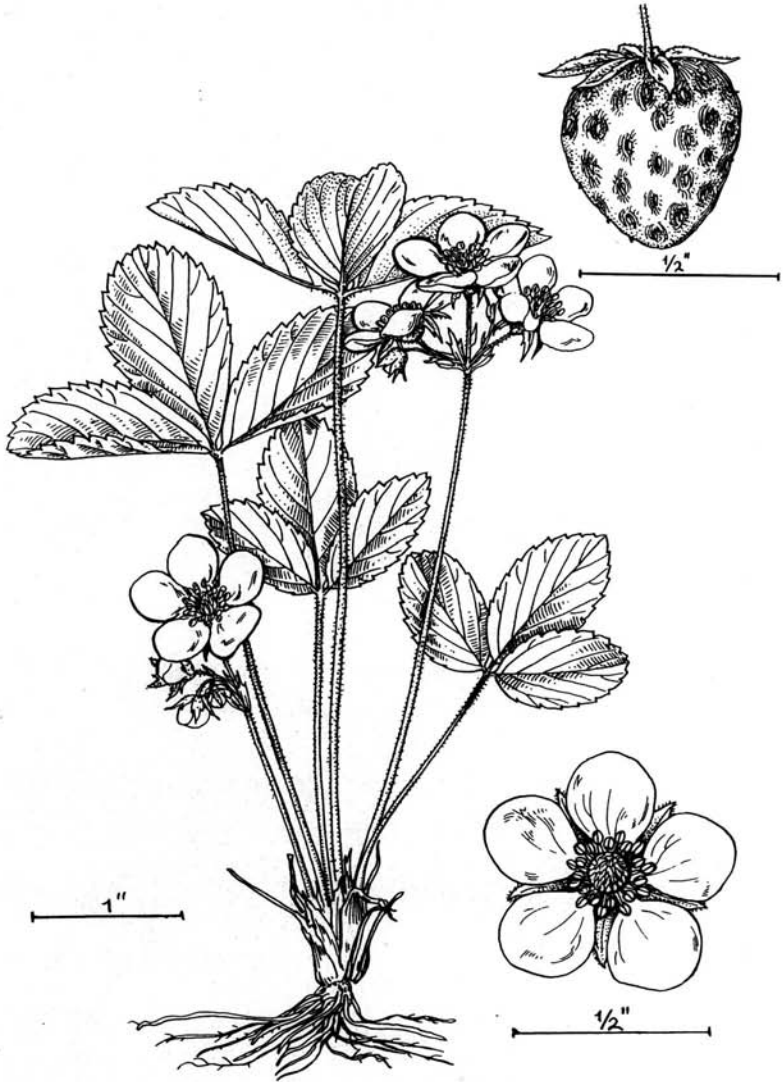
HABITAT: Fields, open slopes, borders of woods.

HARVEST: Leaves and fruit.

USES: Leaves of this plant are mildly astringent; the fruit has been used as an old-time gout remedy and refrigerant.

FRAGARIA VIRGINIANA DUCHESNE.

(ROSACEAE)



FRAXINUS AMERICANA L.

(OLEACEAE)

COMMON NAMES: White ash, American ash, American white ash, ash, biltmore ash, biltmore white ash, cane ash, smallseed white ash.

DESCRIPTION: A tree that grows to 120 feet in height. Bark is ashy gray and furrowed. Leaves are 8 to 12 inches long, with 5 to 9 (mostly 7) leaflets 3 to 5 inches long, rounded at the base and about half as wide as they are long. The winged seeds are from 1 to 3 inches long, narrow, flat, and one-seeded; and they occur in clusters.

FLOWERING PERIOD: April to May.

HABITAT: Rich upland to lowland woods, lower to middle slopes.

HARVEST: Inner bark of trunk and roots, and stem in the spring.

USES: The bark of this plant is tonic, cathartic, diuretic, a febrifuge, diaphoretic, astringent, antiarthritic, and alterative. It has been prescribed for headache followed by fever, fever sores of the lips, and constipation. In Appalachia, the chewed bark is used as a poultice on sores, and a tea made from the buds is used for snakebite.

FRAXINUS AMERICANA L.

(OLEACEAE)



GALIUM APARINE L.

(RUBIACEAE)

COMMON NAMES: Catchweed bedstraw, bedstraw, catchweed, cheese rennet herb, chicus, clabbergrass, cleavers, cleaver's herb, cleaves, cleverwort, goosegrass, goose's hare, milksweet, poor robin, savoyan, scratchweed, spring cleavers, turkey grass.

DESCRIPTION: An annual that has a weak, reclining, bristly 4-angled stem, with hairy joints. Leaves occur in whorls of 8. Flowers are white in cymes. Fruit is very bristly.

FLOWERING PERIOD: May to July.

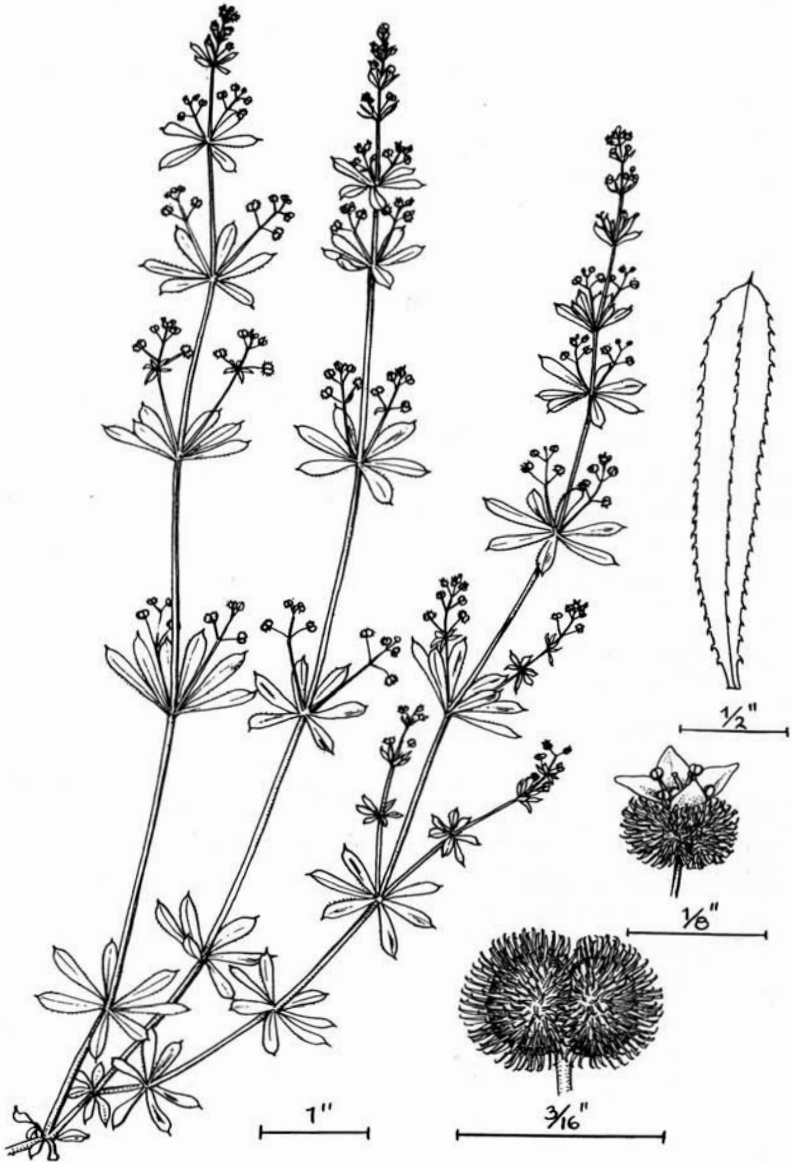
HABITAT: Rich woods, thickets, seashores, waste ground, and shady areas.

HARVEST: Herb in May and June, during flowering.

USES: The U. S. Dispensatory lists the plant as an anti-scorbutic. The herb is also a diuretic, tonic, astringent, antispasmodic; and it is used to treat inflammation of the kidneys and bladder. The seeds are used as a coffee substitute in Sweden; and the dried plant is used as a tea in some countries.

GALIUM APARINE L.

(RUBIACEAE)



***GAULTHERIA PROCUMBENS* L.**

(ERICACEAE)

COMMON NAMES: Checkerberry wintergreen, aromatic wintergreen, berried tea, boxberry, Canadian tea, checkerberry, chequerberry, chidkerberry, clink, creeping wintergreen, deerberry, dewberry, ground holly, ground ivy, grouse berry, hillberry, ivory plum, mountain berry, mountain tea, mountain teaberry, partridge berry, pigeonberry, red-berry tea, red pollom, roxberry, spiceberry, spicy wintergreen, spring wintergreen, teaberry, three-leaved wintergreen, trailing gaultheria, wax cluster, winterberry, wintergreen.

DESCRIPTION: A low, creeping, aromatic, evergreen shrub, with 2- to 6-inch branches. Leaves are shiny and waxy. Single white, nodding flowers are in racemes in axils. Produces bright red berries in fall and winter.

FLOWERING PERIOD: June to August.

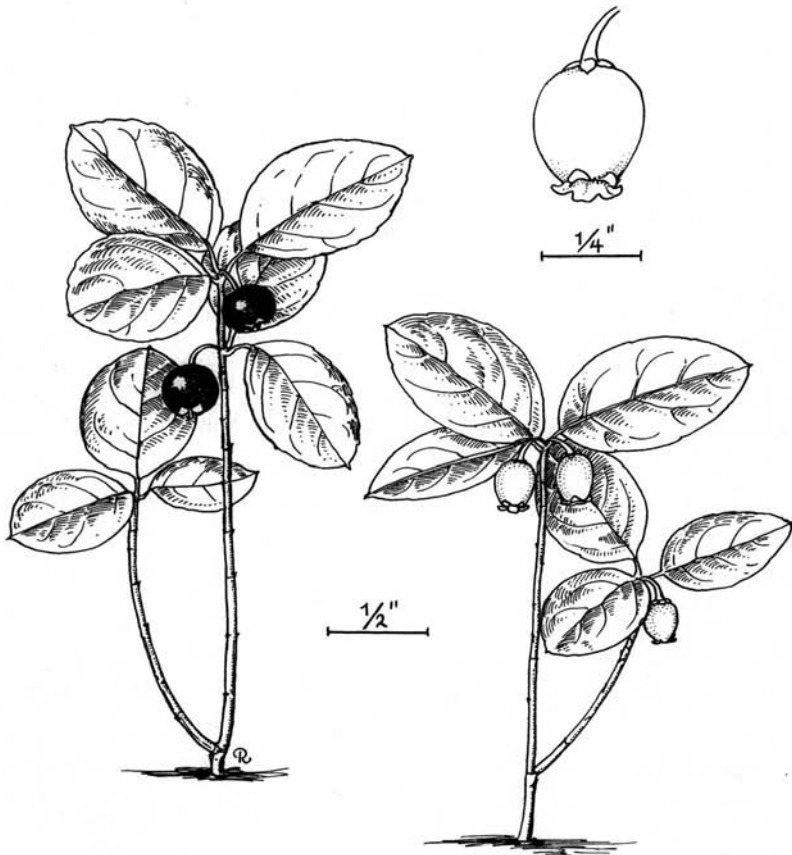
HABITAT: Sterile woods and clearings, dry wooded areas; commonly found growing with rhododendron, mountain laurel, and other members of the heath family.

HARVEST: Herb and leaves in fall.

USES: The plant is primarily a source of true wintergreen oil, which is used as a flavor, counterirritant, astringent, and carminative. Wintergreen oil is extremely toxic if consumed internally.

GAULTHERIA PROCUMBENS L.

(ERICACEAE)



***GELSEMIUM SEMPERVIRENS* (L.) AIT.**

(LOGANIACEAE)

COMMON NAMES: Yellow jessamine, Carolina jessamine, evening trumpet flower, false jasmine, false jessamine, gelsemium, jasmine, wild jasmine, wild jessamine, woodbine, yellow jasmine root.

DESCRIPTION: A perennial vine with horizontal, branched, cylindrical rootstock. Leaves are short-stalked, lanceolate, aromatic, and evergreen, with smooth margins. Flowers are showy, fragrant, and tubular.

FLOWERING PERIOD: March to May.

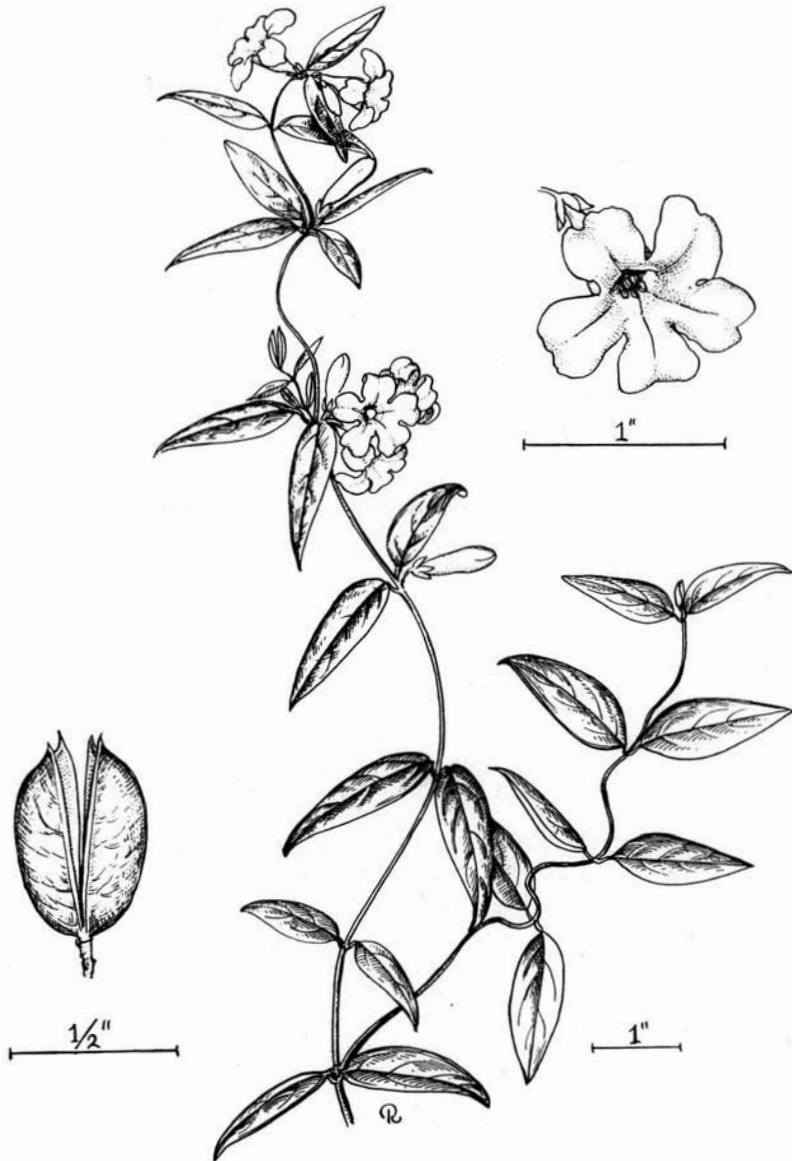
HABITAT: Thickets, roadsides, fence rows, dry and damp woods, and sandy areas.

HARVEST: Roots and rhizomes just after flowering in fall.

USES: This is a very poisonous plant. Preparations made from the roots and rhizomes have been used as central nervous-system depressants, febrifuge, anodyne, and antispasmodic.

GELSEMIUM SEMPERVIRENS (L.) AIT.

(LOGANIACEAE)



GENTIANA VILLOSA L.

(GENTIANACEAE)

COMMON NAMES: Sampson's snakeroot, marsh gentian, straw-colored gentian, striped gentian.

DESCRIPTION: A perennial with several smooth ascending stems. Leaves are oblanceolate. A cluster of crowded, tubular, greenish-white to purplish-green flowers is found at top of the plant.

FLOWERING PERIOD: August to October.

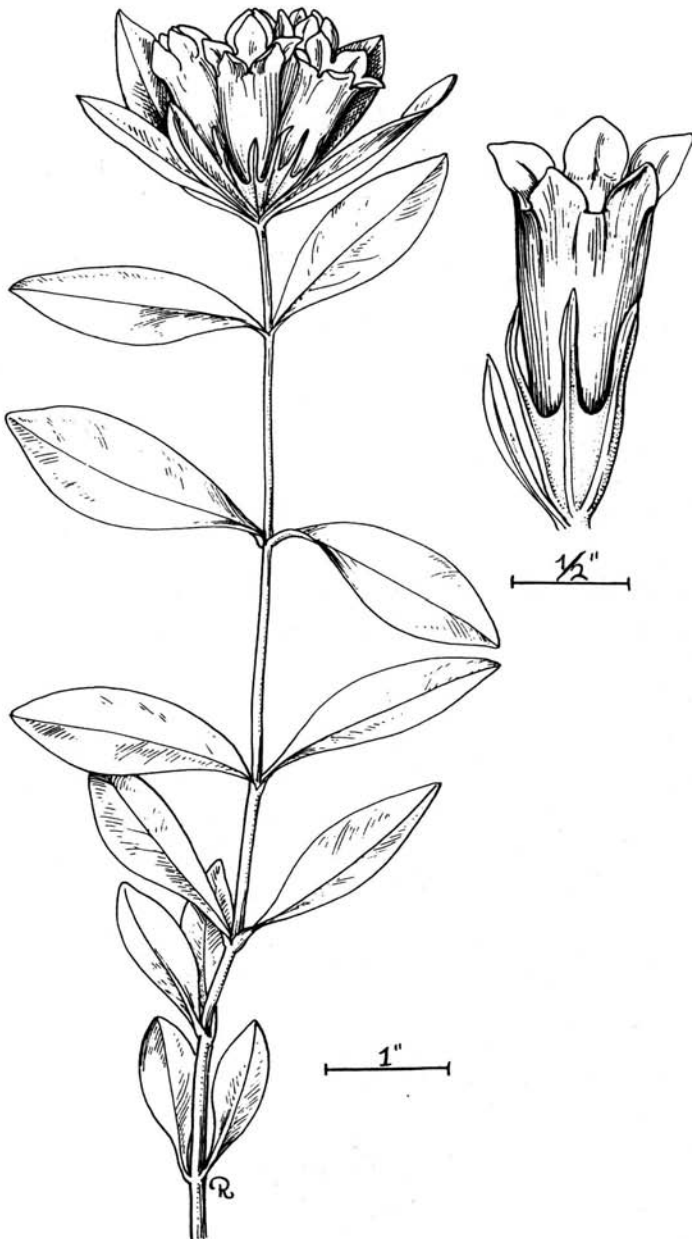
HABITAT: Meadows, brooksides, slopes, calcareous rocks, woods, and pinelands.

HARVEST: Root in fall.

USES: The rhizome has been used to treat indigestion, gout, and rheumatism; and it has also been used as an antiemetic. Because of its bitter flavor, probably the most useful application of this plant is as a tonic and astringent. In Appalachia, a root tea is drunk as a tonic, and a piece of the root is sometimes worn or carried to increase one's physical powers.

GENTIANA VILLOSA L.

(GENTIANACEAE)



GERANIUM MACULATUM L.

(GERANIACEAE)

COMMON NAMES: Spotted geranium, alum bloom, alumroot, American kind, American tormentil, astringent root, chocolate flower, common crane's bill, cranesbill, cranesbill geranium, crowfoot, dove's foot, old maid's-nightcap, shameface, spotted cranesbill, stork bill, tormentil, wild cranesbill, wild geranium.

DESCRIPTION: A perennial 1 to 2 feet in height, with a single stem and thick rhizomes. Leaves are 3 to 6 inches across, and deeply cleft. Produces 3 to 5 loose, rosy-purple to white flowers, 1 inch across.

FLOWERING PERIOD: April to June.

HABITAT: Rich woods and meadows.

HARVEST: Leaves and rhizomes in spring, just before plant flowers, or in late summer.

USES: The leaves have been used as a vulnerary. However, the roots and rhizomes, which contain much tannin, are very astringent, antiseptic, styptic, and diuretic; and they have been used to treat diarrhea. In Appalachia, a tea made from the whole plant is used to treat dysentery and sore throat.

GERANIUM MACULATUM L.

(GERANIACEAE)



HAMAMELIS VIRGINIANA L.

(HAMAMELIDACEAE)

COMMON NAMES: Witch hazel, common witch hazel, hamamelis, long boughs, pistachio, snapping hazel, snapping hazel-nut, southern witch hazel, spotted alder, striped alder, tobacco wood, white hazel, winterbloom, wood tobacco.

DESCRIPTION: A crooked tree or shrub usually 8 to 15 feet in height, with forking branches and smooth, brown bark. The leaves are roundish to round-oval, 3 to 5 inches long, thick, and borne on a short stalk. Yellow, thread-like flowers appear in late fall or early winter after the leaves have fallen. Fruits occur in clusters along the stem and mature the following season, when they burst open and eject shiny black seeds.

FLOWERING PERIOD: September to November.

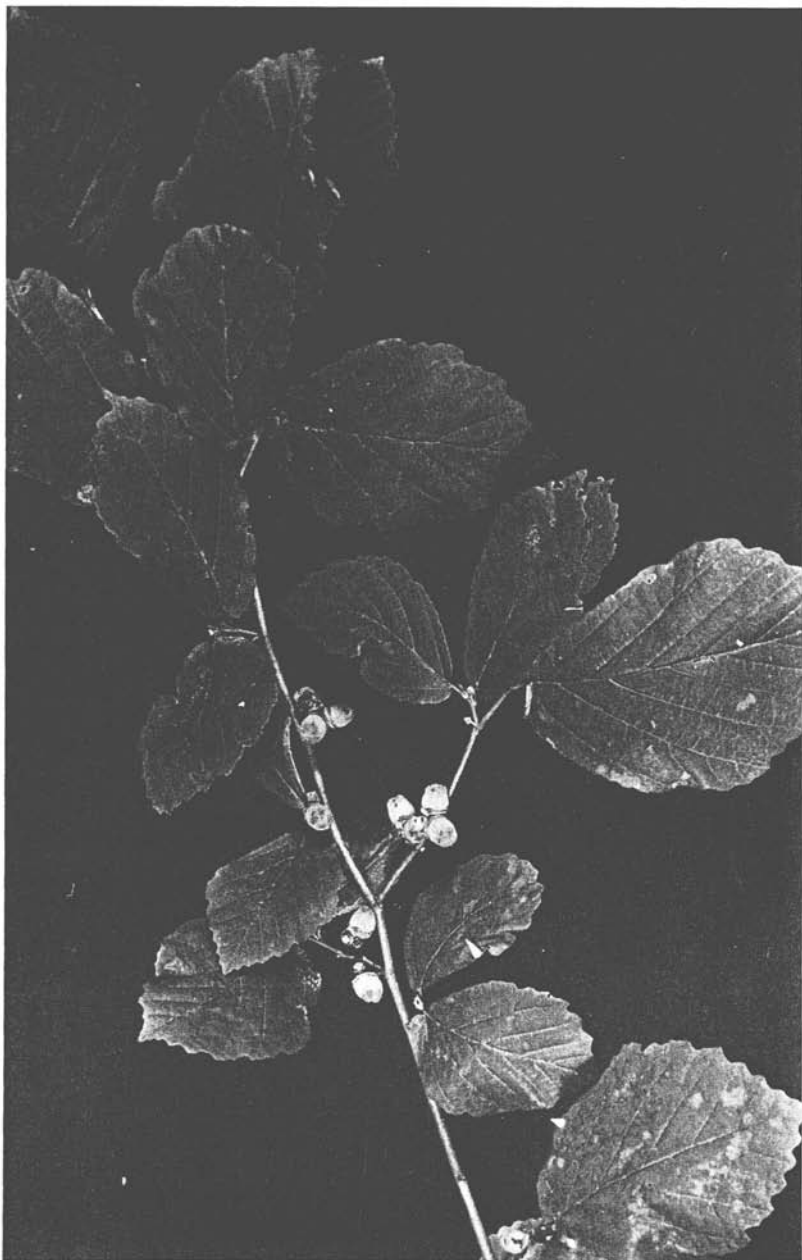
HABITAT: Dry to moist woods.

HARVEST: Leaves, twigs, and bark in fall.

USES: The twigs, leaves, and bark are used to prepare witch hazel extract, which has been used in shaving lotions and to treat bruises and sprains. The fresh leaves of the plant contain high concentrations of tannin, which makes them very astringent.

HAMAMELIS VIRGINIANA L.

(HAMAMELIDACEAE)



HEDEOMA PULEGIOIDES (L.) PERS.

(LAMIACEAE)

COMMON NAMES: American pennyroyal, American false-pennyroyal, mock pennyroyal, pennyroyal, pennyroyal of America, pudding grass, squaw mint, stinking balm, thickweed, tickweed.

DESCRIPTION: A branched annual that grows to 18 inches in height. Leaves are erect, hairy, small, and ovate, with the broad end at the base. Produces clusters of aromatic, tiny, bluish flowers about 1/4 inch long.

FLOWERING PERIOD: July to September.

HABITAT: Dry soils, woodlands, pastures, and meadows.

HARVEST: Leaves, flowering tops and small stems in full bloom; plants just before flowering.

USES: This herb is used as an antispasmodic, rubifacient, and stimulant. A tea is used in Appalachia for treating pneumonia.

HEDEOMA PULEGIOIDES (L.) PERS.

(LAMIACEAE)



***HEPATICA ACUTILOBA* DC.**

(RANUNCULACEAE)

COMMON NAMES: Sharplobe hepatica, heart liverleaf, hepatica, liverleaf, liverwort, noble liverwort, sharplobed liverleaf.

DESCRIPTION: A perennial that grows to 9 inches in height. Liver-shaped leaves have 3 to 5 lobes, and each leaf stalk has one leaf. Produces a single white to purplish flower in spring.

FLOWERING PERIOD: March to April.

HABITAT: Rich calcareous woods.

HARVEST: Leaves in the spring.

USES: This herb has been used as a tonic, mild astringent, and diuretic.

HEPATICA ACUTILOBA DC.

(RANUNCULACEAE)



HYDRANGEA ARBORESCENS L.

(SAXIFRAGACEAE)

COMMON NAMES: Smooth hydrangea, sevenbark, wild hydrangea.

DESCRIPTION: A perennial shrub that grows to 10 feet in height, with stems rising from base of the plant. It has large, opposite, ovate leaves, and produces white or greenish flowers at top of branches. Many varieties are recognized.

FLOWERING PERIOD: May to July.

HABITAT: Rich woods, calcareous rocky slopes, banks of streams.

HARVEST: Root in the fall.

USES: The roots and rhizomes have been used as diuretics, cathartics, and tonics. Some authorities say that the drug has value in preventing kidney stones.

HYDRANGEA ARBORESCENS L.

(SAXIFRAGACEAE)



HYDRASTIS CANADENSIS L.

(RANUNCULACEAE)

COMMON NAMES: Goldenseal, eyebalm, eyebright, eyeroot, goldenroot, ground raspberry, hydrastis, Indiana dye, Indian paint, Indian plant, Indian turmeric, jaundice root, Ohio curcuma, orange root, tumeric, wild turmeric, yellow eye-wright, yellow paintroot, yellow puccoon, yellowroot, yellowwort.

DESCRIPTION: A perennial that grows to 1 foot in height. It has 1 stem with two 5- to 7-lobed leaves near the apex, which is topped with 1 greenish-white flower. Several single leaf stocks topped with flowers that have no petals rise from the roots. Fruit looks like a raspberry but is inedible.

FLOWERING PERIOD: April to May.

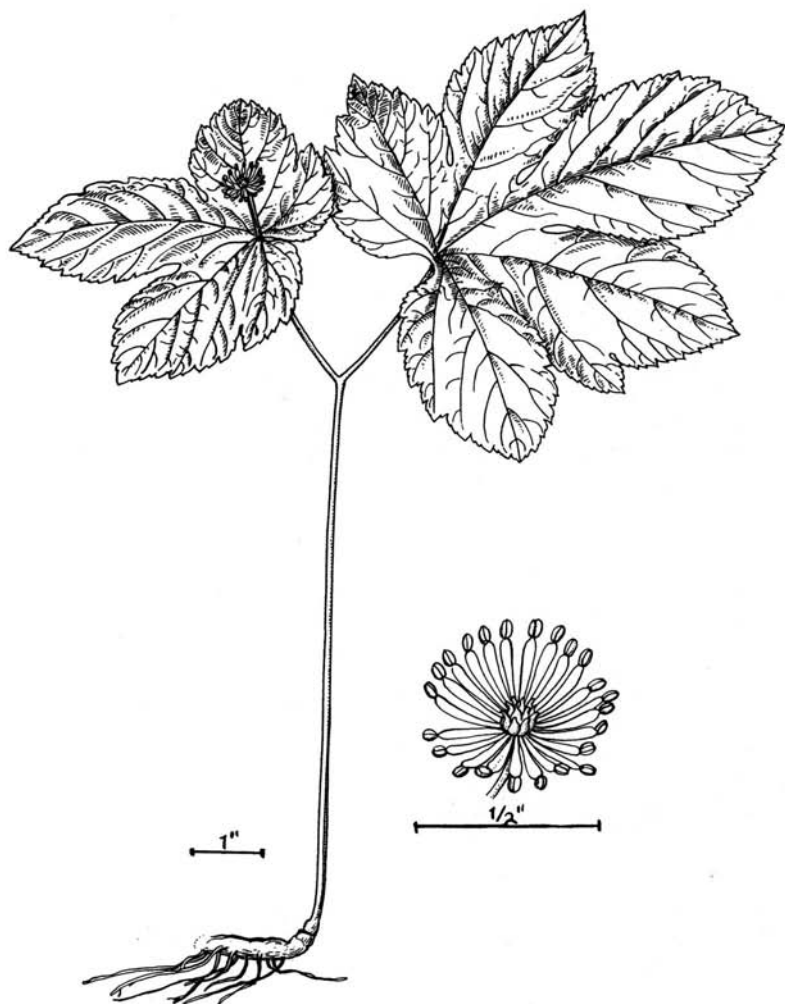
HABITAT: Rich woods.

HARVEST: Rootstock in fall; leaves or tops in late summer or fall, after seeds ripen.

USES: The pulverized rhizomes and roots have been used a long time to treat mouth ulcers, and as a hemostatic. This preparation has also been used as a diuretic in catarrhal conditions, and as an astringent for treating certain eye conditions. In Appalachia, a root tea is used as a tonic.

HYDRASTIS CANADENSIS L.

(RANUNCULACEAE)



***JEFFERSONIA DIPHYLLO* (L.) PERS.**

(BERBERIDACEAE)

COMMON NAMES: American twinleaf, ground squirrel pea, helmet pod, rheumatism root, twinleaf, yellow root.

DESCRIPTION: An erect shrub that grows to 2 feet. Stalk is topped by 2 identical, opposite, half-ovate leaf segments. Flowers are white, 1 inch across. Fruit is a large capsule.

FLOWERING PERIOD: March to April.

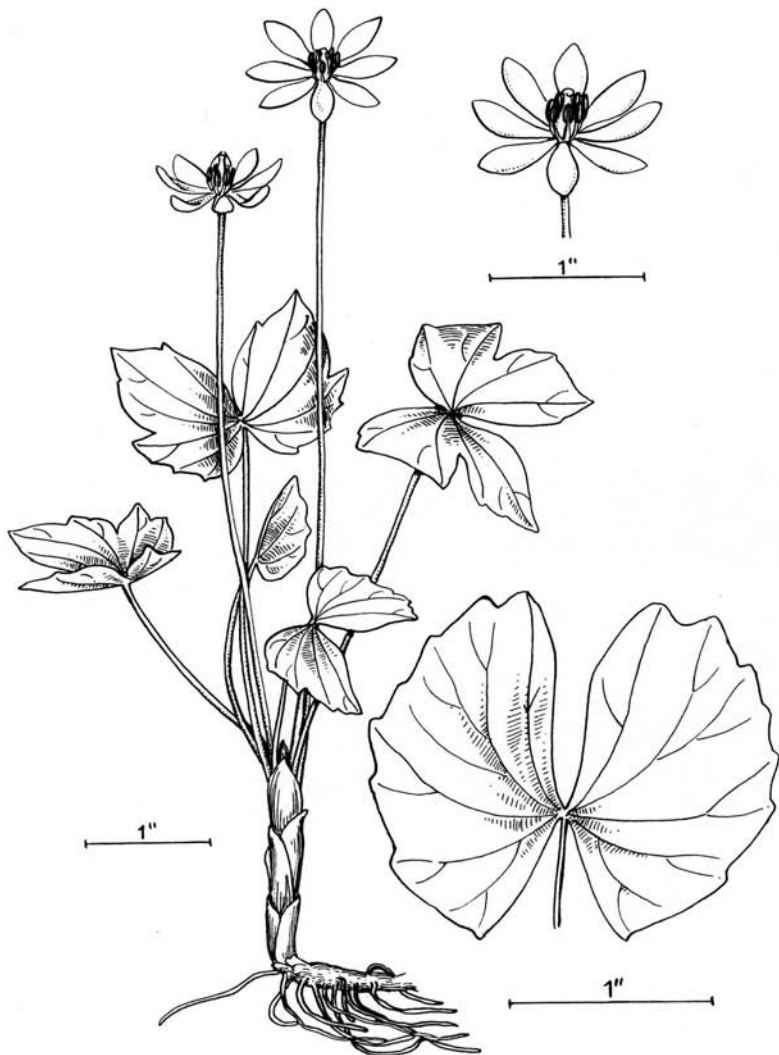
HABITAT: Rich, damp, shaded woods.

HARVEST: Root in fall.

USES: The rhizomes and roots have been used to treat chronic rheumatism, dropsy, spasms, and as a gargle. In small doses, the drug is an expectorant; in large doses it is an emetic. It also has been considered a diuretic, alterative, and antispasmodic.

JEFFERSONIA DIPHYLLA (L.) PERS.

(BERBERIDACEAE)



JUGLANS CINEREA L.

(JUGLANDACEAE)

COMMON NAMES: Butternut, filnut, lemonnut, oilnut, white walnut.

DESCRIPTION: A tree usually 40 to 60 feet in height, with light gray bark divided into broad, flat ridges by moderately deep furrows. Leaves are compound with 11 to 17 leaflets arranged opposite each other, from 2 to 3 inches long, and with very short stems. Elliptical pointed fruit is 1½ to 2½ inches long and occurs in clusters of 2 to 5 or singly. The strong smelling, sticky husk is covered with hairs and contains an edible nut that has a hard, thick, deeply furrowed shell.

FLOWERING PERIOD: April to June.

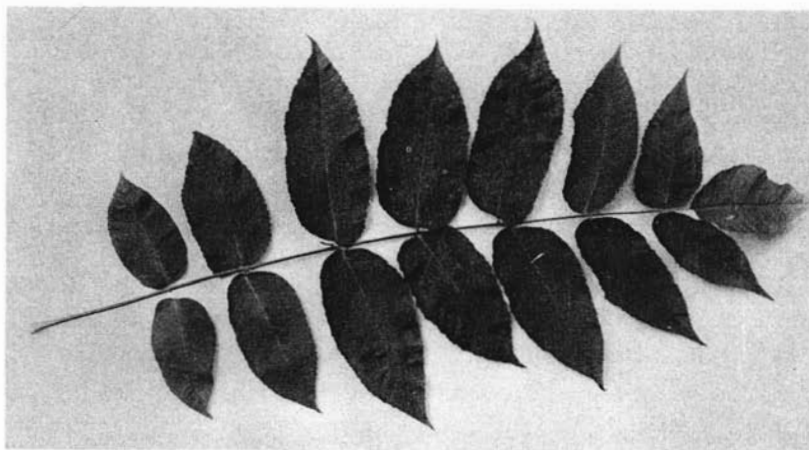
HABITAT: Rich woods and along rivers on well drained soils.

HARVEST: Inner bark of root any time of year; leaves and nuts in the fall.

USES: The bark has been used as a rubifacient and cathartic. Oil extracted from the fruit is reportedly valuable in treating tape worms and fungus infections. In Appalachia, a tea made from the bark is used as a laxative.

JUGLANS CINEREA L.

(JUGLANDACEAE)



JUGLANS NIGRA L.

(JUGLANDACEAE)

COMMON NAMES: Black walnut, American walnut, eastern black walnut, walnut.

DESCRIPTION: A valuable tree that often grows to more than 120 feet in height, with almost black bark divided into rough ridges by deep, narrow furrows. Leaflets are alternate, commonly 12 to 23 per stem, finely toothed, and 3 to 3½ inches long. The fruit occurs singly or in clusters of 2 or 3, and has a thick, somewhat fleshy, aromatic husk; the fruit is roundish, about 1½ to 2 inches in diameter, edible, and has a hard, rough, deeply furrowed shell.

FLOWERING PERIOD: April to June.

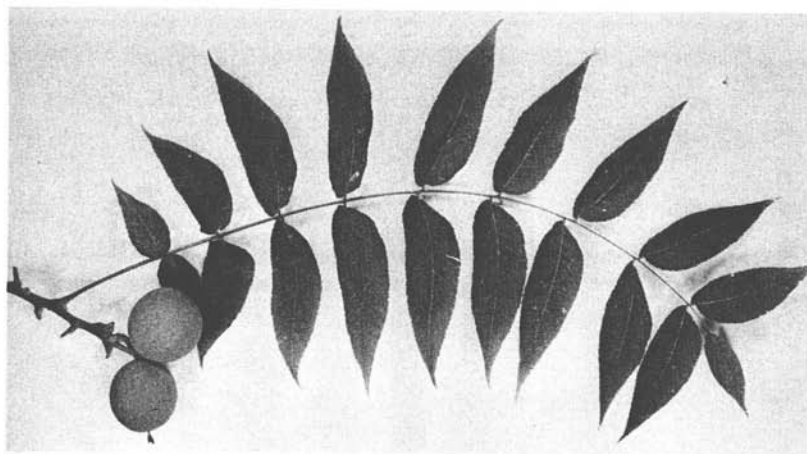
HABITAT: Rich woods and limestone soils.

HARVEST: Inner bark of root; leaves and nuts in fall.

USES: The root bark is cathartic. A leaf infusion is used as an astringent and against bedbugs.

JUGLANS NIGRA L.

(JUGLANDACEAE)



JUNIPERUS COMMUNIS L.

(PINACEAE)

COMMON NAMES: Common juniper, dwarf juniper, gorst, ground juniper, hackmatack, horse savin, juniper, juniper bush, prostrate juniper.

DESCRIPTION: A small evergreen shrub or tree 12 to 30 feet in height, low and spreading or upright. The bark of trunk is shreddy and reddish brown. Needles are straight, sharp-pointed, ridged, and nearly at right angles to branchlets. Dark purple fruit is round, fleshy, berry-like, and about $\frac{1}{4}$ inch in diameter.

FLOWERING PERIOD: March.

HABITAT: Dry soil.

HARVEST: Fruit in fall and winter.

USES: The fruit is used commercially in flavoring gin, and has value as a diuretic and urinary antiseptic. In Europe, it is used to treat arteriosclerosis.

JUNIPERUS COMMUNIS L.

(PINACEAE)



JUNIPERUS VIRGINIANA L.

(PINACEAE)

COMMON NAMES: Eastern redcedar, Carolina cedar, cedar, cedar apple, evergreen, juniper, pencil cedar, red cedar, red juniper, red savin, savin, Virginia cedar.

DESCRIPTION: A small erect evergreen tree 20 to 50 feet in height. Trunk is lobed, buttressed, and has thin, red-tinged, fibrous, peeling bark. Foliage has needle and scale form. Produces smooth, round, berry-like bluish fruit with 1 or 2 seeds.

FLOWERING PERIOD: February to March.

HABITAT: Pasture land; dry, rarely wet, open woods; or calcareous rocky slopes and barrens.

HARVEST: Leaves and mature fruits.

USES: The leaves have been used as a stimulant, emmenagogue, and taeniafuge. In Appalachia, a mixture of nuts, leaves, and twigs is boiled and inhaled as a treatment for bronchitis. In New Mexico, some Spanish-speaking people use a boiled mixture of bark and water to treat skin rash.

JUNIPERUS VIRGINIANA L.

(PINACEAE)



LACTUCA SCARIOLA L.

(ASTERACEAE)

COMMON NAMES: Prickly lettuce, compass plant, wild lettuce, wild opium.

DESCRIPTION: An annual or perennial that grows to 2 feet in height. Flowers are yellow, but purple or bluish when dried. Stem has a few prickles. Leaves are cleft, with lobes arranged on either side of a common axis.

FLOWERING PERIOD: June to October.

HABITAT: Cultivated fields, waste or disturbed areas, dry soil, and gardens.

HARVEST: Leaves in summer or fall; milky juice of the stem in summer.

USES: The milky juice of this plant is extremely irritating to the eyes. The whole herb has been used as a diuretic, antispasmodic, and emollient.

LACTUCA SCARIOLA L.

(ASTERACEAE)



LEONURUS CARDIACA L.

(LAMIACEAE)

COMMON NAMES: Motherwort, common motherwort, lion's ear, lion's tail, lion's tart, throwwort.

DESCRIPTION: A perennial that grows to 3 to 6 feet in height. Stems are stout, with 2- to 5-inch long petioled leaves. The palmately lobed leaves have sharp teeth. Flowers are white to pink, and very hairy.

FLOWERING PERIOD: May to August.

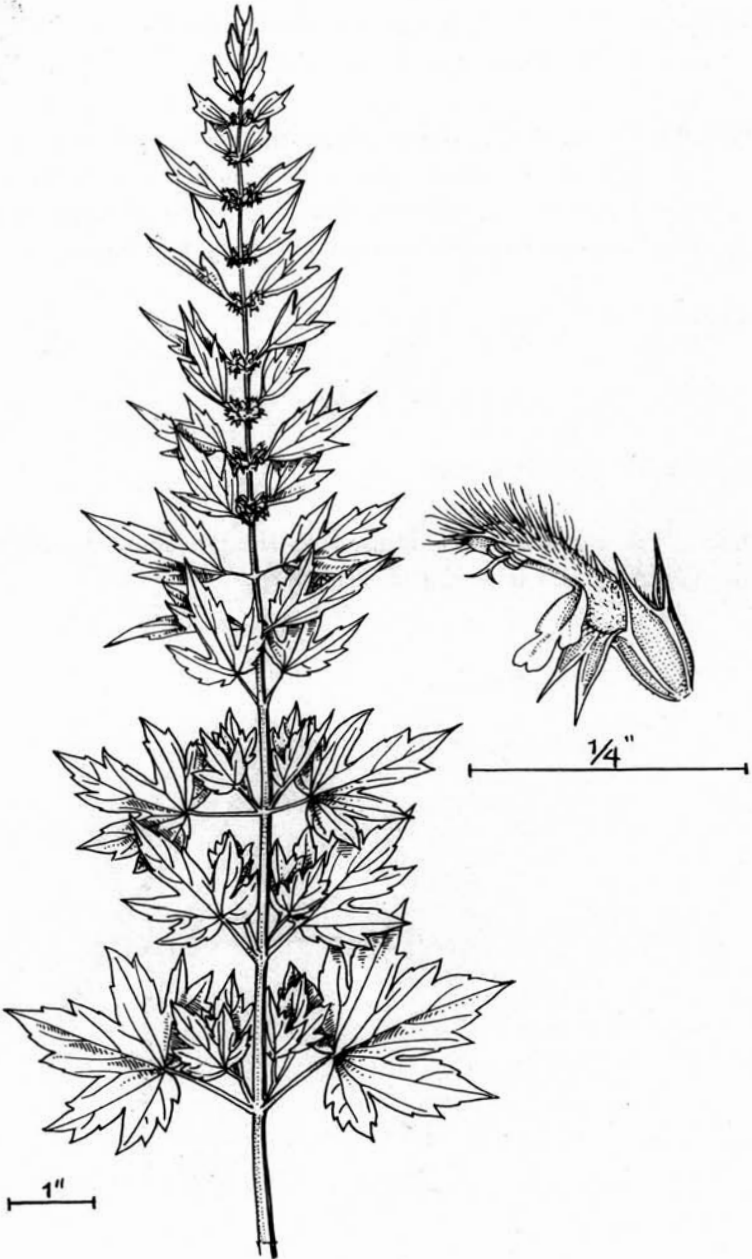
HABITAT: Waste places, roadsides, gardens, and pastures.

HARVEST: Herb at flowering time.

USES: The herb is used as a stimulant and emmenagogue. In Europe it has been used to treat heart palpitations and asthma.

LEONURUS CARDIACA L.

(LAMIACEAE)



LINDERA BENZOIN (L.) BLUME

(LAURACEAE)

COMMON NAMES: Common spicebush, allspice bush, Benjamin bush, feverbush, spiceberry, spicebush, wild allspice.

DESCRIPTION: A deciduous shrub that grows to more than 15 feet in height. Leaves are 3 to 5 inches long, alternate, elliptical, aromatic, with smooth margins. Produces greenish-yellow flowers in dense clusters and long, bright red berries.

FLOWERING PERIOD: March to May.

HABITAT: Damp woods and brooksides.

HARVEST: Bark and twigs.

USES: The aromatic bark is used to treat dysentery, coughs, and colds; and it is used as a vermifuge.

LINDERA BENZOIN (L.) BLUME

(LAURACEAE)



LIQUIDAMBAR STYRACIFLUA L.

(HAMAMELIDACEAE)

COMMON NAMES: Sweetgum, American storax, American sweetgum, bilsted, liquid storax, redgum, sapgum, star leaf gum, storax tree, styrax.

DESCRIPTION: A tree that grows to 140 feet in height. Corky ridges are often found on smaller branches. Leaves are star-shaped, with 5 lobes. Fruit is in woody globular capsules. Produces winged seeds.

FLOWERING PERIOD: March to May.

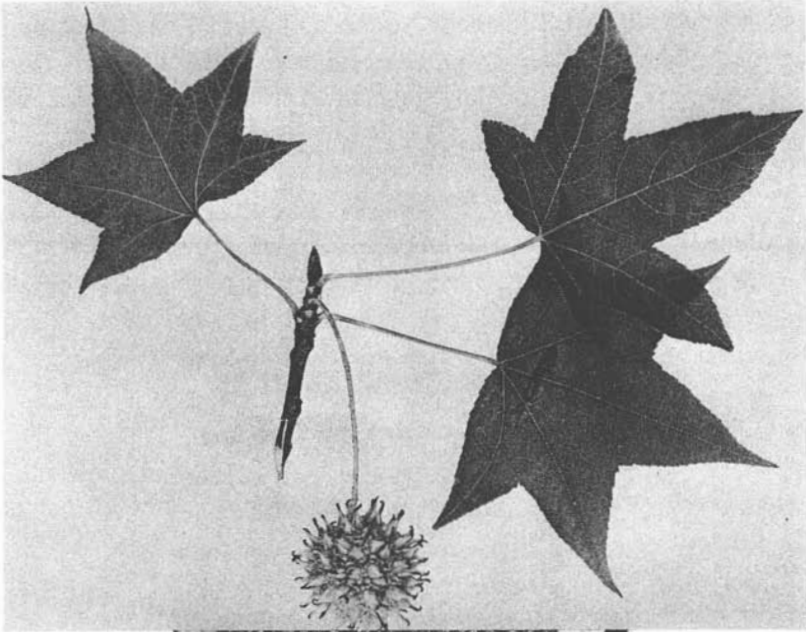
HABITAT: Swampy woods, alluvial areas, and moist soils.

HARVEST: Bark; gum from wounds in the trunk.

USES: This tree is an important source of the drug storax, a stimulating expectorant, weak antiseptic, desharpenner for tobacco and for treating scabies. Water- or brandy-soaked twigs are chewed to clean the teeth in some areas of Appalachia.

LIQUIDAMBAR STYRACIFLUA L.

(HAMAMELIDACEAE)



***LOBELIA INFLATA* L.**

(CAMPANULACEAE)

COMMON NAMES: Indian tobacco, asthma weed, bladder pod, bladder-podded lobelia, emetic herb, emetic weed, eyebright, field lobelia, gagroot, Indian Tobacco lobelia, lobelia, obelia, pukeweed, tobacco lobelia, vomitwort, wild tobacco.

DESCRIPTION: A branching annual that grows to 3 feet in height. Leaves are 1 to 3 inches long. Produces small, violet-pinkish-white flowers situated in axils of alternate leaves, the bottom of which greatly inflate in fruiting stage.

FLOWERING PERIOD: July to September.

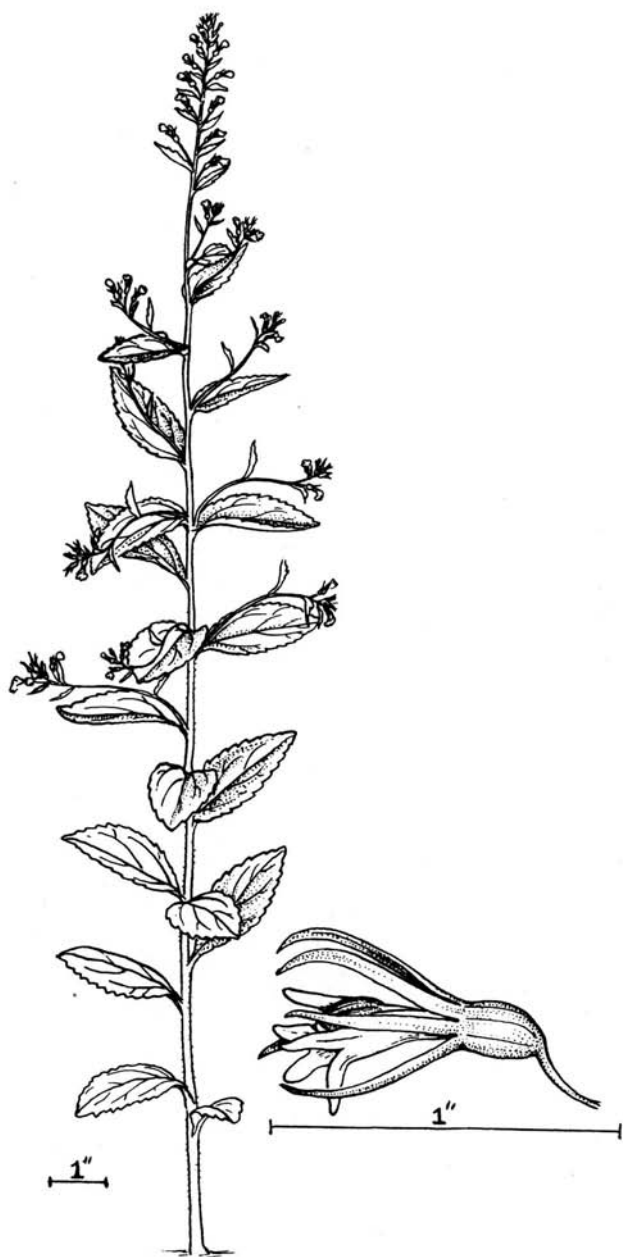
HABITAT: Weedy fields, roadsides, woods, and in partial shade.

HARVEST: Herb when in flower and forming seeds.

USES: The herb yields lobeline sulfate, which is used in anti-tobacco therapy. It is also used as a stimulant, antiasthmatic, and expectorant in cases of bronchitis.

LOBELIA INFLATA L.

(CAMPANULACEAE)



LYCOPUS VIRGINICUS L.

(LAMIACEAE)

COMMON NAMES: Virginia bugleweed, bugleweed, buglewort, carpenter's herb, gypsyweed, gypsywort, horehound, Paul's betony, purple archangel, sweet bugleweed, water bugle, water horehound, wolf foot, wood betony.

DESCRIPTION: A shrub with a 4-angled stem. Dark green or purple-tinged leaves are somewhat ovate, coarsely toothed, and narrowed at each end. Whorls of tubular flowers are borne in the leaf axils.

FLOWERING PERIOD: July to October.

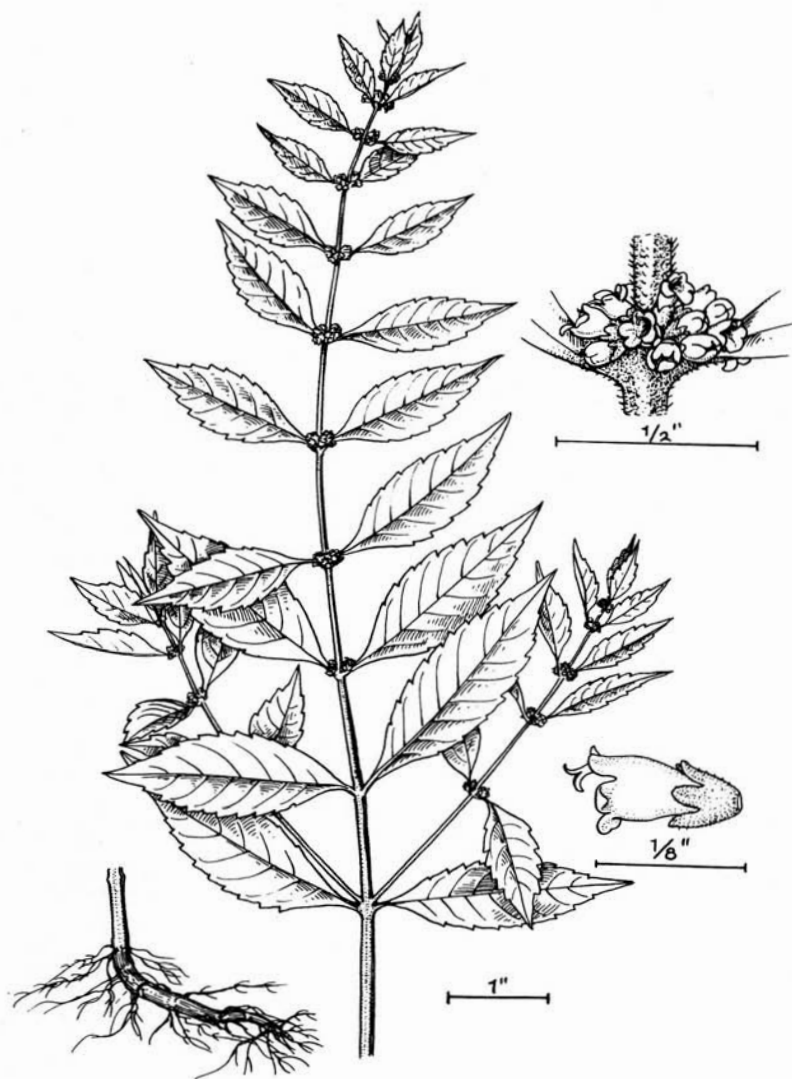
HABITAT: Rich, moist soil, in fields or forests.

HARVEST: Herb during flowering time.

USES: This herb is used as an astringent and sedative, and reportedly it has many other drug uses.

LYCOPUS VIRGINICUS L.

(LAMIACEAE)



MARRUBIUM VULGARE L.

(LAMIACEAE)

COMMON NAMES: White horehound, common hoarhound, common horehound, hoarhound, horehound, houndsbane, marrhue, marrub, marrubium, marvel, white hoarhound.

DESCRIPTION: A shrub that grows to 3 feet in height. Plant branches from base. Produces 2-inch, bitter, aromatic, round-ovate leaves that are whitish above and gray woolly below.

FLOWERING PERIOD: May to September.

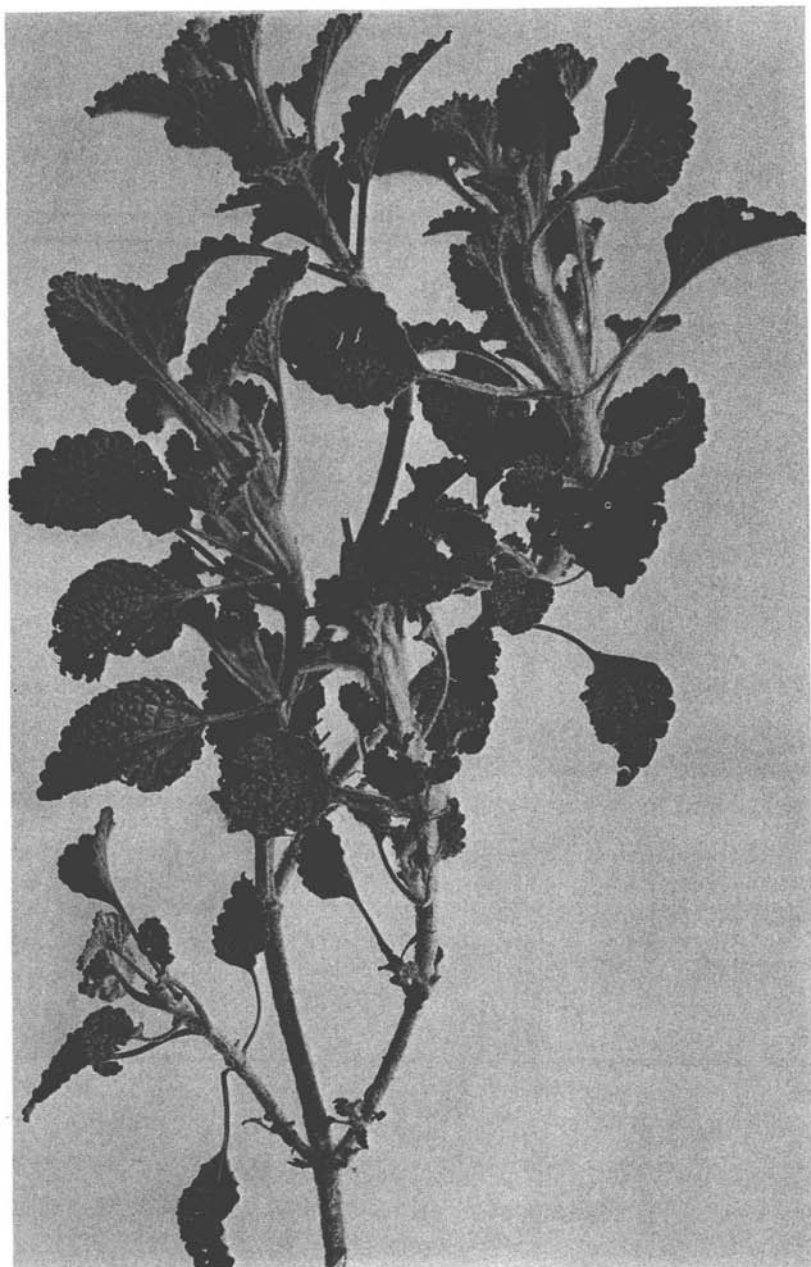
HABITAT: Waste places, pastures, and old fields.

HARVEST: Leaves and small stems in May before blooming.

USES: This plant is used in many pulmonary ailments as an expectorant, tonic, and emmenagogue. In Appalachia, the leaves are used to make a cough syrup. In Europe, it is considered a febrifuge and has been used to treat menstrual pain.

MARRUBIUM VULGARE L.

(LAMIACEAE)



MENISPERMUM CANADENSE L.

(MENISPERMACEAE)

COMMON NAMES: Common moonseed, Canada moonseed, maple vine, moonseed, Texas sarsaparilla, vine maple, yellow parilla, yellow sarsaparilla.

DESCRIPTION: A woody, twining perennial vine that grows from a thick root. Leaves are wide with 3 to 7 angles or lobes around the outside margin. Produces bunches of white or greenish flowers and small black grape-like berries.

FLOWERING PERIOD: June to August.

HABITAT: Thickets and light woodlands where there is rich soil; alluvial soils, rocky ravines, fence rows, and cool regions.

HARVEST: Rhizomes and roots during fall.

USES: The root has been used as a diuretic and a stomachic. Some also claim it has value in arthritic conditions and blood disorders.

MENISPERMUM CANADENSE L.

(MENISPERMACEAE)



MENTHA PIPERITA L.

(LAMIACEAE)

COMMON NAMES: Peppermint, brandy mint, lamb mint, lammint.

DESCRIPTION: A perennial that grows to 3 feet in height. It has a pungent mint smell, and dark green, serrated leaves. Produces purplish flowers in spike-like groups in axils and terminally.

FLOWERING PERIOD: Late June to October.

HABITAT: Brook banks, wet meadows, and other damp places.

HARVEST: Herb during early flowering time.

USES: The herb is a source of the volatile oil of peppermint. Cultivated plants are grown for this product, mostly in the Pacific Northwest coast area. In Appalachia, the herb has been used generally as a flavoring agent and in treating colic and indigestion. In Europe, it is considered a carminative and is believed to increase bile secretion.

MENTHA PIPERITA L.

(LAMIACEAE)



MENTHA SPICATA L.

(LAMIACEAE)

COMMON NAMES: Spearmint, brown mint, common mint, garden mint, lady's mint, sage of Bethlehem, Scotch mint, Scotch spearmint.

DESCRIPTION: A perennial that grows to 3 feet in height. It looks like other mints but is different in odor and taste from the others. It is less pungent than *M. piperita*, and not as cooling as peppermint. Leaves are oblong, lanceolate, toothed, and about 2 inches long. Flowers are in long spikes in the upper axils and terminally.

FLOWERING PERIOD: June to October.

HABITAT: Wet places near settlements.

HARVEST: Flowering top and leaves.

USES: The herb is of value as a flavoring agent, carminative, antiemetic, refrigerant; and it is used to treat colic.

MENTHA SPICATA L.

(LAMIACEAE)



MITCHELLA REPENS L.

(RUBIACEAE)

COMMON NAMES: Partridgeberry, checkerberry, creep-chequer berry, deer berry, hive vine, one berry, running box, squawberry, squaw vine, twinberry, two-eyed berry, two-eyed chequer berry, winter clover.

DESCRIPTION: This creeping, perennial vine is distinguished by small roundish evergreen leaves that are shiny above and frequently have white lines. Produces scented white flowers tinged with purple, and scarlet, 2-eyed berries.

FLOWERING PERIOD: May to July.

HABITAT: Damp, moist, deciduous woods; often found associated with hemlock and rhododendron.

HARVEST: Herb in fall.

USES: This plant has been used frequently in ornamental terraria. The bright, orange-red berry and dark green leaves are very attractive. Therapeutically, the plant has been described as astringent, diuretic, and topic.

MITCHELLA REPENS L.

(RUBIACEAE)



MONARDA DIDYMA L.

(LABIATAE)

COMMON NAMES: Oswego beebalm, American bee balm, bee balm, bergamot, horsemint, Indian's plume, low balm, mountain balm, mountain mint, Oswego tea, red balm, rose balm, scarlet balm.

DESCRIPTION: Stems sharply four-angled, to about 4 feet in height, aromatic, simple branches to 6 inches long; leaves ovate to lance-like, toothed, rounded at base, petioled, hairy, serrate, 5 to 6 inches long; bright crimson flowers to 2 inches long in large terminal clusters at top of plant; perennial.

FLOWERING PERIOD: July to September.

HABITAT: Rich woods, thickets, bottomlands, and stream banks.

HARVEST: Herb when flowering.

USES: This herb is described as being a rubefacient, stimulant and carminative. The U. S. Dispensatory lists it as being anthelmintic. This plant is a commercial source of the drug Thymol, which is of value as an antiseptic and flavor.

MONARDA DIDYMA L.

(LABIATAE)



***MYRICA CERIFERA* L.**

(MYRICACEAE)

COMMON NAMES: Southern wax myrtle, American vegetable tallow, American vegetable wax, bayberry, bayberry tallow, bayberry waxtree, bearing myrica, candleberry, candleberry myrtle, myrtle, southern bayberry, tallow shrub, waxberry, wax myrtle.

DESCRIPTION: A perennial shrub or small tree that grows to 35 feet in height, with waxy rough branchlets. The narrow evergreen leaves taper at both ends. Flowers are in form of short scaly catkins. Produces grayish berries.

FLOWERING PERIOD: April to June.

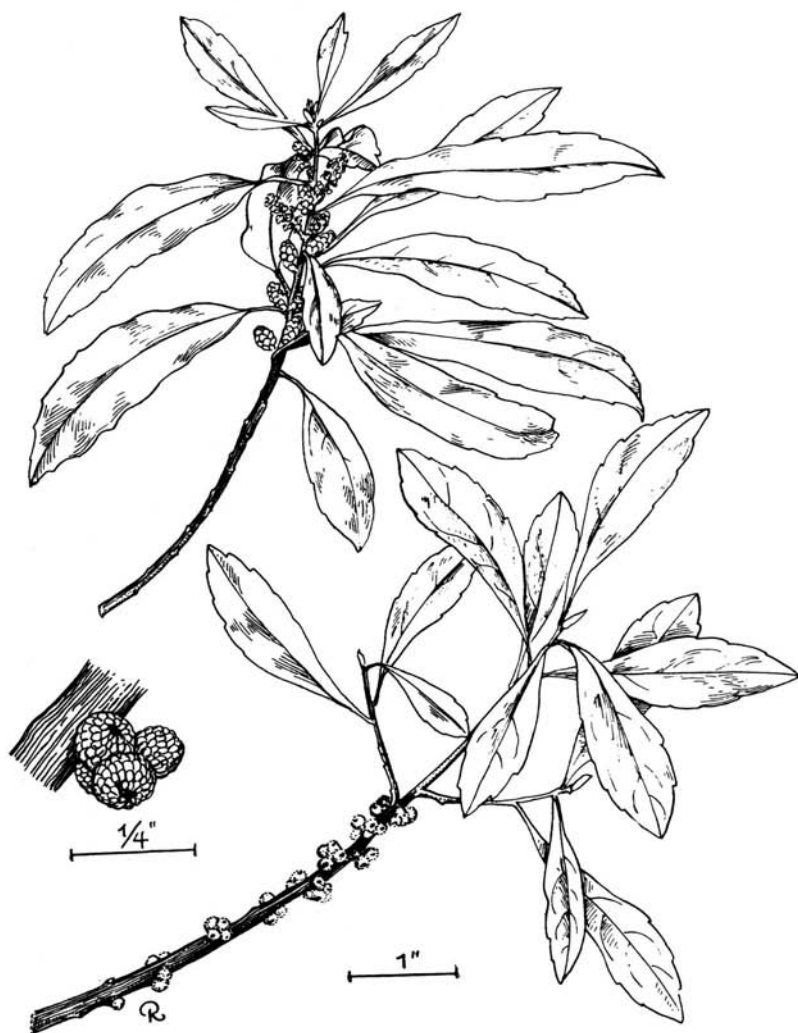
HABITAT: Poor, dry areas particularly; pine barrens and low woods.

HARVEST: Root bark in fall; roots are gently heated and bark stripped.

USES: The fruit is the main source of wax used in making candles. The root bark is astringent and emetic.

MYRICA CERIFERA L.

(MYRICACEAE)



NASTURTIIUM OFFICINALE, R. BR.*

(BRASSICACEAE)

COMMON NAMES: Watercress, nasturtium, true watercress.

DESCRIPTION: A floating perennial. The large stems are freely rooting, thick, and hollow. Leaves are alternate and pinnately divided. Leaflets are entire.

FLOWERING PERIOD: April to October.

HABITAT: In thick beds in cold, flowing water of ditches, small rills, slow streams, brooks, and ponds.

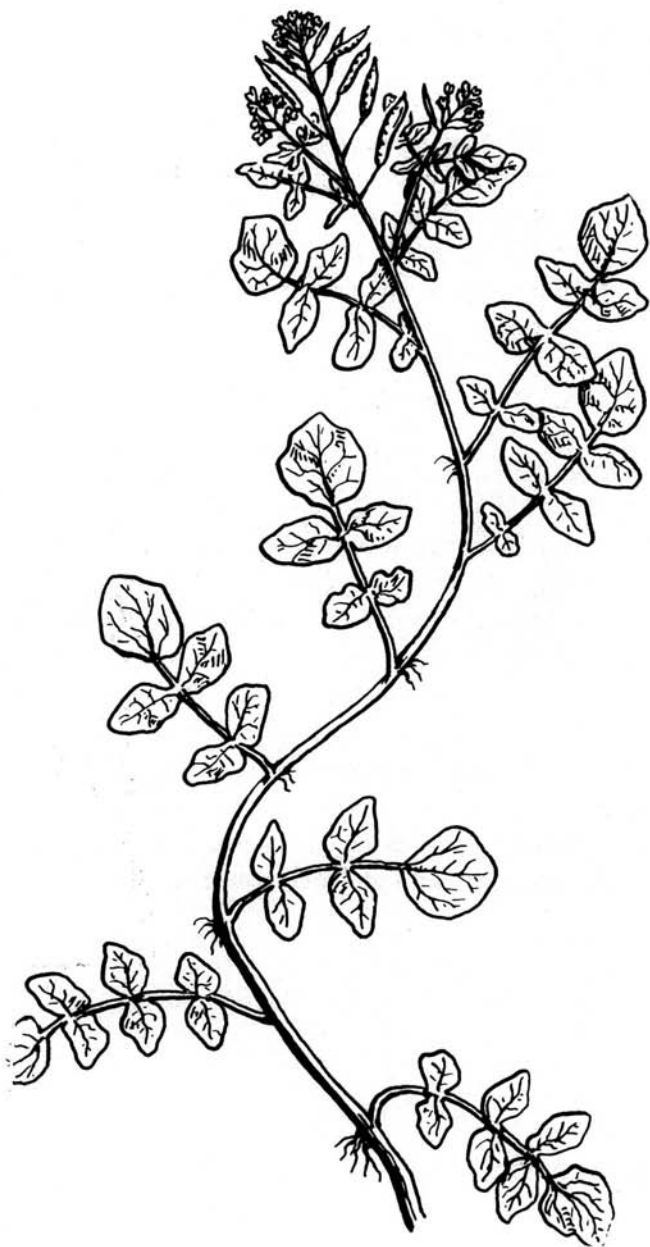
HARVEST: Herb, at any time.

USES: This floating herb is widely used as a fresh edible green. The leaves are very rich in vitamins A and C. Spanish-speaking people in New Mexico eat the plant as a treatment for kidney and heart trouble, and use it crushed in cold water as a treatment for tuberculosis. In Europe it is used to increase urine flow and to combat rheumatism and bronchitis. Pregnant women are warned not to use it because it may cause abortion.

*Synonym—*Radicula nasturtium-aquaticum* (L) Britten & Rendle.

NASTURTIUM OFFICINALE, R. BR.*

(BRASSICACEAE)



NEPETA CATARIA L.

(LAMIACEAE)

COMMON NAMES: Catnip, catmint, catnep, catrup, catwort, field balm, nip.

DESCRIPTION: An erect perennial that grows to 3 feet in height. Stem is whitish and downy. Leaves are heart-shaped, opposite, with long petioles, coarsely toothed, and about 2 to 3 inches long. The tubular flowers are $\frac{1}{4}$ to $\frac{1}{2}$ inch long, whitish with purple dots, and crowded toward the tips of the stems in dense spikes.

FLOWERING PERIOD: June to September.

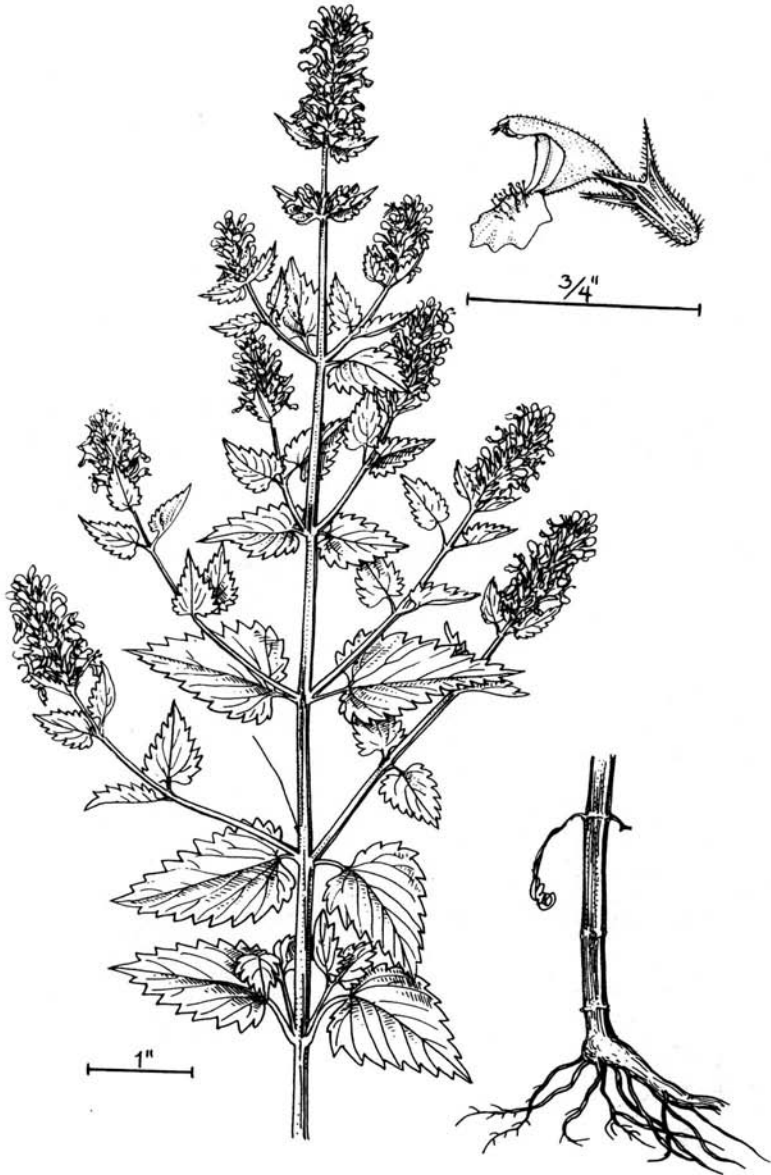
HABITAT: Dooryards, roadsides, and waste places.

HARVEST: Leafy flowering tops; herb when in full flower.

USES: As a therapeutic agent, it is used as an aromatic, stimulant, and carminative, particularly for infants. It has been used in cough remedies, and as an emmenagogue and refrigerant. The stimulating action of this plant upon cats is well known. In Appalachia, a tea made from the plant is used for treating colds, nervous conditions, stomach ailments, and hives; dried leaves and stalks are smoked for catarrh. In Europe it is used to bring on delayed menstruation.

NEPETA CATARIA L.

(LAMIACEAE)



PANAX QUINQUEFOLIUM L.

(ARALIACEAE)

COMMON NAMES: American ginseng, dwarf groundnut, five fingers, garantogen, garentoquere, gensang, ginseng, grantogen, jinshard, man's health, manroot, ninsin, redberry, sang, tartar root.

DESCRIPTION: A perennial about 6 to 8 inches long, with 2 to 4 leaves that are divided into 5 leaflets arranged palmately at the end of each leaf stalk. The small terminal stalk produces inconspicuous flowers and red berries. Roots are large and aromatic.

FLOWERING PERIOD: August.

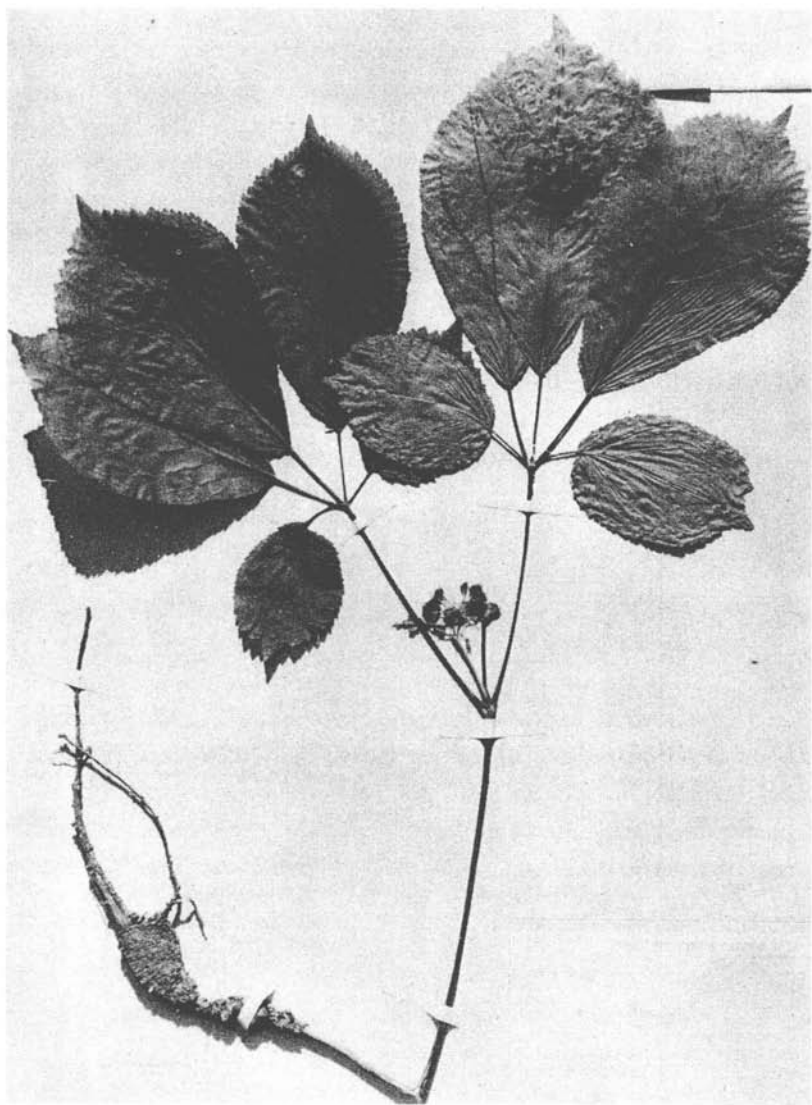
HABITAT: Rich and cool woods.

HARVEST: Roots at 3 to 5 years, in the fall.

USES: The therapeutic value of this plant has never been established in this country, yet this is one of the most valuable woodland crops in Appalachia. The cleaned dried roots are used in the Orient as a cure-all. Because ginseng roots branch to resemble the human body, they are revered and used as a medication for any ill. In China, the roots are used in the preparations of love potions and talismans. The largest amount harvested in Appalachia is shipped to Hong Kong, Singapore, and other areas where there are large Chinese colonies. Soviet Union scientists claim to have isolated various compounds that have therapeutic value. In Appalachia, a tea made of the root is used as a tonic and aphrodisiac.

PANAX QUINQUEFOLIUM L.

(ARALIACEAE)



PASSIFLORA INCARNATA L.

(PASSIFLORACEAE)

COMMON NAMES: Maypop passionflower, apricot vine, maypop, maypop herb, passionflower, passion vine.

DESCRIPTION: A vine that grows to 25 feet in height. Leaves are alternate, composed of 3—or rarely 5—finely toothed oval lobes. Flowers are large, flesh-colored, 2 inches across, with pink or purple corona. The fruit, which is 2 to 3 inches long, is smooth, yellow, and ovate.

FLOWERING PERIOD: May to July.

HABITAT: Thickets, fence lines, edge of woods, and wastelands.

HARVEST: Herbs, leaves, roots, flowering tops, and fruit during summer.

USES: This plant has been used as an antispasmodic, sedative, and a treatment for neuralgia and epilepsy. Also, the drug has been used to reduce blood pressure and to increase the rate of respiration. It is also reputed to be an aphrodisiac, particularly for elderly men. In Bermuda, the vine is used as a perfume base.

PASSIFLORA INCARNATA L.

(PASSIFLORACEAE)



PHYTOLACCA AMERICANA L.

(PHYTOLACCACEAE)

COMMON NAMES: Pokeweed, American nightshade, cancer jalap, cancerroot, chongras, coakum, cocum, cokan, common pokeberry, crowberry, garget, inkberry, jalap, pigeonberry, pocan, pocan bush, poke, pokeberry, pokeroot, red-ink plant, red wood, soko, skoke, Virginia poke.

DESCRIPTION: A perennial that grows to 9 feet in height. It has a thick, hollow, red stem, and an unpleasant smell. Leaves are ovate, entire, long, and petioled. Flowers are white to pinkish in terminal racemes. Produces spikes or racemes of dark purple berries.

FLOWERING PERIOD: July to September.

HABITAT: Rich, low ground, old fields, and recently cleared areas and roadsides.

HARVEST: Root in fall; ripe berries.

USES: Young shoots, when properly prepared in spring, are edible. Consumption of the plant is dangerous because it becomes poisonous as it matures. Medically it is a slow emetic and a purgative, with some narcotic properties. The dried root is reported valuable in treating hemorrhoids. In Appalachia, pokeberry wine is thought to help alleviate rheumatism; and in some areas dried fruits are used as a poultice on sores.

PHYTOLACCA AMERICANA L.

(PHYTOLACCAEAE)



PINUS PALUSTRIS MILL.

(PINACEAE)

COMMON NAMES: Longleaf pine, fat pine, Georgia pine, hard pine, heart pine, longleaf yellow pine, longstraw pine, pitch pine, rosemary pine, southern pine, southern yellow pine, turpentine pine, yellow pine.

DESCRIPTION: A large evergreen tree that grows to 80 to 120 feet in height, with coarse, scaly bark. Needles are a distinctive characteristic; they are about 8 to 18 inches long, and in groups of 3. Cones are 6 to 10 inches long, and somewhat cylindrical. Young form of tree is columnar, unbranched, and has very leafy trunk.

FLOWERING PERIOD: March to April.

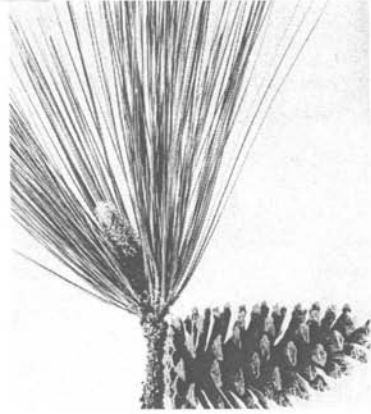
HABITAT: Sandy soil.

HARVEST: Sap in early April, and gum about last of April or first of May.

USES: This pine in southern Appalachia is a valuable source of turpentine, pine oil, tar, pitch, and rosin. The uses of turpentine oil as a rubefacient are well known. Rosin is widely used by athletes to protect their hands, and by violinists to prevent the bow from slipping and to produce better vibration. Pine tar from this source is used therapeutically for the same purpose as white pine tar. Pitch is of great value to the naval stores industry.

PINUS PALUSTRIS MILL.

(PINACEAE)



PINUS STROBUS L.

(PINACEAE)

COMMON NAMES: Eastern white pine, American deal pine, American white pine, New England pine, northern pine, northern white pine, soft deal-pine, soft pine, spruce pine, weymouth pine, white pine.

DESCRIPTION: An evergreen tree that sometimes grows to 200 feet in height. The soft bluish needles, which are 3 to 5 inches long and found in groups of 5, distinguish it from other pines. The cones are 4 to 8 inches long, thin, cigar-shaped, and often curved.

FLOWERING PERIOD: April to June.

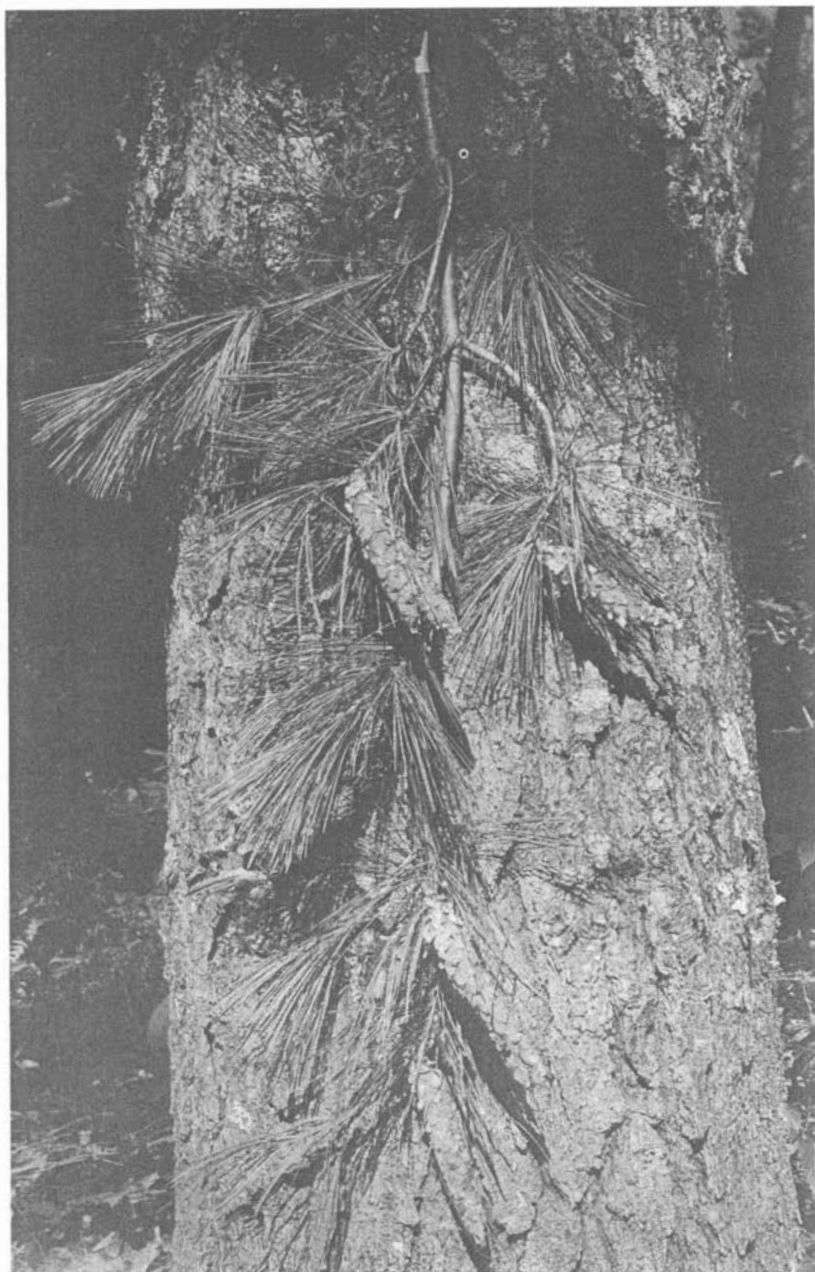
HABITAT: Woods, old fields.

HARVEST: Inner bark, rossed or natural.

USES: The bark is used as an astringent and expectorant; the wood has been used to produce white pine tar, which has value as an antiseptic, expectorant, and protective.

PINUS STROBUS L.

(PINACEAE)



PLANTAGO L. SPP.

(PLANTAGINACEAE)

COMMON NAMES: Plantain, black psyllium, blond psyllium, fleaseed, French psyllium, Indian plantago, plantago, psyllium, psyllium seed, ribgrass, ribwort, Spanish psyllium.

DESCRIPTION: A low, weedy perennial, with broadly elliptical to linear, prominently ribbed leaves. Flowers grow tightly at apex on erect spikes.

FLOWERING PERIOD: March to October.

HABITAT: Roadsides, dooryards, lawns, poor soils, fields, and woods.

HARVEST: Seeds and leaves.

USES: The seeds are valuable as a bulk laxative. Soaking the seed in water causes it to exude a clear sticky gum, which has been used in manufacturing lotions and hair-wave sets. Some authorities report that the leaves are used as a vulnerary. In Appalachia, wet leaves of the plant are used as a poultice for snakebite and wounds; crushed fresh leaves are rubbed on wounds and skin eruptions, and are used for treating rectal itch. In Appalachia the leaves are used to make a tonic tea.

PLANTAGO L. SPP.

(PLANTAGINACEAE)



PODOPHYLLUM PELTATUM L.

(BERBERIDACEAE)

COMMON NAMES: Common mayapple, devil's apple, duck's foot, ground lemon, hog apple, Indian apple, mandrake, mayapple, podophyllum, racoonberry, umbrella plant, vegetable calomel, vegetable mercury, wild jalap, wild lemon, wild mandrake, yellowberry.

DESCRIPTION: An erect perennial that grows to about 1 to 1½ feet in height. Two umbrella-like, palmately lobed leaves grow at the top of each plant, rarely 3. The plant produces a white flower in fork of leaves, and ovate yellow fruit.

FLOWERING PERIOD: March to May.

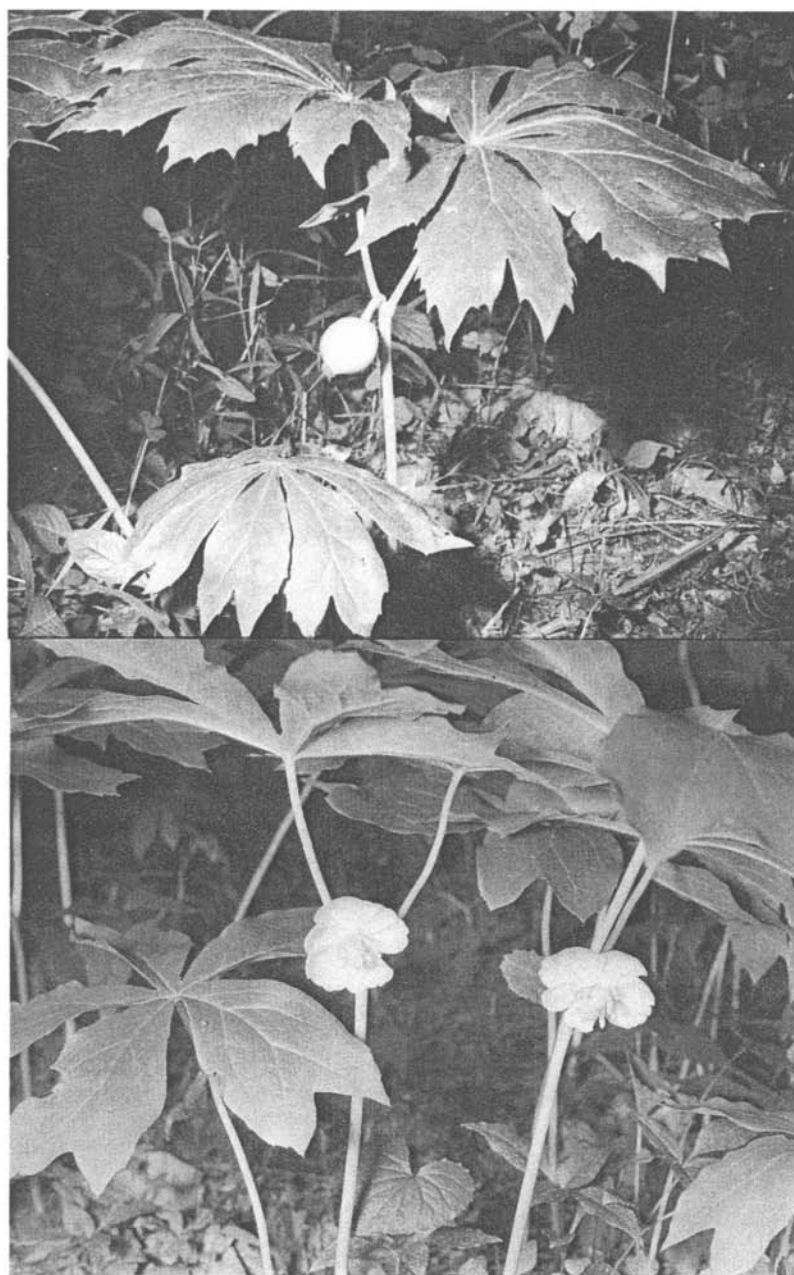
HABITAT: Deciduous forests in mountain areas, rich woods, thickets, and pastures; prefers shade.

HARVEST: Rootstock in fall and sometimes in spring before leaves appear.

USES: Improper use of this plant could be very dangerous. The roots and rhizomes are used as a purgative. A resin from the plant, called podophyllin, has been used to treat venereal warts. The resin is extremely allergenic; it exhibits anti-tumor activity. In Appalachia, a tea of bark and roots is used to treat constipation.

PODOPHYLLUM PELTATUM L.

(BERBERIDACEAE)



POLYGALA SENEGA L.

(POLYGALACEAE)

COMMON NAMES: Seneca-snakeroot polygala, milkwort, mountain flax, rattlesnake root, senecaroot, seneca snake-root, senega root, senega snakeroot, seneka snakeroot.

DESCRIPTION: A perennial that grows to 2 feet in height. Several stems arise from crown, and have numerous alternate linear-shaped leaves. Dense spikes of white or pinkish flowers tinged with green terminate the stem. Produces seeds in capsules.

FLOWERING PERIOD: April to July.

HABITAT: Dry woods on limestone, rocky soils, and higher altitudes.

HARVEST: Root in autumn. (Knotty crown must be removed first.)

USES: The plant is reportedly used as an emetic, purgative, diuretic, expectorant, and tonic.

POLYGALA SENEGA L.

(POLYGALACEAE)



POLYGONATUM BIFLORUM (WALT.) ELL.

(LILIACEAE)

COMMON NAMES: Small solomonseal, conquer-John, dwarf solomon's seal, hairy solomon's seal, sealwort, solomon's seal.

DESCRIPTION: A perennial that grows to 3 feet in height. It can be distinguished from *Smilacina racemosa* by the 1 to 4 flowers that hang from the axils of the leaves, which are about 4 inches long, 2 inches wide, and hairy below. Berries are globular, black or blue.

FLOWERING PERIOD: April to May.

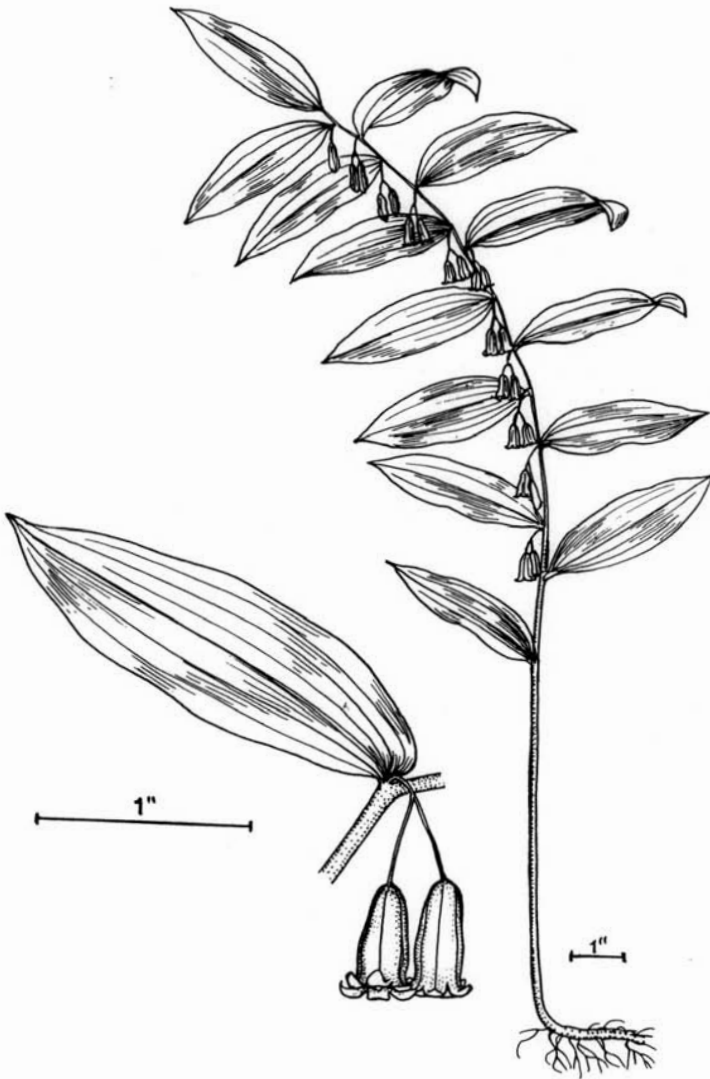
HABITAT: Dry to moist, sandy, loamy areas, or in rocky woods.

HARVEST: Root in fall.

USES: Roots and rhizomes are mildly astringent, diuretic, emetic, and tonic.

Polygonatum biflorum (WALT.) ELL.

(LILIACEAE)



POLYGONUM HYDROPIPER L.

(POLYGONACEAE)

COMMON NAMES: Marshpepper smartweed, arsmart, biting knotweed, biting parsicaria, biting tongue, common smartweed, doorweed, lakeweed, pepperplant, red knees, red shanks, red sharks, sickleweed, smartweed, water pepper, water smartweed.

DESCRIPTION: An annual that grows to 1 to 2 feet in height. It is erect and branched at base. Stems are reddish; and leaves are narrowly lanceolate and alternate, with smooth margins 1 to 4 inches long. Produces numerous small greenish flowers that are formed close together on the ends of nodding terminal spikes.

FLOWERING PERIOD: July to October.

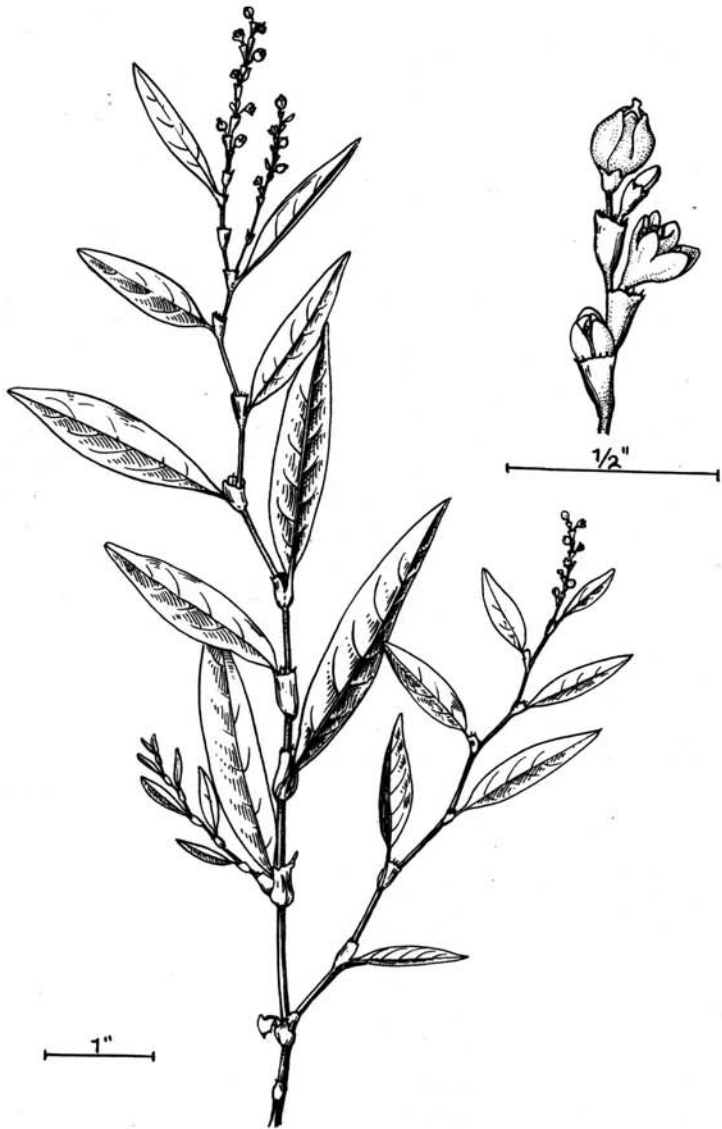
HABITAT: Damp soil.

HARVEST: Herb.

USES: The herb is a diuretic and has been used in certain uterine disorders. In Europe it is used as a hemostatic drug to control internal and hemorrhoidal bleeding.

POLYGONUM HYDROPIPER L.

(POLYGONACEAE)



POPULUS BALSAMIFERA L.

(SALICACEAE)

COMMON NAMES: Balsam poplar, balm buds, balm of Gilead, Carolina poplar, cottonwood, hackmatack, poplar balsam, tacamahac poplar, tackamahac.

DESCRIPTION: A tree that may reach 100 feet in height; sometimes the trunk is 6 feet in diameter. The broad, pointed leaves are 3 to 6 inches long and 2 to 4 inches wide; they are rounded or slightly heart-shaped at the base, finely toothed, shiny dark green above, pale green often with rusty brown patches below. The buds and twigs are brownish red, and the large buds are very resinous and fragrant.

FLOWERING PERIOD: March to April.

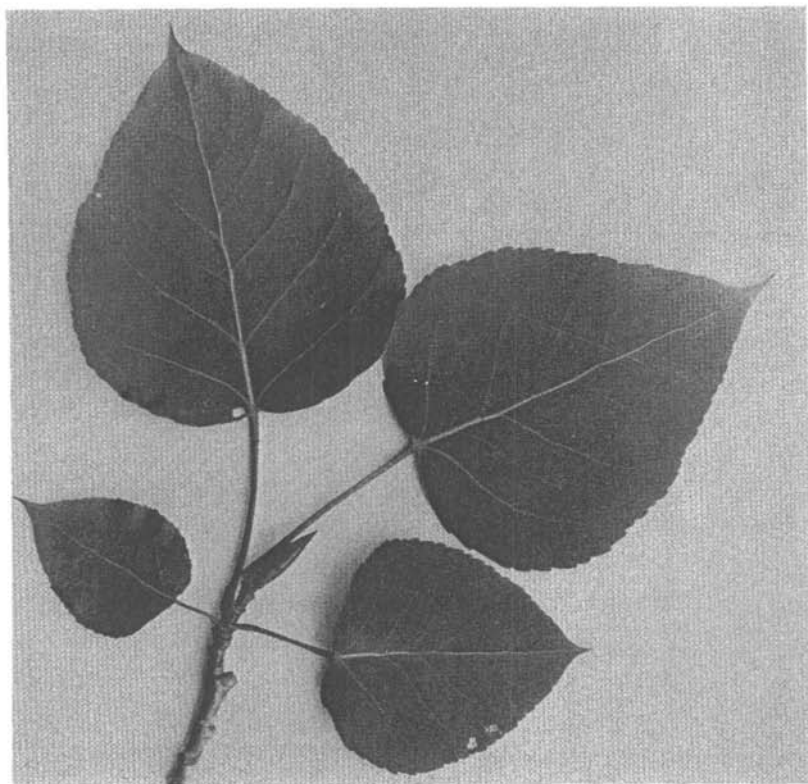
HABITAT: River banks, swamps, wastelands, and river bottoms.

HARVEST: Winter buds in February and March before opening.

USES: A tincture of the bark has reportedly been used to treat infections of the chest, kidneys, stomach, and for rheumatism, gout, and scurvy. The buds have been used as a vulnerary and pectoral. In Europe the fresh flowers are steeped in cold water, then strained and drunk to purify the blood.

***POPULUS BALSAMIFERA* L.**

(SALICACEAE)



PRUNELLA VULGARIS L.

(LAMIACEAE)

COMMON NAMES: Heal-all, blue curls, brownwort, carpenter's herb, carpenterweed, common selfheal, dragonhead, hookweed, self-heal, sickleweed, sicklewort.

DESCRIPTION: A perennial that grows to 2 feet in height. Usually the plant is much tufted, and sometimes it is horizontal. Leaves are round and bract-like. Violet purple blooms, about 1/2 inch long, are found in the axils of the leaves, in a close spike or head.

FLOWERING PERIOD: April to October.

HABITAT: Roadsides, lawns, fields, pastures, wastelands, and grasslands.

HARVEST: Herb from May to September, at flowering time.

USES: The herb is used as an aromatic and carminative. It has been used also as a gargle, and in treating hemorrhage and diarrhea.

PRUNELLA VULGARIS L.

(LAMIACEAE)



***PRUNUS SEROTINA* EHRH.**

(ROSACEAE)

COMMON NAMES: Black cherry, black choke, cabinet cherry, choke cherry, mountain black cherry, rum cherry, Virginia prune bark, whicky cherry, wild black cherry, wild cherry.

DESCRIPTIONS: A valuable tree that grows to 100 feet in height and has a straight trunk covered with rough, black bark. Inner bark is aromatic. The young branches are smooth and reddish. Leaves are shiny, smooth, and finely toothed, 2 to 5 inches long. Small white flowers occur in long drooping clusters at the end of the branches, followed by clusters of round, black berries that are edible but bitter.

FLOWERING PERIOD: April to May.

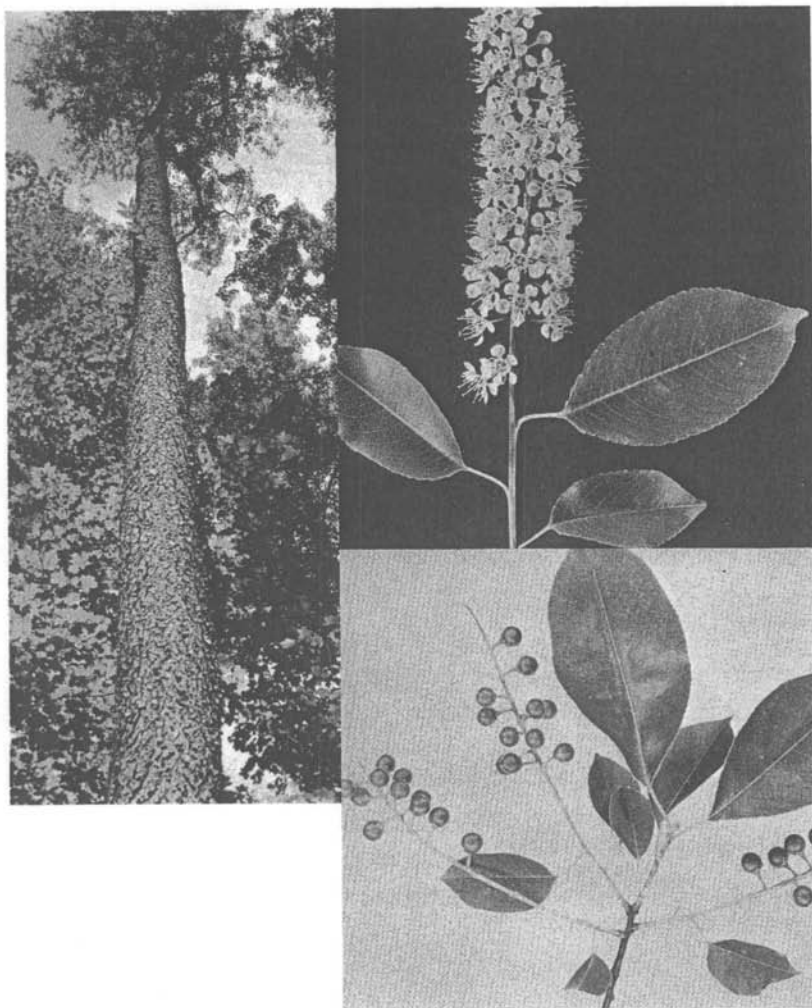
HABITAT: Along fence rows, roadsides, streamsides, pastures, and in dry woods.

HARVEST: Young, thin bark; and bark from older trees after it has been rossed; also, fruit when ripe.

USES: The bark is used primarily as a flavoring agent. The drug is an excellent expectorant. Appalachian wild cherry bark tea is used for coughs, colds, and cholera.

***PRUNUS SEROTINA* EHRH.**

(ROSACEAE)



QUERCUS ALBA L.

(FAGACEAE)

COMMON NAMES: White oak, common white oak, fork-leaf white oak, ridge white oak, stave oak, stone oak, tanner's oak.

DESCRIPTION: A tree that is usually 60 to 80 feet in height, but sometimes reaches 150 feet. The bark is a light ashy gray, variable in appearance—from loosely attached plates on young trees to narrow, rounded ridges with deep fissures on old trees. The smooth thin leaves, which are 5 to 9 inches long, have short stems and are usually divided into 7 to 9 smooth, rounded lobes.

FLOWERING PERIOD: March to May.

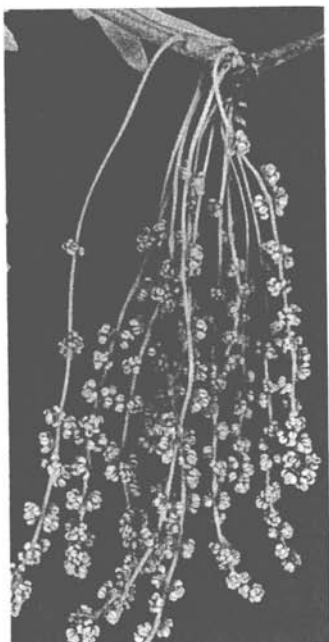
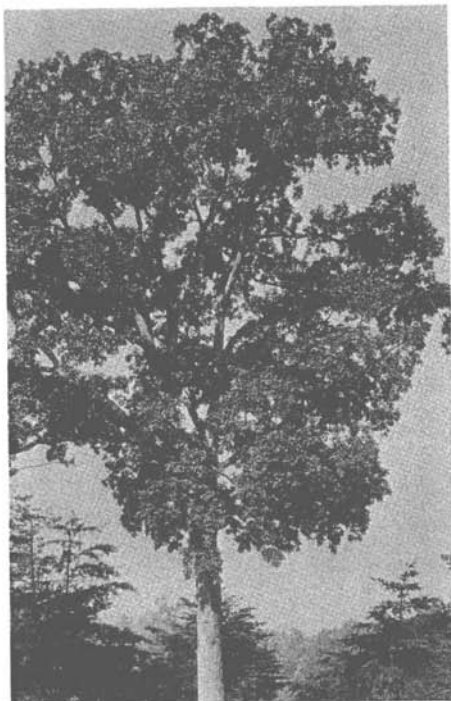
HABITAT: Widely distributed in hardwood forests of the eastern United States.

HARVEST: Inner bark, at any time; bark from older trees should be collected in spring.

USES: The pollen is reportedly allergenic. Because the bark contains tannins, it is used as an astringent and antiseptic. In Appalachia, a bark tea is used to treat burns and sore mouth. A chartreuse dye is obtained from the bark.

QUERCUS ALBA L.

(FAGACEAE)



***RHUS GLABRA* L.**

(ANACARDIACEAE)

COMMON NAMES: Smooth sumach, common sumac, Pennsylvania sumach, scarlet sumac, shernoke, sumac, upland sumach, vinegar tree.

DESCRIPTION: A shrub or small tree that grows to about 15 feet in height. Leaves are 1 to 3 feet long, with 11 to 31 leaflets; each leaflet is 2 to 4 inches long and about 1 to 2 inches wide, pointed and sharp-toothed. Twigs are smooth. Produces greenish yellow flowers in clumps at branch ends, and roundish, flattened, bright red fruits or berries that are hairy and sticky.

FLOWERING PERIOD: May to July.

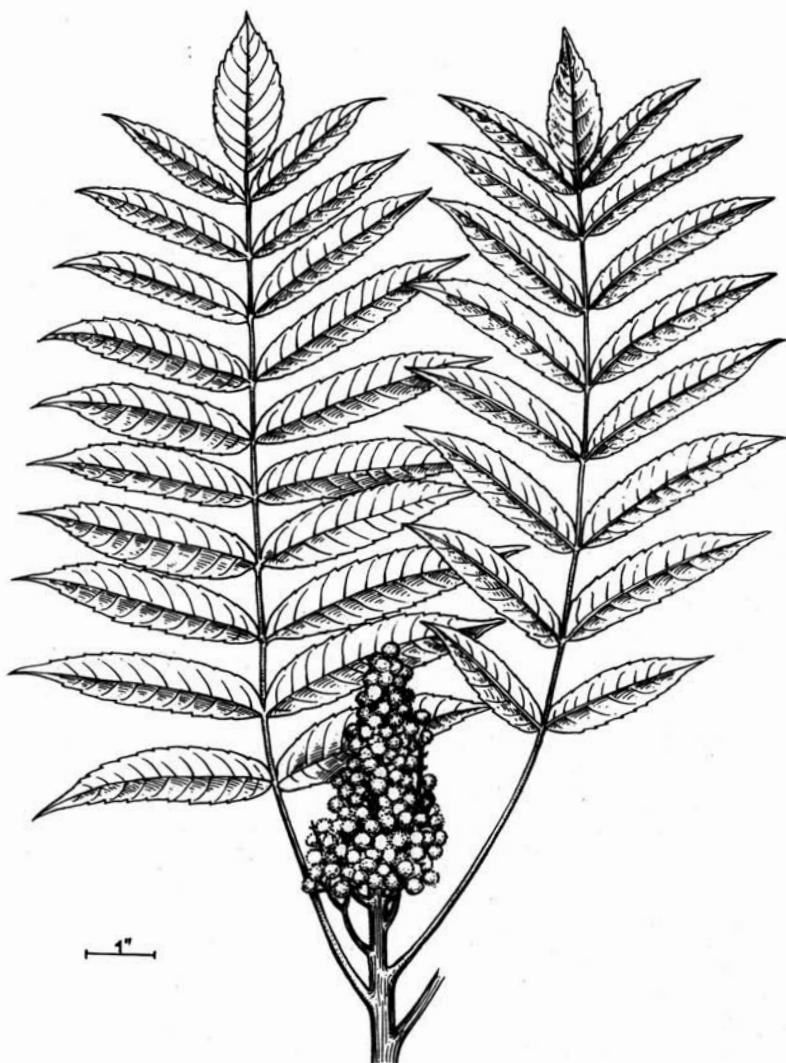
HABITAT: Old fields, power line cuts, roadsides, meadows, and pastures.

HARVEST: Bark of stem and roots, ripe fruit, and leaves.

USES: The dried ripe fruit of sumac is valuable as a source of tannic acid. Preparations of these fruits are effective as astringents, antidiuretics, and tonics. In Appalachia, leaves are smoked to treat asthma. The stems produce a yellow dye.

RHUS GLABRA L.

(ANACARDIACEAE)



RUBUS SPP. L.

(ROSACEAE)

COMMON NAMES: Blackberry, brambleberry, dewberry, raspberry.

DESCRIPTION: A prickly, shrubby or viny perennial that produces 5-petaled, white flowers. Fruit is either black or red.

FLOWERING PERIOD: May to August.

HABITAT: Old fields, waste lands, pastures, fence rows, forest borders.

HARVEST: Bark, fruit, leaves, root, and root bark.

USES: The roots and rhizomes of this plant have been used as astringents because of their high tannin content. In Appalachia, a tea made of roots is used to stop secretions. A fruit juice and wine made from the berries is used to control diarrhea. A tea made from the bark of wild raspberry is used to control dysentery.

***RUBUS* SPP. L.**

(ROSACEAE)



RUMEX CRISPUS L.

(POLYGONACEAE)

COMMON NAMES: Curly dock, bitter dock, curled dock, dock, garden patience, narrow dock, sour dock, yellow dock.

DESCRIPTION: A perennial that grows to 5 feet in height. Leaves are 6 to 12 inches long, linear, and curly-edged. Produces yellow to green flowers in panicles, and dense spikes of winged triangular seeds.

FLOWERING PERIOD: April to August.

HABITAT: Pastures, fields, and waste lands.

HARVEST: Roots, in late summer and fall.

USES: The roots of this plant are reportedly valuable as an astringent and mild laxative. In Appalachia, the root is placed in vinegar and the wash is used to treat ringworm; the leaves are used in a poultice to treat hives. The Indians used the root for a yellow dye.

RUMEX CRISPUS L.

(POLYGONACEAE)



***SALIX ALBA* L.**

(SALICACEAE)

COMMON NAMES: White willow, European white willow.

DESCRIPTION: A tree that grows to 80 feet in height, with spreading and drooping branches. Branchlets are often silky white when young; later they turn olive-brown. Leaves are 1 1/2 to 4 inches long, very narrow, sharp-pointed, very finely toothed, shiny green above and silky white below. Flowers occur in catkins.

FLOWERING PERIOD: April to May.

HABITAT: Stream banks, roadsides, and shaded moist areas.

HARVEST: Bark during flowering time; buds in spring.

USES: The therapeutic value of white willow buds is similar to that of *Populus* species. The bark is reportedly an expectorant, hemostatic, astringent, and tonic. In Appalachia, leaves and bark of different willows are used in a tea to break up fever.

SALIX ALBA L.

(SALICACEAE)



***SALIX NIGRA* MARSH.**

(SALICACEAE)

COMMON NAMES: Black willow, pussy willow, swamp willow, willow.

DESCRIPTION: A tree that often grows to 40 feet in height, but may reach 100 to 120 feet. Leaves are very narrow, 3 to 6 inches long and up to 3/4 inch wide, sharp-pointed, finely toothed, short-stemmed. Twigs are slender, reddish brown, and usually brittle. Produces male and female flowers in separate catkins; male catkins are 1 to 2 inches long and the female 1 1/2 to 3 inches long.

FLOWERING PERIOD: April to June.

HABITAT: Banks of streams, lake shores, and in rich, low woods.

HARVEST: Strip bark with buds from 2- or 3-year-old branches in spring.

USES: The buds and bark are used for the same purposes as those of *S. alba*.

SALIX NIGRA MARSH.

(SALICACEAE)



SALVIA OFFICINALIS L.

(LAMIACEAE)

COMMON NAMES: Garden sage, meadow sage, sage, scarlet sage, true sage.

DESCRIPTION: A fuzzy perennial that grows to 2 1/2 feet in height. Leaves are lanceolate to narrowly elliptic, with rounded teeth, narrowing at base to long petioles. Flowers are in whorls of 4 to 8 in terminal spikes, blue or white.

FLOWERING PERIOD: July to September.

HABITAT: Dumps, waste lands, and gardens.

HARVEST: Herb at flowering time; leaves.

USES: Sage reportedly has many therapeutic uses. The drug is an astringent and carminative. In Appalachia, it was thought to serve as a laxative and a gargle; and it was used to treat baldness, loose teeth, and gas. European research suggests estrogen is present but has not been isolated. It has been used to help achieve regularity of menstrual period. However, its major use is for culinary purposes.

SALVIA OFFICINALIS L.

(LAMIACEAE)



SANGUINARIA CANADENSIS L.

(PAPAVERACEAE)

COMMON NAMES: Bloodroot, coonroot, pauson, puccoon, puccoon root, red Indian paint, red puccoon, redroot, snakebite, sweet slumber, tetterwort, turmeric, white puccoon.

DESCRIPTION: A perennial that grows to 6 to 14 inches in height, with a solitary leaf-stem. Leaves are palmately lobed around outer edge. In early spring, produces white flowers 1 to 2 inches in width. A distinctive characteristic of this plant is the red juice produced by the root.

FLOWERING PERIOD: April to May.

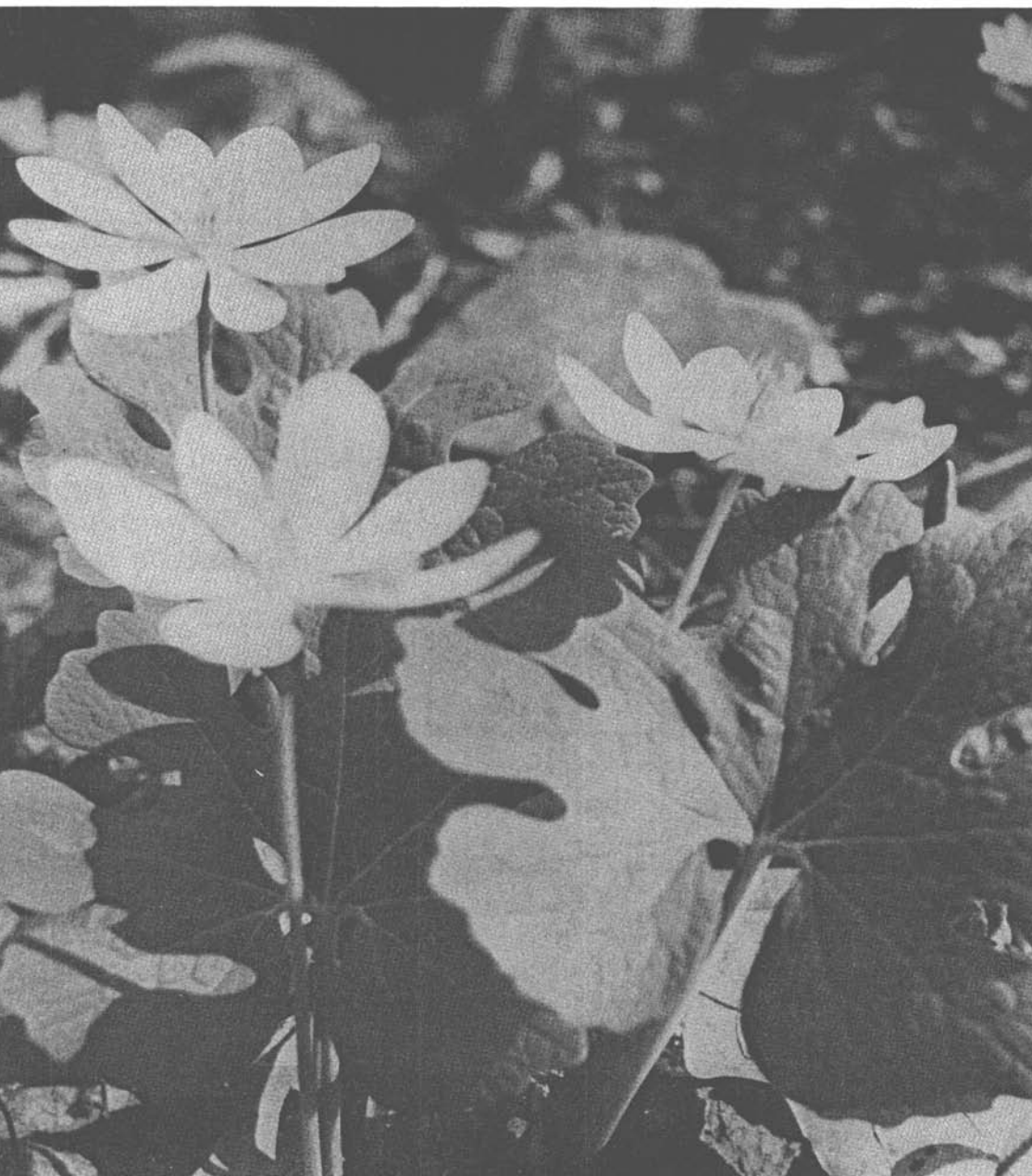
HABITAT: Deep, cool, moist, deciduous woodland slopes; rich woods.

HARVEST: Rootstock at time of flowering, in late summer or early fall.

USES: This plant is extremely poisonous. It is a source of morphine, and improper use should be avoided. The drug is an emetic, laxative, and emmenagogue; and because of its expectorant qualities, it has been used to treat chronic bronchitis. The plant is used both as a pain reliever and a sedative. When combined with oak bark, the roots give a red dye. In Appalachia, a piece of bloodroot is sometimes carried as a charm to ward off evil spirits.

SANGUINARIA CANADENSIS L.

(PAPAVERACEAE)



SASSAFRAS ALBIDUM (NUTT.) NEES

(LAURACEAE)

COMMON NAMES: Sassafras, ague tree, cinnamon wood, common sassafras, red sassafrass, saxifras, smelling stick, white sassafras.

DESCRIPTION: A tree that grows to 40 feet in height. Twigs are green and produce leaves of 3 different shapes: 3-lobed, 2-lobed or mitten-shaped, and unlobed. All parts of the tree have a spicy aroma. Fragrant, yellowish-green flowers are borne in clusters. Male and female flowers are usually borne on different trees. In September the female flowers develop into dark blue 1-seeded berries, about pea size, that are borne on a thick red stalk.

FLOWERING PERIOD: March to April.

HABITAT: Along fence rows; in open woods and abandoned fields, and on dry ridges.

HARVEST: Root bark in spring and autumn; entire root in fall.

USES: The root bark can be used to prepare a tea. Root material can be distilled to make sassafras oil, which is used mainly as a flavoring agent in beverages, confectionery tooth paste, and the like. The tea has been used as a diaphoretic, stimulant, diuretic, and carminative; and it is used in Appalachia to treat bronchitis. The bark is reportedly used also as an insect repellent. Colonial Americans were advised to chew the bark of this tree to break the tobacco habit. Sassafras leaves have been used as a dye to make a soft yellow tan. And some research suggests that, under certain conditions, the leaves may be carcinogenic.

SASSAFRAS ALBIDUM (NUTT.) NEES

(LAURACEAE)



***SCROPHULARIA MARILANDICA* L.**

(SCROPHULARIACEAE)

COMMON NAMES: Maryland figwort, brownwort, bullwort, Carpenter's square, figwort, great pilewort, heal-all, Holme's weed, kernelwort, knotted root, murrian grass, pilewort, scrofula plant, square stalk, stinking Christopher.

DESCRIPTION: A perennial that grows to 9 feet in height, with 4-angled stems. Leaves are opposite, thin, 3 to 12 inches long, with toothed margins, ovate or rounded and broad at base, tapering to a point at tip. The small reddish-brown flowers are loosely arranged on irregular thin branches at the top of the plant.

FLOWERING PERIOD: June to October.

HABITAT: Rich woods and thickets, open woodlands, fallow fields, and roadsides.

HARVEST: Leaves, roots, and herb at flowering time.

USES: The herb is used as a tonic, diuretic, diaphoretic, and in reducing hemorrhoids.

SCROPHULARIA MARILANDICA L.

(SCROPHULARIACEAE)



SCUTELLARIA LATERIFLORA L.

(LAMIACEAE)

COMMON NAMES: Sideflowering skullcap, American skullcap, blue pimernel, blue skullcap, helmet flower, hooded willow herb, hoodwort, mad-dog, mad-dog skullcap, mad-dog weed, madweed, skullcap.

DESCRIPTION: An erect widely-branched perennial that grows to 30 inches in height. The stem is slender and 4-sided. Leaves are thin, 1 to 4 inches long, ovate, pointed, coarsely serrated, and opposite. The flowers are blue, 2-lipped, and arranged along spikes in each of the upper leaf axils.

FLOWERING PERIOD: July to October.

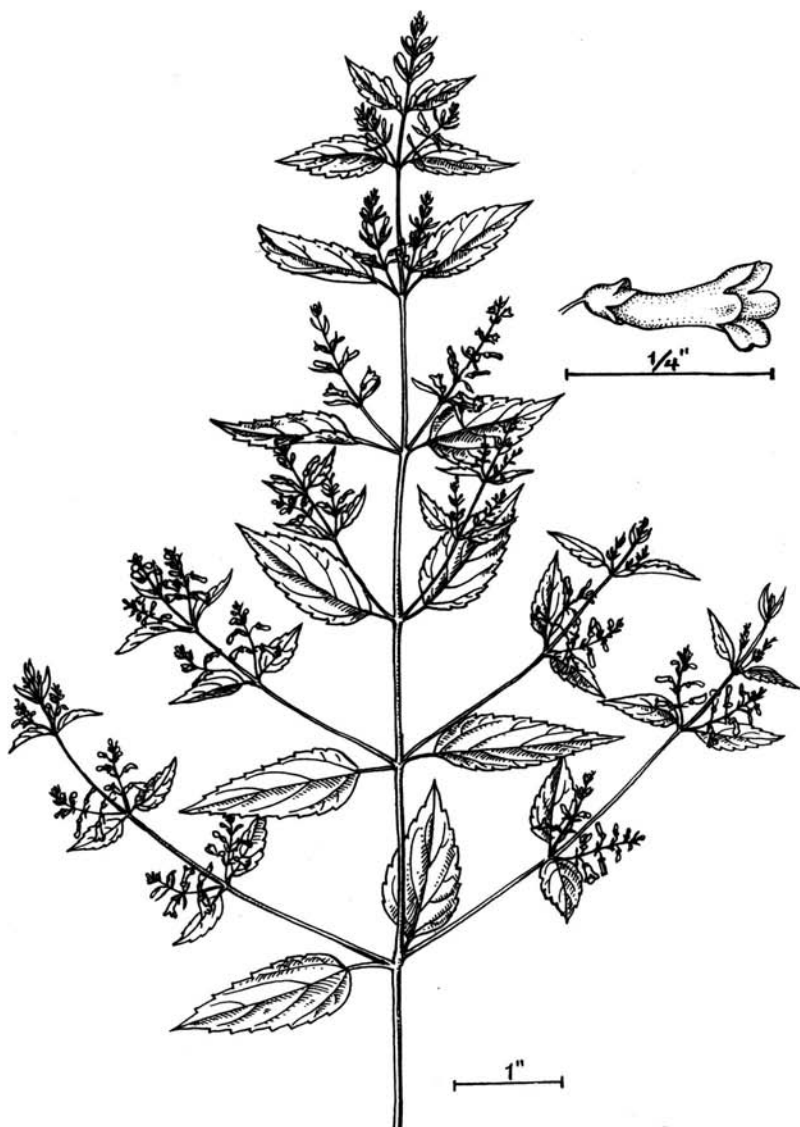
HABITAT: Alluvial thickets, meadows, swampy woods, moist areas, and shaded areas.

HARVEST: Herb in early summer.

USES: The plant has been used for treating hydrophobia, but without much success. It is reputed to be a nervine, tonic, diuretic, and antispasmodic.

SCUTELLARIA LATERIFLORA L.

(LAMIACEAE)



SENECIO AUREUS L.

(ASTERACEAE)

COMMON NAMES: Golden ragwort, butterweed, cocashweed, coughweed, false valerian, female regulator, golden groundsel, golden senecio, groundsel, liferoot, ragwort, squawweed, swamp squawweed, uncum, waxweed, wild valerian.

DESCRIPTION: A perennial that grows to 1 to 2 1/2 feet in height, with 1 to several erect flowering stems. The slender basal leaves are heart-shaped and long petioled (to 6 inches); the rest of the stem leaves are variously cleft, with lobes arranged on either side of the main mid-vein of the leaf. The spring-blooming composite flowers are yellow. The roots are characterized by horizontal creeping.

FLOWERING PERIOD: March to June.

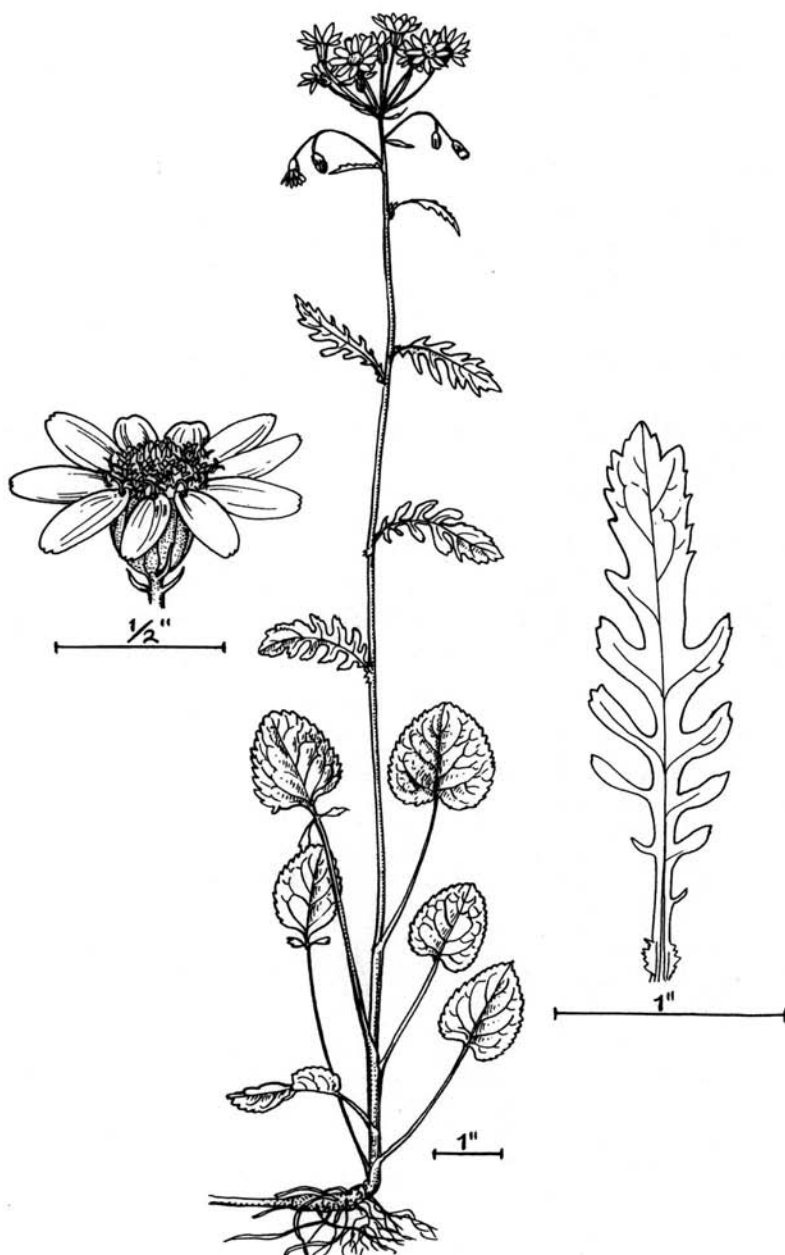
HABITAT: Rich calcareous woods and bottoms, upland swamps, and humid areas.

HARVEST: Root; herb in May when flowering; entire plant before flowering.

USES: As the common name, "coughweed", would indicate, the herb is an expectorant and pectoral. In addition to these qualities, it is listed as an emmenagogue and vulnerary.

SENECIO AUREUS L.

(ASTERACEAE)



SOLANUM CAROLINENSE L.

(SOLANACEAE)

COMMON NAMES: Horse nettle, apple of Sodom, ball nettle, bull nettle, Carolina horse nettle, nightshade, sand brier, tread-softly.

DESCRIPTION: A prickly erect perennial that grows to 3 feet in height. Leaves are shallowly lobed pinnately, broad, with yellow thorns on veins beneath. Flowers are pale violet to white. Fruit is a yellow berry.

FLOWERING PERIOD: May to September.

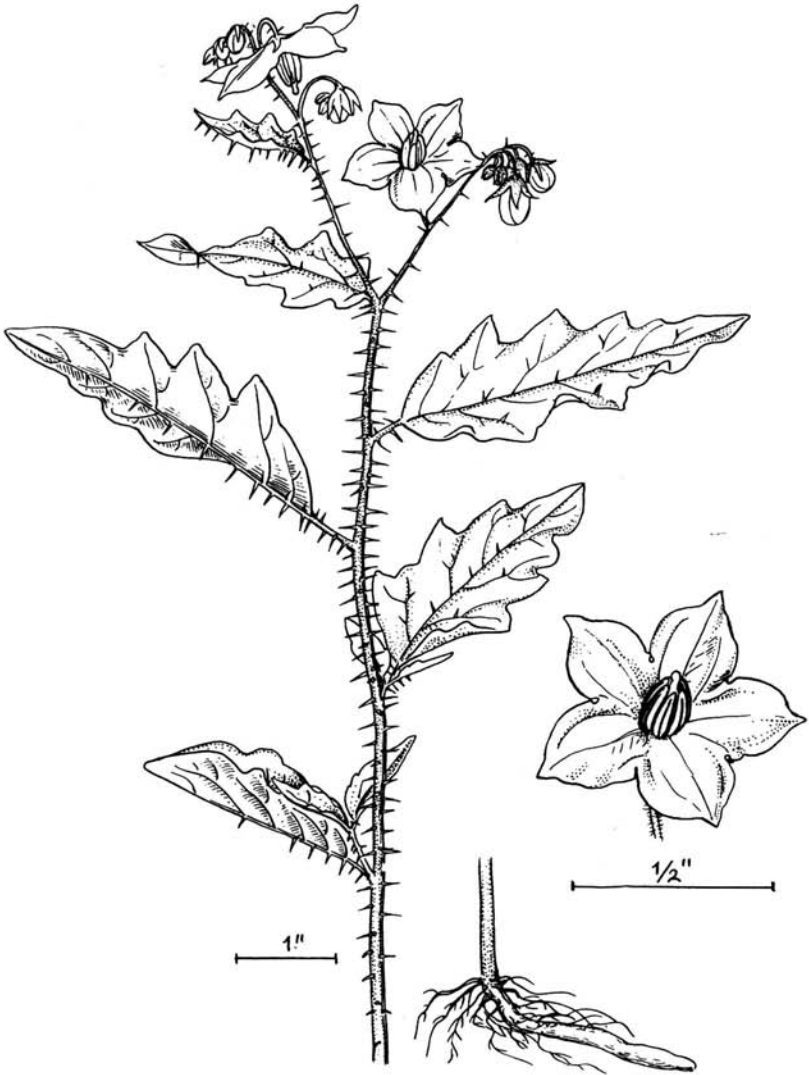
HABITAT: Sandy openings, dry fields, waste lands, and roadsides.

HARVEST: Berries, leaves, and rootstock in the fall.

USES: This plant is extremely poisonous. The berries, when properly prepared, have been used as diuretics, antispasmodics, anodynes; and according to the U. S. Dispensatory, they have also been used in a treatment for epilepsy.

SOLANUM CAROLINENSE L.

(SOLANACEAE)



SORBUS AMERICANA* MARSH.

(ROSACEAE)

COMMON NAMES: American mountainash, American rowan tree, American service tree, dogberry, Indian mozemize, life-of-man, masse-misse, missy-massy, missey-moosey, mountain ash, mountain sumach, quick beam, round tree, roundwood, wild ashe, wine tree, witchwood.

DESCRIPTION: A shrub or small tree that grows to 30 feet in height. Bark is smooth and light gray. Compound leaves consist of 11 to 17 narrow, pointed, toothed leaflets about 1 1/4 to 4 inches long. White flowers appear in dense, round, or flatish clusters about 3 to 6 inches across. Large, dense, showy clusters of bright red berries about the size of peas appear in late fall.

FLOWERING PERIOD: June to July.

HABITAT: Evergreen forests and waste areas.

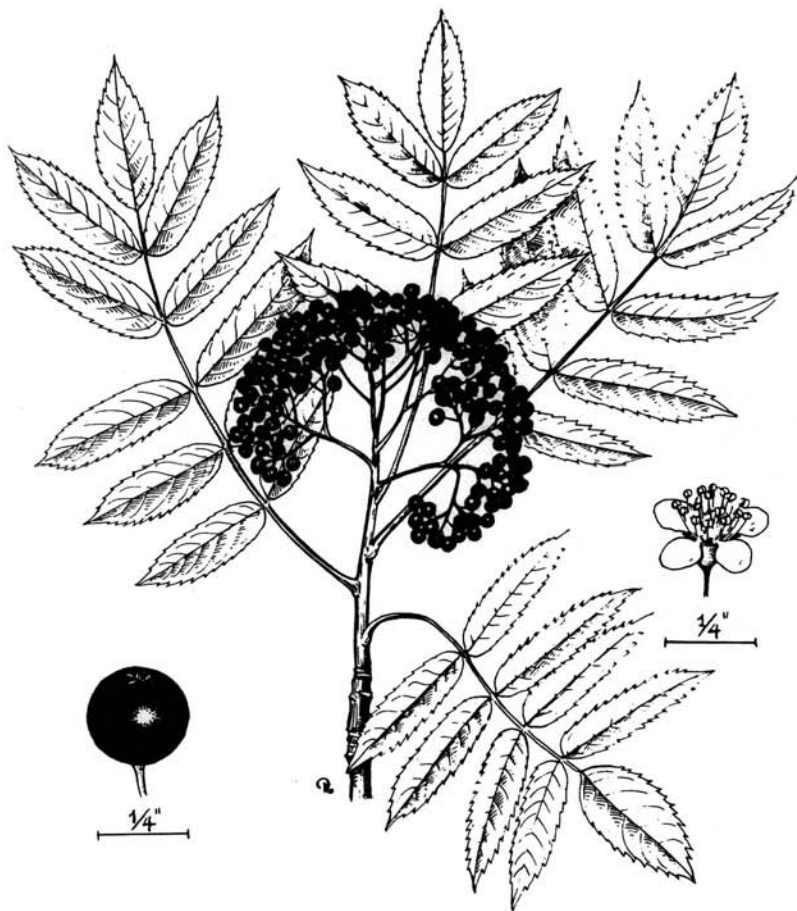
HARVEST: Bark and fruit.

USES: The berries have been used to treat scurvy and as a vermifuge. Bark preparations have been used for biliousness.

*Synonym = *Pyrus americana* (Marsh) D.C.

*SORBUS AMERICANA** MARSH.

(ROSACEAE)



SPIGELIA MARILANDICA L.

(LOGANIACEAE)

COMMON NAMES: Pinkroot spigelia, American wormroot, Carolina pink, Carolina pinkroot, Indian pink, Maryland pinkroot, perennial wormgrass, pinkroot, snakeroot, star bloom, unstillia, wormgrass.

DESCRIPTION: A perennial that grows to 1 to 2 feet in height. Leaves are opposite, without a petiole, lanceolate to broadly oval. Flowers are funnel-like, red on the outside, yellow on the inside, arranged on one side of a single spike. The funnel forms five lobes at the open end.

FLOWERING PERIOD: May to June.

HABITAT: Rich woods.

HARVEST: Rootstock after flowering in early fall.

USES: The root is used as a vermifuge, anthelmintic, and cathartic. Some authorities say it is also a narcotic. In Appalachia, a tea made from the leaves is used to aid digestion.

SPIGELIA MARILANDICA L.

(LOGANIACEAE)



***STELLARIA MEDIA* (L.) CYRILLO**

(CARYOPHYLLACEAE)

COMMON NAMES: Chickweed, adder's mouth, common chickweed, satin flower, starwort, stitchwort, tongue grass, white bird's eye.

DESCRIPTION: An annual that grows to 12 inches in height. The plant is weak, with matted to upright trailing stems. Lower and median leaves are ovate; upper leaves are sessile and highly variable. Solitary flowers have 4 to 5 star-shaped white petals that are 2-cleft.

FLOWERING PERIOD: January to March.

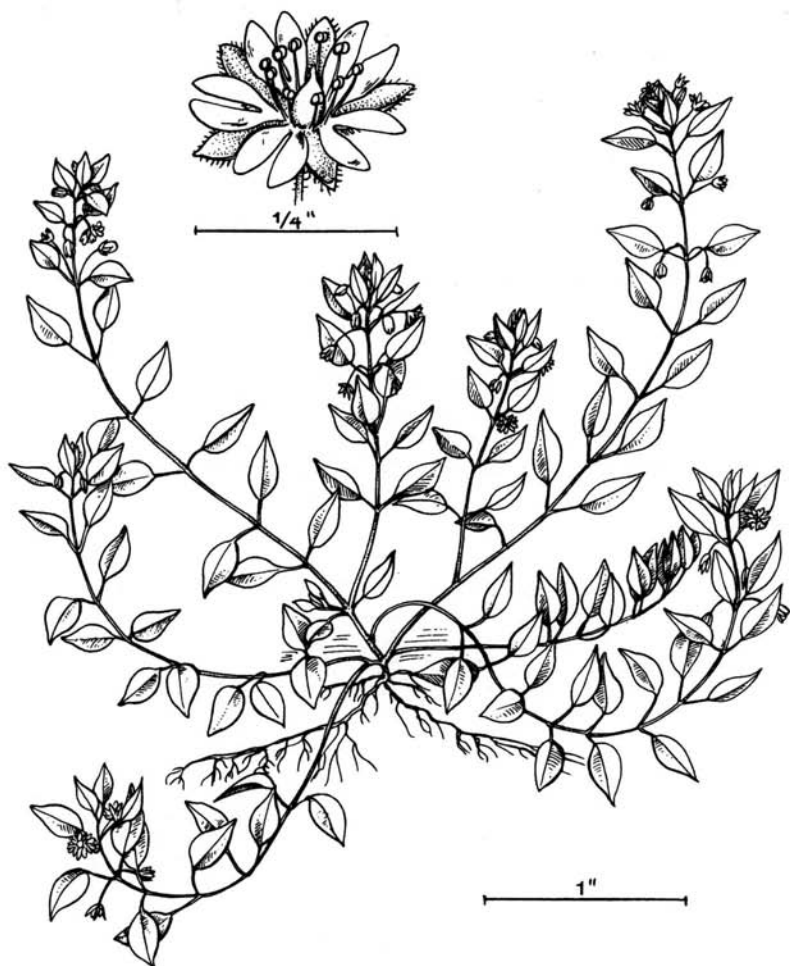
HABITAT: Found in dooryards, cultivated ground, waste land, damp woods, thickets, and gardens.

HARVEST: Herb.

USES: The herb is classed as a refrigerant, demulcent, and expectorant.

STELLARIA MEDIA (L.) CYRILLO

(CARYOPHYLLACEAE)



STILLINGIA SYLVATICA L.

(EUPHORBIACEAE)

COMMON NAMES: Queensdelight, cock-up-hat, cocyshat, marcony, nettle potato, queen's delight stillingia, queen's root, silver leaf, stillingia, yaw root.

DESCRIPTION: A perennial that grows to 3 feet in height. It is a milky-juiced plant with fleshy, crowded, leathery, stemless leaves that vary in shape: some are round, others sharply sawtoothed. Flowers are yellow.

FLOWERING PERIOD: May to July.

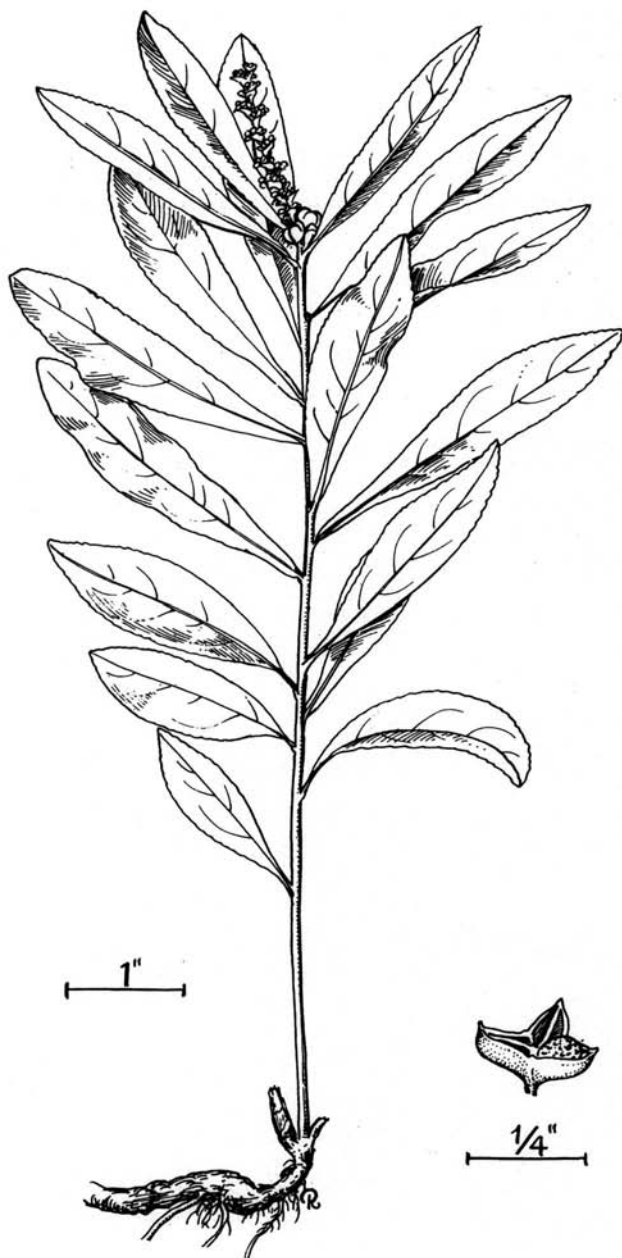
HABITAT: Sandy, dry soil, pine barrens, old fields, and forest openings.

HARVEST: Rootstock in August or September.

USES: The root has been classed as emetic, cathartic, and diuretic.

STILLINGIA SYLVATICA L.

(EUPHORBIACEAE)



TANACETUM VULGARE L.

(ASTERACEAE)

COMMON NAMES: Tansy, bitter buttons, common tansy, double tansy, English cost, ginger plant, golden buttons, hind heal, parsley fern, scented fern.

DESCRIPTION: A perennial 2 to 3 feet in height, with erect unbranched stems that grow in clumps. Pungent, aromatic, fern-like foliage is a common characteristic. Leaves are alternate, topped with flat heads of yellow, tubular, button-like flowers.

FLOWERING PERIOD: July to September.

HABITAT: Roadsides and borders of fields.

HARVEST: Herb.

USES: The herb has been used as an anthelmintic, emmenagogue, and stomachic. The dried flower heads are used frequently in flower arrangements.

TANACETUM VULGARE L.

(ASTERACEAE)



***TEPHROSIA VIRGINIANA* (L.) PERS.**

(FABACEAE)

COMMON NAMES: Virginia tephrosia, catgut, devil's shoe strings, goat's rue, hoary pea, rabbit pea, turkey pea.

DESCRIPTION: A perennial that grows to 2 feet in height. Stem is erect, simple, and leafy to the top, with narrowly elliptic leaflets arranged compoundly on either side of main stem, which is hairy. Flowers are large and densely cluttered on a terminal spike; they are yellowish white marked with purple. The podlike fruits are heavy and hairy, about 2 inches long.

FLOWERING PERIOD: Mid-May to August.

HABITAT: Dry, sandy woods and openings.

HARVEST: Herb in summer; roots in fall.

USES: The root of this plant is used as an insecticide and, according to the U. S. Dispensatory, as a vermifuge.

TEPHROSIA VIRGINIANA (L.) PERS.

(FABACEAE)



***TIARELLA CORDIFOLIA* L.**

(SAXIFRAGACEAE)

COMMON NAMES: Allegheny foamflower, coalwort, coolwort, false bitterwort, false miterwort, foam flower, gem fruit.

DESCRIPTION: A perennial that grows to 1 foot in height. The heart-shaped leaves are broad, shallowly lobed, toothed, 4 inches across. Flower petals are lanceolate, white or pinkish, and arranged on a spike-like stem.

FLOWERING PERIOD: April to July.

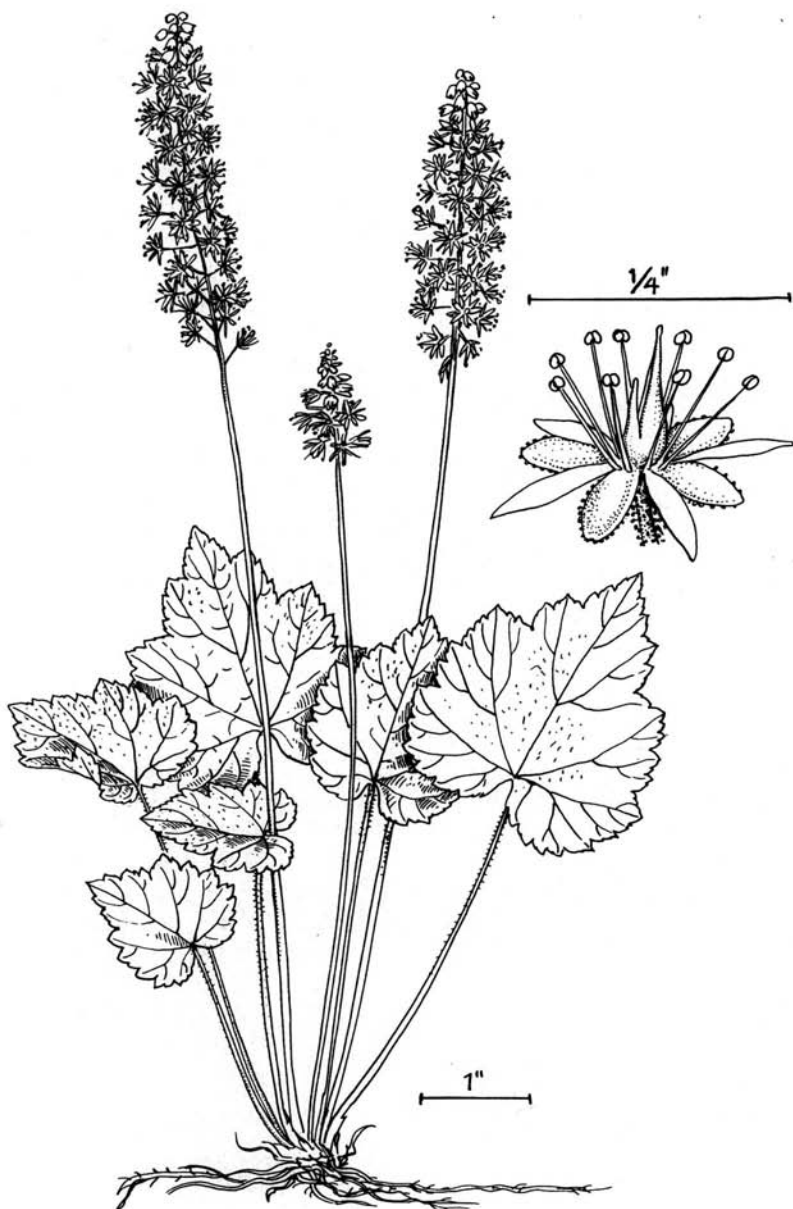
HABITAT: Rich woodlands and uplands.

HARVEST: Herb during flowering; root in fall.

USES: This herb is reputed to be useful as a tonic and diuretic. The root is classed as a diuretic and pectoral.

TIARELLA CORDIFOLIA L.

(SAXIFRAGACEAE)



TRIFOLIUM PRATENSE L.

(FABACEAE)

COMMON NAMES: Red clover, broadleaved clover, cleaver grass, common clover, common red clover, cow clover, meadow clover, purple clover, sweet clover.

DESCRIPTION: A biennial or perennial legume, with long-petioled, tri-foliolate leaves, each with 3 oval-shaped leaflets. The globular to ovate flower heads are dense and roseate colored.

FLOWERING PERIOD: May to September.

HABITAT: Roadsides, clearings, turf, fields, and meadows.

HARVEST: Flowers and herb.

USES: The flowers of this plant are therapeutically used as an antispasmodic, expectorant, sedative, and vulnerary. The U. S. Dispensatory reports that the flowers have been used in some anti-asthma cigarettes. In central Europe, clover has been used to regulate digestive functions, to improve the appetite, and to treat liver ailments.

TRIFOLIUM PRATENSE L.

(FABACEAE)



***TRILISA ODORATISSIMA* (WALT.) CASS**

(ASTERACEAE)

COMMON NAMES: Vanilla trilisa, deerstongue, dogtongue, vanilla leaf, vanilla plant.

DESCRIPTION: An erect, stout perennial that grows to 2 to 3 feet in height. Basal leaves are large, smooth, spatula-like, with stem-clasping leaves diminishing as they ascend the stem. Leaves are alternate, and up to 10 inches long. Foliage is vanilla-scented. Flowers are in flat-topped purplish clusters.

FLOWERING PERIOD: July to September.

HABITAT: Open, low pine forests of the Southeast, damp fields, and barrens.

HARVEST: Leaves in early summer to fall.

USES: The herb has no reported drug use. However, it is used as a blend with tobacco, and because it is high in coumarin it has been used to flavor medicinal compounds.

TRILISA ODORATISSIMA (WALT.) CASS

(ASTERACEAE)



TRILLIUM ERECTUM L.

(LILIACEAE)

COMMON NAMES: Purple trillium, bath flower, bathwort, bethroot, bettroot, birthroot, birthwort, bumblebee root, daffydown-dilly, dishcloth, ground lily, ill-scented trillium, ill-scented wakerobin, Indian balm, Indian shamrock, lamb's quarters, nosebleed, orange blossom, purple wakerobin, rattlesnake root, red Benjamin, red trillium, red wakerobin, squaw flower, squaw root, stinking Benjamin, three-leaved nightshade, trillium, true love, wakerobin, wood lily.

DESCRIPTION: A perennial that grows to 1 to 2 foot in height. It has a single stout stem with a whorl of 3 broad leaves at the top, and a single brown or greenish purple ill-scented flower growing from the center of the whorl of leaves.

FLOWERING PERIOD: April to early June.

HABITAT: Rich, damp, shady woods.

HARVEST: Root in late summer or fall.

USES: The plant has been used as an antispasmodic, emmenagogue, emetic, expectorant, and uterine astringent. The Indians of Appalachia cooked pieces of the root in food as an aphrodisiac.

TRILLIUM ERECTUM L.

(LILIACEAE)



TSUGA CANADENSIS (L.) CARR.

(PINACEAE)

COMMON NAMES: Eastern hemlock, Canada hemlock, hemlock, hemlock fir, hemlock spruce, hemlock spruce pine, spruce pine, tan-bark tree, weeping spruce.

DESCRIPTION: An evergreen tree, usually 60 to 70 feet in height. Leaves are 1/3- to 2/3-inch long, needle-like, flattened, tapering from base to tip, bright green above, light silvery green with 2 white streaks below. Cones are small, 1/2 to 3/4 inch long. Bark is dark reddish-brown, and deeply furrowed.

FLOWERING PERIOD: April to early June.

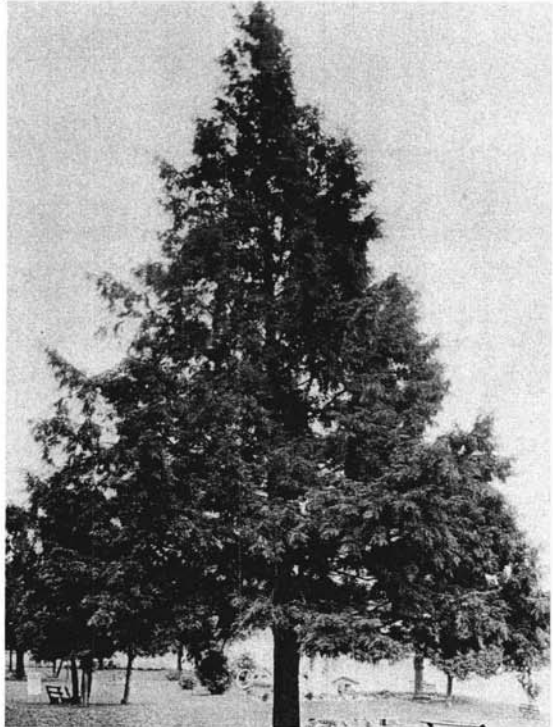
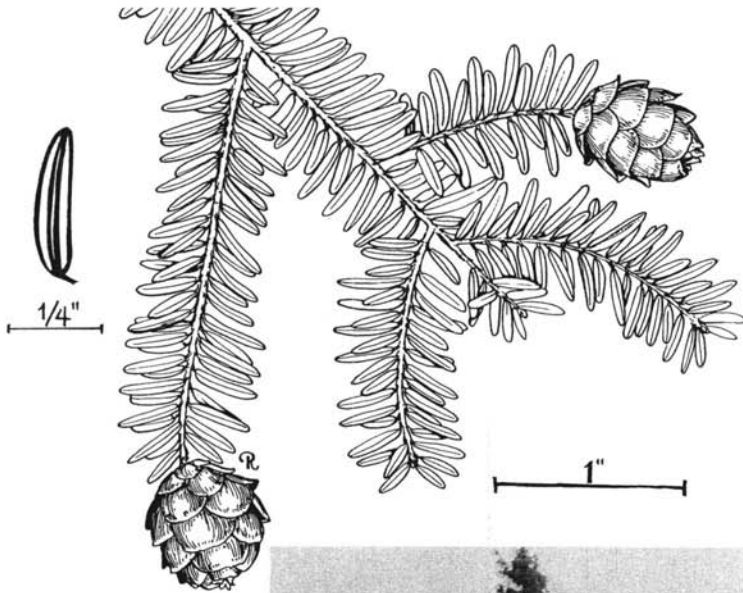
HABITAT: Hilly, mountainous, rocky woods, upland loams, moist benches, and swamp borders.

HARVEST: Bark and resin, which is collected by cutting the trunk of the tree.

USES: The bark has been used primarily because of its tannin content, which makes it a strong astringent. Resin is used as a mild rubefacient and veterinary liniment.

TSUGA CANADENSIS (L.) CARR.

(PINACEAE)



ULMUS RUBRA MUHL.

(ULMACEAE)

COMMON NAMES: Slippery elm, American tree, elm, gray elm, Indian elm, moose elm, red elm, rock elm, soft elm, sweet elm, tawny elm.

DESCRIPTION: A tree 60 to 70 feet in height, with dark green leaves 5 to 7 inches long, 2 to 3 inches wide, nearly oval-shaped, rough above and hairy beneath. Twigs are rough and ashy gray in color. Buds are dark colored and hairy. Buds at branch ends usually have orange tips. Inner bark is mucilaginous with a somewhat aromatic flavor.

FLOWERING PERIOD: Late February to early May.

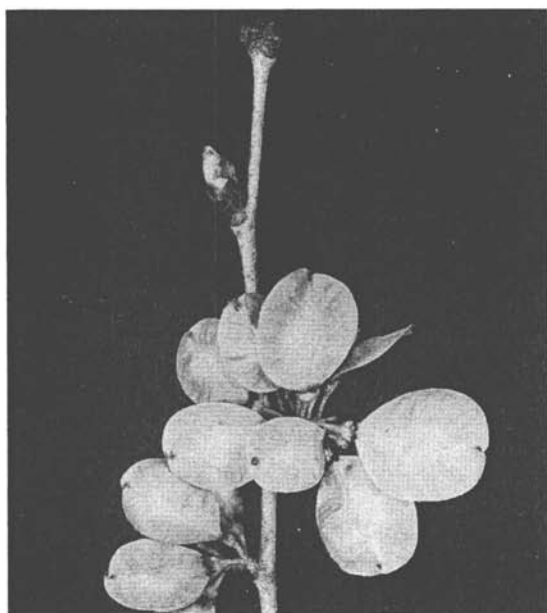
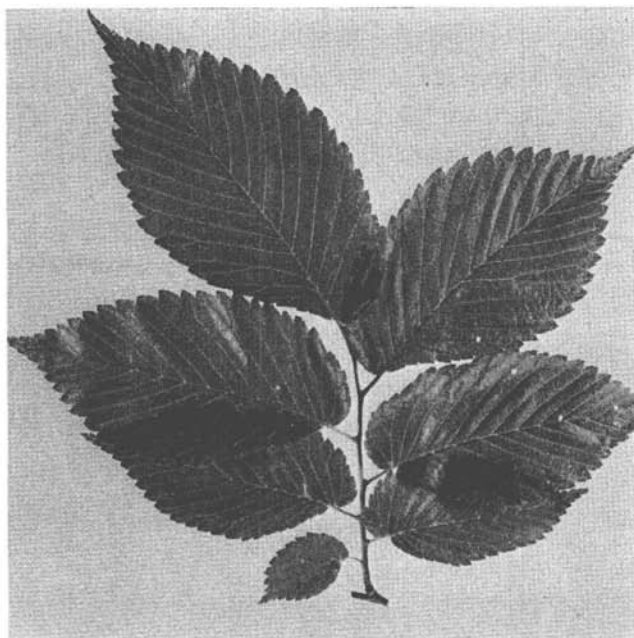
HABITAT: Rich soil, often calcareous, stream banks, river terraces, bottom lands; also on dry and poor sites.

HARVEST: Inner bark.

USES: Upon soaking in warm water, the inner bark of this tree produces a mucilage that can be used as a protective, demulcent, emmolient, laxative, and vulnerary. The pollen is allergenic. In Appalachia, a tea made from the bark is used as a laxative.

ULMUS RUBRA MUHL.

(ULMACEAE)



VERATRUM VIRIDE AIT.

(LILIACEAE)

COMMON NAMES: White hellebore, American falsehellebore, American hellebore, American white hellebore, bearcorn, big-bane, common swamp hellebore, devil's-bite, false hellebore, green hellebore, Indian poke, itchweed, pokeroot, swamp hellebore.

DESCRIPTION: A perennial that is coarse, erect, 2 to 8 feet in height. Stems are leafy, unbranched, and grow from short, thick rootstock to 1 foot long. Leaves are alternate, broadly ovate to elliptical, entire, with parallel veining. Flowers are greenish-white to purple, inconspicuous, and in pyramidal panicles 2 feet long.

FLOWERING PERIOD: May to July.

HABITAT: Swamps and low ground, meadows, and banks of streams.

HARVEST: Roots in fall after leaves have died.

USES: This plant is very poisonous. Its dried roots and rhizomes, when properly prepared, are a strong cardiac stimulant drug. It is emetic, diaphoretic, sedative, and analgesic.

VERATRUM VIRIDE AIT.

(LILIACEAE)



VERBASCUM THAPSUS L.

(SCROPHULARIACEAE)

COMMON NAMES: Common mullein, Aaron's rod, Adam's flannel, blanket leaf, bullock's lungwort, candlewick, cow's lungwort, feltwort, flannel leaf, flannel mullein, flannel plant, great mullein, hare's beard, hedge taper, ice leaf, Indian tobacco, Jacob's staff, Jupiter's staff, lady's foxglove, mullein, mullein dock, old man's flannel, Peter's staff, shepherd's club, torch-wort, velvet dock, velvet plant.

DESCRIPTION: A tall, weedy, unbranched, biennial that grows to 7 feet in height. It is hairy and soft. Leaves are widely oblanceolate and oblong 2 to 12 inches long. Flowers are yellow, densely arranged along a terminal club-like spike.

FLOWERING PERIOD: Late June to September.

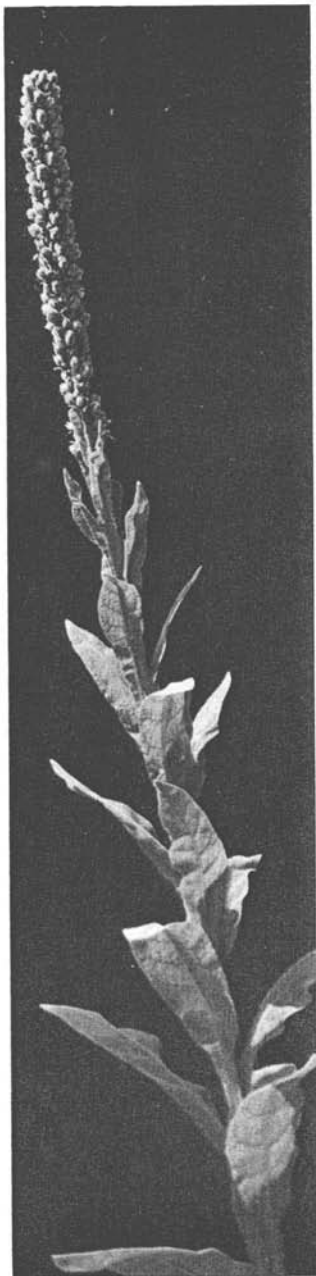
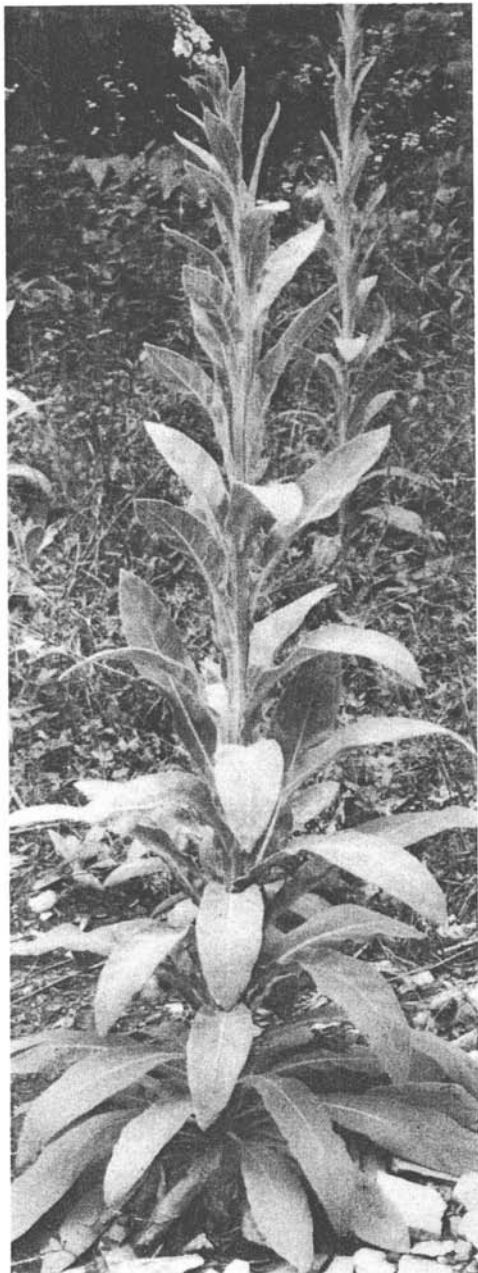
HABITAT: Fields, rocky or gravelly banks, waste lands, roadsides, embankments, pastures, and meadows.

HARVEST: Leaves, and flowers, when fully open.

USES: The leaves and flowers are classed as astringent, antitussive, respiratory sedative, antifungal, and anodyne. A tea made from the leaves is used in Appalachia for colds. The Greeks and Romans dipped dried stalks in wax and used them as candles. The Spanish people of New Mexico smoked the dried leaves, wrapped in corn husks, as a treatment for asthma.

VERBASCUM THAPSUS L.

(SCROPHULARIACEAE)



***VERBENA HASTATA* L.**

(VERBENACEAE)

COMMON NAMES: Blue vervain, blue verbena, ironweed, simpler's joy, verbain, wild hyssop.

DESCRIPTION: A perennial that grows to 4 feet in height, branched above. Leaves are serrated and 3-lobed with 2 sharp lobes arising from the base. Produces blue or blue-violet flowers on numerous narrow terminal spikes.

FLOWERING PERIOD: July to September.

HABITAT: Swales, damp thickets, shores, moist fields, meadows, and waste areas.

HARVEST: Herb and root.

USES: This herb reportedly has been used as an astringent, antipyretic, vulnerary, antirheumatic, tonic, and expectorant.

VERBENA HASTATA L.

(VERBENACEAE)



***VERONICASTRUM VIRGINICUM* (L.) FARW.**

(SCROPHULARIACEAE)

COMMON NAMES: Culver's physic, Beaumont root, black-root, bowman's root, culver's root, physic root, tall speedwell, whorlywort.

DESCRIPTION: An erect, unbranched, smooth perennial that grows to 7 feet in height. Leaves are narrowly lanceolate and in whorls of 3 to 9 around the stem joints. Flowers are white to bluish, and crowded in several dense spikes on top of plant.

FLOWERING PERIOD: June to September.

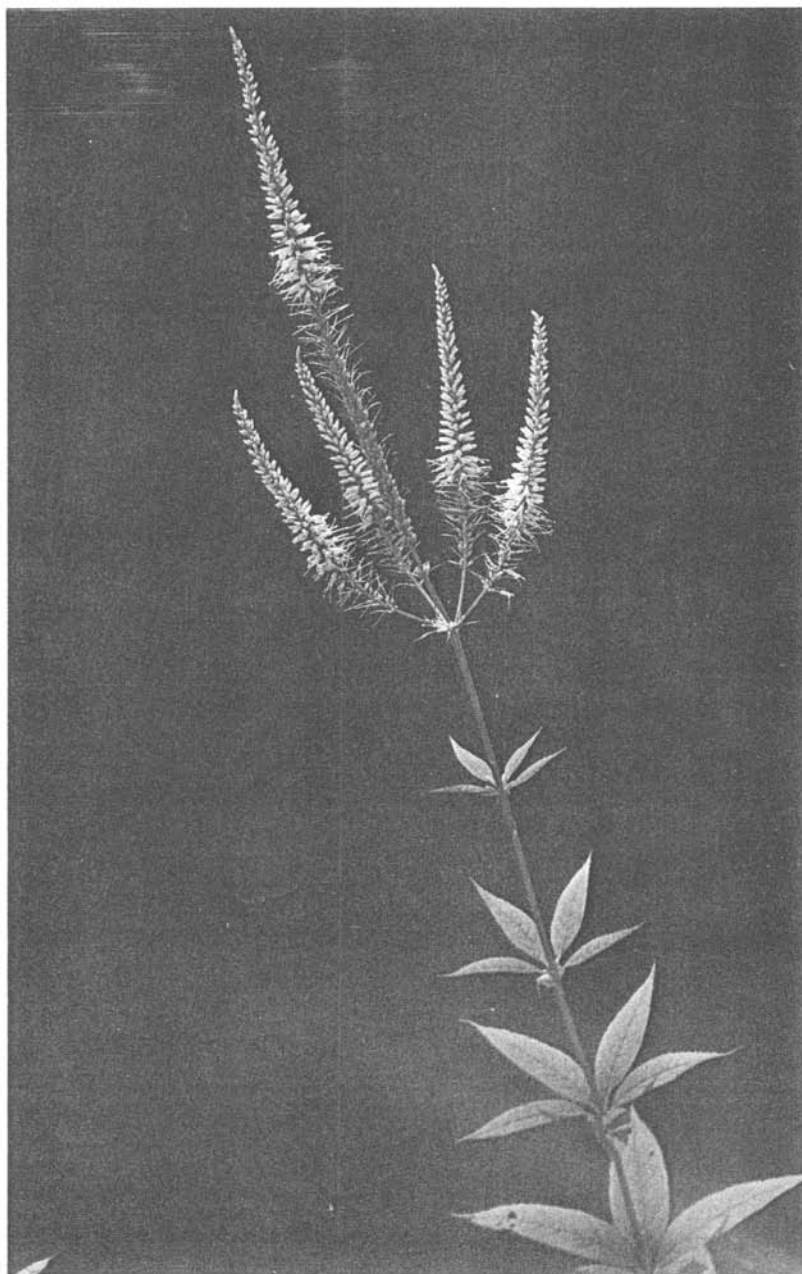
HABITAT: Rich woods, thickets, moist meadows, and prairies.

HARVEST: Rhizomes and roots.

USES: The rhizome is reputed to be a laxative, emetic, cholagogue, and tonic.

VERONICASTRUM VIRGINICUM (L.) FARW.

(SCROPHULARIACEAE)



VIBURNUM NUDUM L.

(CAPRIFOLIACEAE)

COMMON NAMES: Possumhaw viburnum, larger withe-rod, possumhaw, shawnee haw, shonny haw, swamp haw, white rod.

DESCRIPTION: A perennial shrub that grows to 20 feet in height. Leaves are up to 5 inches long, varying from elliptic to ovate, with acute to rounded tops. Produces a spreading white or occasionally pink flower, and bitter berries in drupes.

FLOWERING PERIOD: May to early July.

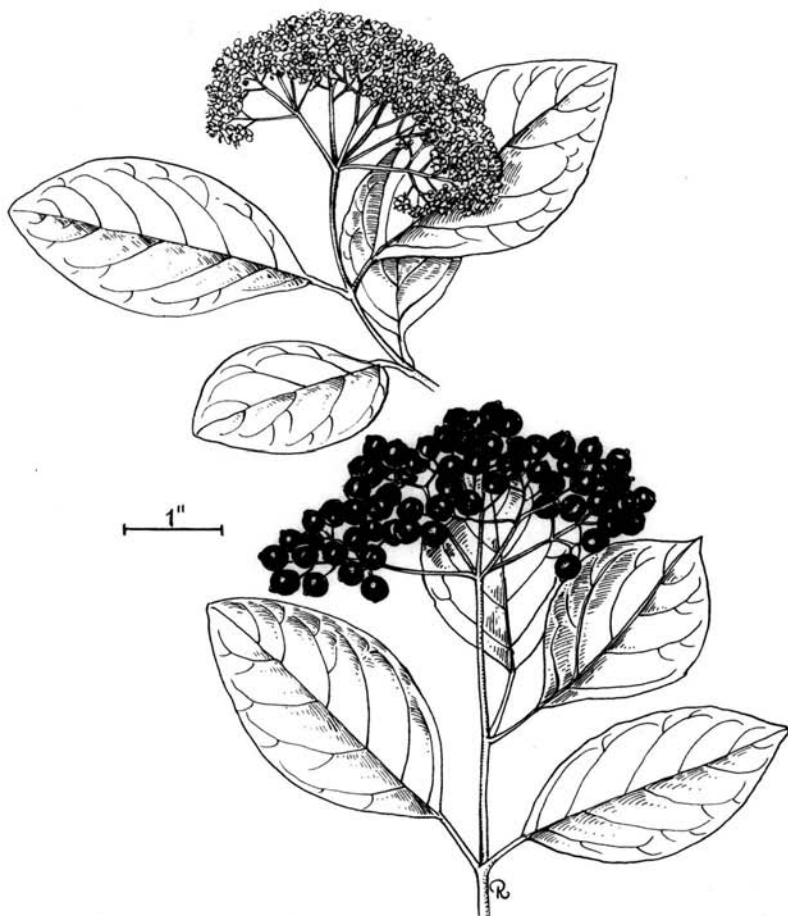
HABITAT: Moist and open woods, wooded swamps, wet pinelands, and bogs.

HARVEST: Bark of root or stem.

USES: The bark is a uterine sedative, diuretic, antispasmodic, and tonic.

VIBURNUM NUDUM L.

(CAPRIFOLIACEAE)



VIBURNUM PRUNIFOLIUM L.

(CAPRIFOLIACEAE)

COMMON NAMES: Black haw, blackhaw viburnum, cramp bark, sheepberry, shonny, sloe, sloe-leaved viburnum, stag-bush, sweethaw.

DESCRIPTION: A perennial shrub or small tree, 10 to 20 feet in height, with spreading branches. The dull-colored leaves are broadly ovate, opposite, and petioled, with finely serrated margins. Produces white flowers and dullish black oval fruit.

FLOWERING PERIOD: April to May.

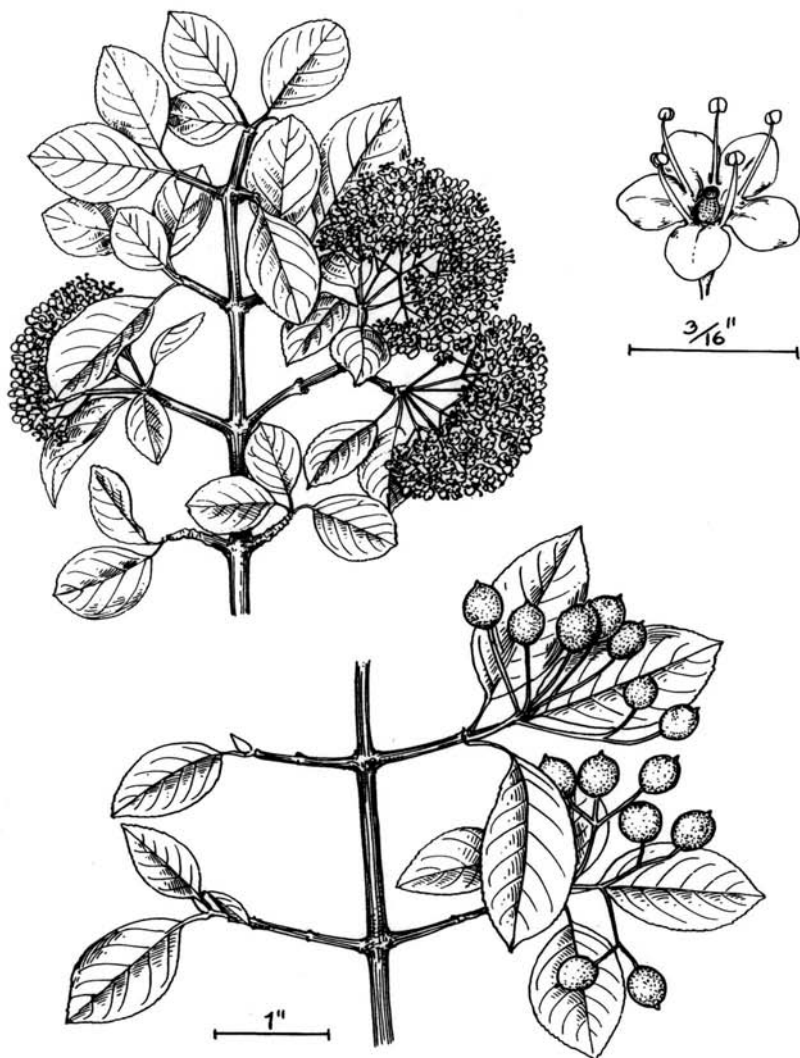
HABITAT: Thickets, borders of woods, and shores.

HARVEST: Bark of root or stem in the fall.

USES: This plant has the same qualities as *V. nudum*. In Appalachia, a root tea is used as a tonic.

VIBURNUM PRUNIFOLIUM L.

(CAPRIFOLIACEAE)



XANTHORHIZA SIMPLICISSIMA MARSH.

(RANUNCULACEAE)

COMMON NAMES: Yellow root, shrub yellowroot.

DESCRIPTION: A perennial low shrub that grows to 1 1/2 feet in height, with bright yellow wood. It bears a cluster of compound leaves, each with 5 lanceolate to broadly ovate, toothed, incised, or parted leaflets. Produces small brown-purple flowers on thin spikes.

FLOWERING PERIOD: April to May.

HABITAT: Damp woods, thickets, and stream banks.

HARVEST: Roots in fall.

USES: The roots are reputed to be valuable for making a bitter tonic and as a treatment for dyspepsia.

XANTHORHIZA SIMPLICISSIMA MARSH.

(RANUNCULACEAE)



XANTHOXYLUM AMERICANUM MILL.

(RUTACEAE)

COMMON NAMES: Pricklyash, American pricklyash, common pricklyash, northern pricklyash, pellitory bark, toothache bush, toothache tree, yellow wood.

DESCRIPTION: A shrub or small tree 5 to 10 feet in height. Leaves are alternate and compound, with 5 to 11 leaflets. Stems and petioles are often prickly. Flowers are greenish-white, small, and inconspicuous. Fruit is a reddish, globular to elliptic aromatic capsule.

FLOWERING PERIOD: April to May.

HABITAT: Rich woods and river banks.

HARVEST: Bark of stem in spring and fall, and fruit when ripe.

USES: Preparations made from the bark of this tree are reportedly used as a sudorific or diaphoretic, tonic, and antispasmodic. The fruit has some flavoring qualities also.

***XANTHOXYLUM AMERICANUM* MILL.**

(RUTACEAE)



***XANTHOXYLUM CLAVA-HERCULIS* L.**

(RUTACEAE)

COMMON NAMES: Hercules'-club prickly ash, Herculesclub, pepper wood, pricklyash, shrubby pricklyash, southern pricklyash, toothache tree, wild orange.

DESCRIPTION: A shrub or small tree 5 to 10 feet in height. Leaves are alternate, compound with 5 to 11 leaflets. Stems and petioles are often prickly. Flowers are greenish-white, small, and inconspicuous. Fruit is a reddish, globular to elliptic aromatic capsule, with sharp prickles.

FLOWERING PERIOD: April to May.

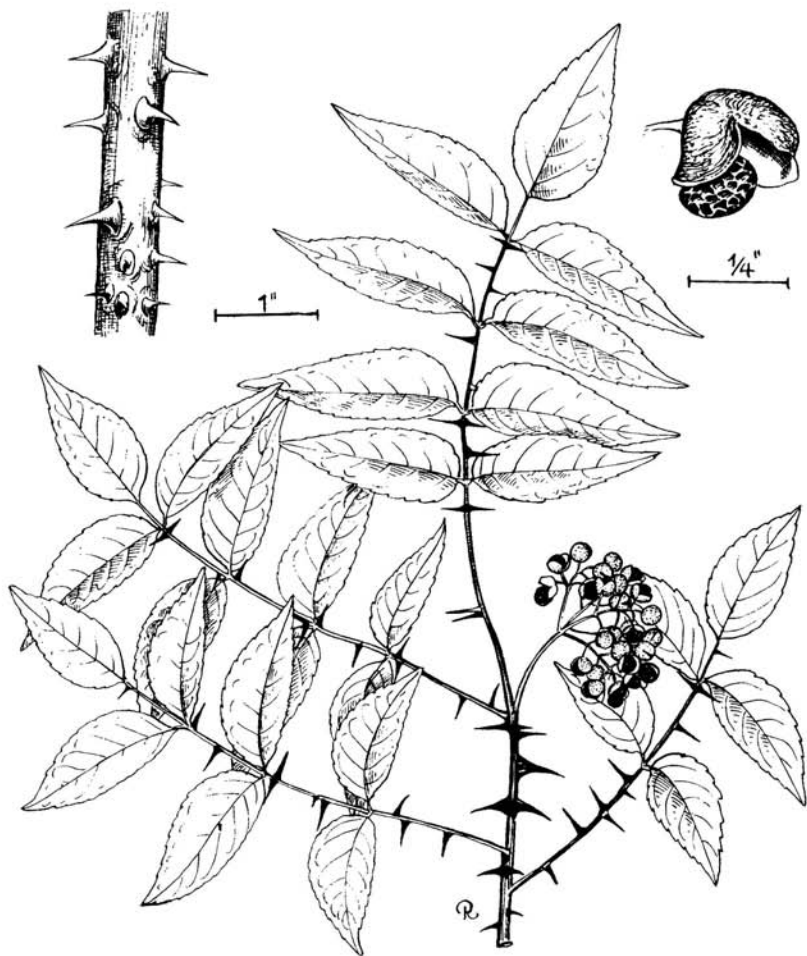
HABITAT: Sand hills, dry woods, and thickets.

HARVEST: Bark collected in spring and fall when ripe.

USES: This plant has been used as a sudorific and diaphoretic.

XANTHOXYLUM CLAVA-HERCULIS L.

(RUTACEAE)



INDEX OF COMMON PLANT NAMES

Aaron's rod	264	American spindle tree	116
Adam-and-Eve root	48	American storax	162
Adam's flannel	264	American sweetgum	162
Adder's mouth	242	American tormentil	134
Ague grass	40	American tree	260
Ague horn	40	American twinleaf	146
Agueroot	40	American valerian	106
Ague tree	228	American vegetable tallow	180
Ague-weed	118	American vegetable wax	180
Alder	42	American walnut	150
Aletris root	40	American wormroot	240
Alexanders	46	American wormseed	86
Allegheny foam flower	250	American white ash	124
Allspice bush	160	American white hellebore	262
Aloe	40	American white pine	194
Aloeroot	40	Amyroot	52
Alum bloom	134	Angelica	46
Alumroot	134	Apple of Peru	108
Amaranth	44	Apple of Sodom	236
Ambrosia	86	Apple Peru	108
Ambrosia-like chenopodium	86	Apricot vine	188
American alder	42	Archangel	46
American angelica	46	Aromatic wintergreen	128
American ash	124	Arrow-wood	116
American barberry	74	Arsmart	204
American bee balm	178	Ash	124
American bugbane	94	Asthma weed	164
American deal pine	194	Astringent root	134
American falsehellebore	262	Atlantic yam	110
American falsepennyroyal	138	Aunt Jerichos	46
American fringe tree	92		
American ginseng	186	Backache root	40
American hellebore	262	Ball nettle	236
American hemp	52	Balm buds	206
American ipecac	50	Balm of Gilead	206
American kind	134	Balmoney	84
American maidenhair	36	Balsam poplar	206
American mountainash	238	Barberry	74
American nightshade	190	Bath flower	256
American pennyroyal	138	Bathwort	256
American pricklyash	276	Battle weed	96
American rowan tree	238	Bayberry	180
American sarsaparilla	54, 56	Bayberry tallow	180
American service tree	238	Bayberry wax tree	180
American skullcap	232	Bearcorn	262
American spikenard	54, 56	Bearing myrica	180

Beaumont root	268	Blue verbena	266
Bedstraw	126	Blue vervain	266
Bee balm	178	Bog onion	62
Beewort	32	Boneset	118
Beggar's buttons	58	Bowman's root	52, 268
Bellyache root	46	Boxberry	128
Benjamin bush	160	Brambleberry	216
Bergamot	178	Brandy mint	172
Berried tea	128	Broad leaf collinsonia	100
Bethroot	256	Broadleaved clover	252
Bettroot	256	Broad-leaved sarabacca	66
Bigbane	262	Brown mint	174
Bilsted	162	Brownwort	208, 230
Biltmore ash	124	Buckeye tree	38
Biltmore white ash	124	Bugbane	94, 96
Birthroot	256	Bugleweed	166
Birthwort	64, 256	Buglewort	166
Biting knotweed	204	Bull nettle	236
Biting parscaria	204	Bullock's lungwort	264
Biting tongue	204	Bullwort	230
Bitter ash	116	Bumblebee root	256
Bitter buttons	246	Burdock	58, 60
Bitter dock	218	Burning bush	116
Bitter dogbane	50	Bursting heart	116
Bitter herb	84	Butterfly milkweed	70
Bitter pepper root	32	Butterfly weed	70
Bitter-root	50, 52	Butternut	148
Bitter thistle	98	Butterweed	234
Bitterweed	98	Button snakeroot	114
Bitter wintergreen	90	Button snakeroot eryngo	114
Black alder	42	Cabinet cherry	210
Blackberry	216	Calamus	32
Black birch	76	Canada hemlock	258
Black cherry	210	Canada moonseed	170
Black choke	210	Canada root	70
Black cohosh	96	Canada snakeroot	66
Black haw	272	Canada wild ginger	66
Blackhaw viburnum	272	Canadian collinsonia	100
Black Indian hemp	50	Canadian hemp	52
Black maiden's hair fern	34	Canadian sweetgale	102
Black psyllium	196	Canadian tea	128
Blackroot	268	Cancer jalap	190
Black Sampson	112	Cancerroot	190
Black snakeroot	66, 96	Candle alder	42
Black snakeweed	66	Candleberry	180
Black walnut	150	Candleberry myrtle	180
Black willow	222	Candlewick	264
Bladder pod	164	Cane ash	124
Bladder-podded lobelia	164	Carduus	98
Blanket leaf	264	Careless	44
Blazing star	40, 82	Carolina cedar	154
Bleeding heart	116	Carolina horse nettle	236
Blessed carduus	98	Carolina jessamine	130
Blessed thistle	98	Carolina pink	240
Blond psyllium	190	Carolina pinkroot	240
Bloodroot	226	Carolina poplar	206
Bloodwort	30	Carpenter's grass	30
Blueberry	96	Carpenter's herb	166, 208
Blueberry cohosh	78	Carpenter's square	230
Blueberry root	78	Carpenterweed	208
Blue cohosh	78	Catchfly	50
Blue curls	208	Catchweed	126
Blue ginseng	78, 96	Catchweed bedstraw	126
Blue pimpernel	232	Catfoot	66
Blue skullcap	232	Catgut	248
Bluestem Joe-pyeweed	120		

Catmint	184	Common pipsissewa	90
Catnep	184	Common pokeberry	190
Catnip	184	Common pricklyash	276
Catrup	184	Common red clover	252
Catwort	184	Common sassafras	228
Cedar	154	Common selfheal	208
Cedar apple	154	Common silkweed	68
Checkerberry	128, 176	Common smartweed	204
Checkerberry wintergreen	128	Common spicebush	160
Cheese rennet herb	126	Common sumac	214
Chequerberry	128	Common swamp hellebore	262
Cherry birch	76	Common tansy	246
Chickweed	242	Common white oak	212
Chicus	126	Common witch hazel	136
Chidkerberry	128	Common yarrow	30
Chigger flower	70	Compass plant	156
China root	110	Conquer-John	202
Chocolate flower	134	Coolwort	250
Choctaw root	52	Coonroot	226
Choke cherry	210	Coralroot	104
Chongras	190	Cordate rattle-top	96
Cinnamon wood	228	Corn snakeroot	114
Citronella	100	Cottonweed	68
Citronella horse balm	100	Cottonwood	206
Clabbergrass	126	Coughweed	234
Cleaver grass	252	Cow clover	252
Cleavers	126	Cow's lungwort	264
Cleaver's herb	126	Cramp bark	272
Cleaves	126	Cranesbill	134
Cleverwort	126	Cranesbill geranium	134
Clink	128	Crawleyroot	104
Clotbur	58, 60	Creep-chequer berry	176
Clover bloom	72	Creeping wintergreen	128
Coakum	190	Crosswort	118
Coalwort	250	Crowberry	190
Cocashweed	234	Crow corn	40
Cock-up-hat	244	Crowfoot	134
Cocum	190	Cuckoo button	60
Cocyshat	244	Cuckoo plant	62
Cohosh	96	Culver's physic	268
Cohosh bugbane	96	Culver's root	268
Cokan	190	Curled dock	218
Colicroot	40, 50, 66, 110	Curly dock	218
Coltsfoot	66	Cursed thistle	98
Coltsfoot's snakeroot	66		
Columbine-leaved leontice	96	Daffydown-dilly	256
Combflower	112	Dead nettle	46
Common alder	42	Deer berry	128, 176
Common angelica	46	Deerstongue	254
Common barberry	74	Devil's apple	198
Common boneset	118	Devil's bit	40, 82
Common burdock	60	Devil's-bite	262
Common chickweed	242	Devil's bones	110
Common clover	252	Devil's shoe strings	248
Common crane's bill	134	Devil's trumpet	108
Common dog's bane	50	Dewberry	128, 216
Common hoarhound	168	Dioscorea	110
Common horehound	168	Dishcloth	256
Common horsechestnut	38	Dock	218
Common juniper	152	Dogbane	50
Common mayapple	198	Dogberry	238
Common milkweed	68	Dog daisy	30
Common mint	174	Dogtongue	254
Common moonseed	170	Doorweed	204
Common motherwort	158	Double tansy	246
Common mullein	264	Dove's foot	134

Dragon grape	74	Fluxroot	70
Dragonhead	208	Fly trap	50
Dragon root	62	Foam flower	250
Dragon's claws	104	Fork-leaf white oak	212
Dragon's tongue	88	Fragrant wintergreen	90
Dragon turnip	62	French psyllium	196
Drug sweetflag	32	Fringe tree	92
Duck's foot	198		
Dutchmanspipe	64	Gagroot	164
Dwarf groundnut	186	Garantogen	186
Dwarf juniper	152	Garden mint	174
Dwarf solomon's seal	202	Garden patience	218
Dyer's baptisia	72	Garden sage	224
		Garentoquere	186
Eastern black walnut	150	Garget	190
Eastern hemlock	258	Gelsemium	130
Eastern redcedar	154	Gem fruit	250
Eastern wahoo	116	Gensang	186
Eastern white pine	194	Georgia pine	192
Elm	260	Ginger plant	246
Emetic herb	164	Ginseng	186
Emetic weed	164	Glabrous hemp	52
English cost	246	Goat's rue	248
Eryngo	114	Golden buttons	246
European barberry	74	Golden groundsel	234
European white willow	220	Golden ragwort	234
Evening trumpet flower	130	Goldenroot	144
Evergreen	154	Goldenseal	144
Eyebalm	144	Golden senecio	234
Eyebright	144, 164	Goose foot	86
Eyeroot	144	Goosefoot maple	28
		Goosegrass	126
Fairywand	82	Goose's hare	126
False bitterwort	250	Gordoloba	30
False cohosh	96	Gorst	152
False colt's foot	66	Grantogen	186
False hellebore	262	Gravelroot	120
False indigo	72	Graybeard tree	92
False jasmine	130	Gray elm	260
False jessamine	130	Great angelica	46
False miterwort	250	Great burdock	58
False sarsaparilla	54	Great mullein	264
False unicorn	82	Great pilewort	230
False unicorn root	40	Green alder	42
False valerian	234	Green amaranth	44
Fat pine	192	Green arrow	30
Feltwort	264	Green hellebore	262
Female regulator	234	Green opened amaranth	44
Fern bush	102	Green-stemmed joe-pyeweed	120
Ferngale	102	Ground holly	90, 128
Ferngate	102	Ground ivy	128
Feverbush	160	Ground juniper	152
Feverweed	114	Ground lemon	198
Feverwort	118	Ground lily	256
Field balm	184	Ground raspberry	144
Field lobelia	164	Groundsel	234
Figwort	230	Ground squirrel pea	146
Filnut	148	Grouse berry	128
Fishmouth	84	Grub root	82
Five fingers	186	Guild tree	74
Flagroot	32	Gypsyweed	166
Flannel leaf	264	Gypsywort	166
Flannel mullein	264		
Flannel plant	264	Hackmatack	152, 206
Fleasaid	196	Hair fern	36
Flowering ash	92	Hairy solomon's seal	202

Hamamelis	136	Indian paint	144
Hard hack	100	Indian pink	240
Hard pine	192	Indian physic	52
Hare's beard	264	Indian plant	144
Hazel alder	42	Indian plantago	196
Heal-all	100, 208, 230	Indian poke	262
Heart-leaved rattle-top	96	Indian roe	56
Heart-leaved snakeroot	96	Indian sage	118
Heart liverleaf	140	Indian shamrock	256
Heart pine	192	Indian's plume	178
Heart snakeroot	66	Indian strawberry	122
Hedgehog	112	Indian tobacco	164, 264
Hedge taper	264	Indian tobacco lobelia	164
Helmet flower	232	Indian turmeric	144
Helmet pod	146	Indian turnip	62
Helonias	82	Indigo broom	72
Hemlock	258	Indigo weed	72
Hemlock fir	258	Inkberry	190
Hemlock spruce	258	Ironweed	266
Hemlock spruce pine	258	Itchweed	262
Hemp dogbane	52	Ivory plum	128
Hempweed	120		
Hepatica	140	Jack-in-the-pulpit	62
Hercules club	278	Jacob's staff	264
Hercules' club prickly ash	278	Jalap	190
Hind heal	246	Jamestown weed	108
High angelica	46	Jasmine	130
Hillberry	128	Jaundice barberry	74
Hive vine	176	Jaundice berry	74
Hoarhound	168	Jaundice root	144
Hoary pea	248	Jerseytea ceanothus	80
Hog apple	198	Jerusalem oak seed	86
Holme's weed	230	Jerusalem tea	86
Holy thistle	98	Jesuit tea	86
Honey bloom	50	Jimsonweed	108
Hooded willow herb	232	Jimsonweed datura	108
Hoodwort	232	Jinshard	186
Hookweed	208	Joepe	118
Horehound	166, 168	Joe-pyeweed	120
Horse balm	100	Jopiroot	120
Horsechestnut	38	Jopiweed	120
Horsefly weed	72	Juniper	152, 154
Horsemint	178	Juniper bush	152
Horse nettle	236	Jupiter's staff	264
Horse savin	152		
Horseweed	100	Kernelwort	230
Houndsbane	168	Kidneyroot	120
Huskwood	40	King-of-the-meadow	120
Huskwort	40	King's cure	90
Hybrid amaranthus	44	Knobgrass	100
Hydrastis	144	Knob root	100
		Knotted root	230
Ice leaf	264		
Illscented trillium	256	Lady's foxglove	264
Illscented wakerobin	256	Lady's hair	34
Indian apple	198	Lady's mint	174
Indian arrowwood	116	Lady-slipper	106
Indian balm	256	Lakeweed	204
Indian dye	144	Lamb mint	172
Indian elm	260	Lamb's quarters	256
Indian ginger	66	Lammint	172
Indian gravelroot	120	Lappa	58
Indian hemp	50, 52	Larger withe-rod	270
Indian Jack-in-the-pulpit	62	Lemonnut	148
Indian mozemize	238	Life-of-man	56, 238
Indian nosy	70	Liferoot	234

Lion's ear	158	Mountain berry	128
Lion's tail	158	Mountain black cherry	210
Lion's tart	158	Mountain bugbane	94
Liquid storax	162	Mountain flax	200
Liverleaf	140	Mountain mahogany	76
Liverwort	140	Mountain maple	28
Lobelia	164	Mountain maple bush	28
Long boughs	136	Mountain mint	178
Longleaf pine	192	Mountain rattle top	94
Longleaf yellow pine	192	Mountain sumac	238
Longstraw pine	192	Mountain tea	128
Lords and ladies	62	Mountain teaberry	128
Love-in-winter	90	Mullein	264
Love lies bleeding	44	Mullein dock	264
Low balm	178	Murrian grass	230
Low maple	28	Myrtle	180
		Myrtle flag	32
Mad apple	108		
Mad dog	232	Narrow dock	218
Mad-dog skullcap	232	Nasturtium	182
Mad-dog weed	232	Nerve root	106
Madweed	232	Nettle potato	244
Maidenhair	34, 36	New England pine	194
Maidenhair fern	36	New Jersey tea	80
Mandrake	198	Niggerweed	120
Man's health	186	Nightshade	236
Mantroot	186	Ninsin	186
Maple vine	170	Nip	184
Marcony	244	Noble liverwort	140
Marrhue	168	Noble pine	90
Marrub	168	Northern pine	194
Marrubium	168	Northern pricklyash	276
Marsh gentian	132	Northern white pine	194
Marsh milkweed	120	Nosebleed	30, 256
Marshpepper smartweed	204	Notch-leaved alder	42
Maryland figwort	230		
Maryland pinkroot	240	Obelia	164
Marvel	168	Ohio curcuma	144
Masse-misse	238	Oilnut	148
Masterwort	46	Old maid's-nightcap	134
Masterwort aromatic	46	Old man's beard	92
Mayapple	198	Old man's flannel	264
Maypop	188	Old man's pepper	30
Maypop herb	188	Old man's root	56
Maypop passionflower	188	One berry	176
Meadow clover	252	Orange apocynum	70
Meadow fern	102	Orange blossom	256
Meadow-rue leontice	96	Orange milkweed	70
Meadow sage	224	Orange root	70, 144
Meadow turnip	62	Orange swallow-wort	70
Mealy starwort	40	Oswego beebalm	178
Memory root	62	Oswego tea	178
Mexican tea	86	Our-lady's-thistle	98
Milfoil	30	Ox balm	100
Milk ipecac	50		
Milksweet	126	Papoose root	78, 96
Milkweed	50, 52, 68	Parsley fern	246
Milkwort	200	Partridgeberry	128, 176
Missy-massy	238	Passionflower	188
Missey-mossey	238	Passion vine	188
Mock pennyroyal	138	Paul's betony	166
Moonseed	170	Pauson	226
Moose elm	260	Pegwood	116
Motherwort	120, 158	Pelican flower	64
Mountain ash	238	Pellitory bark	276
Mountain balm	178	Pencil cedar	154

Pennsylvania sumach	214	Queen-of-the-meadow	120
Pennyroyal	138	Queensdelight	244
Pennyroyal of America	138	Queen's delight stillingia	244
Pepperidge bush	74	Queen's root	244
Peppermint	172	Quick beam	238
Pepper plant	204	Quillwort	120
Pepper turnip	62		
Pepper wood	278	Rabbit's foot	54
Pepsissewa	88	Rabbit pea	248
Perennial wormgrass	240	Racoonberry	198
Peter's staff	264	Ragwort	234
Petty morrel	56	Raspberry	216
Physic root	268	Ratsbane	88
Pigeonberry	128, 190	Rattle bush	72
Pigeon weed	56	Rattle-root	96
Pig weed	44	Rattlesnake flag	114
Pilewort	230	Rattlesnake master	114
Pine root	32	Rattlesnake root	82, 96, 200, 256
Pine tulip	90	Rattlesnake weed	114
Pinkroot	240	Rattletop	96
Pinkroot spigelia	240	Rattleweed	72, 96
Pipsissewa	90	Red alder	42
Pistachio	136	Red balm	178
Pitch pine	192	Red Benjamin	256
Plantago	196	Redberry	186
Plantain	196	Red-berry tea	128
Pleurisy root	70	Red cedar	154
Pocan	190	Red clover	252
Pocan bush	190	Red cockscomb	44
Podophyllum	198	Red elm	260
Poison ash	92	Redgum	162
Poke	190	Red Indian paint	226
Pokeberry	190	Red-ink plant	190
Pokeroot	190, 262	Red juniper	154
Pokeweed	190	Red knees	204
Poor robin	126	Red pollom	128
Poplar balsam	206	Red puccoon	226
Possumhaw	270	Red root	80, 226
Possumhaw viburnum	270	Red sassafrass	228
Prickly lettuce	156	Red savin	154
Pricklyash	276, 278	Red shanks	204
Priest's pintle	62	Red sharks	204
Prince's feather	44	Red sunflower	112
Prince's pine	90	Red trillium	256
Princess pine	90	Red wakerobin	256
Prostrate juniper	152	Red wood	190
Psyllium	196	Reed acorus	32
Psyllium seed	196	Rheumatism root	40, 88, 110, 146
Puccoon	226	Rheumatism weed	52, 90
Puccoon root	226	Rheumatism wood	50
Pudding grass	138	Ribgrass	196
Pukeweed	164	Ribwort	196
Purple archangel	166	Richweed	96, 100
Purple boneset	120	Ridge white oak	212
Purple clover	252	River birch	76
Purple coneflower	112	Rock elm	260
Purple echinacea	112	Rock fern	36
Purplestem angelica	46	Rose balm	178
Purple strawberry bush	116	Rosemary pine	192
Purple thoroughwort	120	Round tree	238
Purple trillium	256	Roundwood	238
Purple wakerobin	256	Roxberry	128
Pussy willow	222	Rubber root	70
Puttyroot	48	Rum cherry	210
Pyrole	90	Running box	176

Sage	224	Slender pigweed	44
Sage of Bethlehem	174	Slim amaranth	44
St. Benedict's thistle	98	Slippery elm	260
Salt-rheum weed	84	Sloe	272
Sampson's snakeroot	132	Sloe-leaved viburnum	272
Sand brier	236	Smaller burdock	60
Sang	186	Small golden slipper	106
Sangrel	64	Small-jack-in-the-pulpit	62
Sangrel-root	64	Small mocassin flower	106
Sanguinary	30	Smallseed white ash	124
Sap gum	162	Small solomonseal	202
Sarsaparil	54	Small spikenard	54
Sarsaparilla	54	Small spikeweed	54
Sarsaparilla root	54	Small yellow lady slipper	106
Sassafras	228	Smartweed	204
Satin flower	242	Smelling stick	228
Savin	154	Smooth alder	42
Savoyan	126	Smooth hydrangea	142
Saxifras	228	Smooth pigweed	44
Scarlet balm	178	Smooth sumac	214
Scarlet sage	224	Smooth snakehead	84
Scarlet strawberry	122	Snakebite	226
Scarlet sumac	214	Snakehead	84
Scented fern	246	Snakemouth	84
Scoke	190	Snakeroot	64, 240
Scotch mint	174	Snakeweed	64
Scotch spearmint	174	Snapping hazel	136
Scratchweed	126	Snapping hazel-nut	136
Scrofula plant	230	Snowdrop tree	92
Sealwort	202	Snowflowers	92
Self-heal	208	Soft deal-pine	194
Senecaroot	200	Soft elm	260
Seneca snakeroot	200	Soft pine	194
Seneca-snakeroot polygala	200	Soldier's woundwort	30
Senega root	200	Solomon's seal	202
Senega snakeroot	200	Sour dock	218
Seneca snakeroot	200	Southern bayberry	180
Serpentaria	64	Southern bayberry	180
Serpentary root	64	Southern maidenhair	34
Sevenbark	142	Southern pine	192
Shameface	134	Southern pricklyash	278
Sharplobed liverleaf	140	Southern snakeroot	66
Sharplobe hepatica	140	Southern wax myrtle	180
Shavings	92	Southern witch-hazel	136
Shawnee haw	270	Southern yellow pine	192
Sheepberry	272	Sow berry	74
Shellflower	84	Spanish psyllium	196
Shepherd's club	264	Spanish tea	86
Shernoke	214	Spearmint	174
Shonny	272	Speckled alder	42
Shonny haw	270	Spiceberry	128, 160
Shotbush	54	Spice birch	76
Shrubby fern	102	Spicebush	160
Shrubby pricklyash	278	Spicy wintergreen	128
Shrubby-sweet fern	102	Spignet	54, 56
Shrub yellowroot	274	Spiked maple	28
Sickleweed	204, 208	Spikenard	54, 56
Sicklewort	208	Spindle tree	116
Sideflowering skullcap	232	Spleen amaranth	44
Silkweed	52, 68, 70	Spleen fern	102
Silky swallow-wort	68	Spleenwort bush	102
Silver leaf	244	Spleenwort fern	102
Simpler's joy	266	Spotted alder	136
Skewerwood	116	Spotted carduus	98
Skoke	190	Spotted cranesbill	134
Skullcap	232	Spotted geranium	134

Spotted pipsissewa	88	Sweet grass	32
Spotted thistle	98	Sweet gum	162
Spotted wintergreen	88	Sweet haw	272
Spreading dogbane	50	Sweet Joe-pyeweed	120
Spring cleavers	126	Sweet Myrtle	32
Spring wintergreen	128	Sweetroot	32, 54
Spruce pine	194, 258	Sweet rush	32
Square stalk	230	Sweet sedge	32
Squawberry	176	Sweet segg	32
Squaw flower	256	Sweet slumber	226
Squaw mint	138		
Squaw root	78, 96, 256	Tacamahac poplar	206
Squaw vine	176	Tackamahac	206
Squawweed	234	Tag alder	42
Stagbush	272	Tall boneset	120
Star bloom	240	Tallow shrub	180
Starchwort	62	Tall speedwell	268
Star grass	40	Tan-bark tree	258
Star leaf gum	162	Tanner's oak	212
Star root	82	Tansy	246
Starwort	40, 82, 242	Tartar root	186
Stave oak	212	Tawny elm	260
St. Benedict's thistle	98	Teaberry	128
Stickweed	86	Teagel	118
Stillingia	244	Tetterwort	226
Stink apple	108	Texas sarsaparilla	170
Stinking balm	138	Thick birthwort	64
Stinking Benjamin	256	Thickweed	138
Stinking Christopher	230	Thorn apple	108
Stinking weed	86	Thorough-stem	118
Stinkweed	108, 120	Thoroughwax	118
Stinkwort	108	Thoroughwort	118
Stitchwort	242	Thousand-leaf	30
Stone oak	212	Thousand-leaved clover	30
Stone root	100	Thousand-seal	30
Storax tree	162	Three-leaved nightshade	256
Stork bill	134	Three-leaved wintergreen	128
Stramonium	108	Thrice-leaved arum	62
Strawberry	122	Throughstem	118
Strawberry bush	116	Throwwort	158
Straw-colored gentian	132	Tickweed	138
Striped alder	136	Tobacco lobelia	164
Striped gentian	132	Tobacco wood	136
Styrax	162	Tongue grass	242
Sumac	214	Toothache bush	276
Summer cohosh	94	Toothache tree	276, 278
Swallow wort	70	Torchwort	264
Swamp alder	42	Tormentil	134
Swamp haw	270	Trailing gaultheria	128
Swamp hellebore	262	Tread-softly	236
Swamp squawweed	234	Trillium	256
Swamp turnip	62	True love	256
Swamp willow	222	True sage	224
Sweating plant	118	True snakehead	84
Sweating weed	118	True watercress	182
Sweet birch	76	True unicorn root	40
Sweet bugleweed	166	Trumpet weed	120
Sweet bush	102	Tuberous-rooted swallow-wort	70
Sweet cane	32	Tuber root	70
Sweet cinnamon	32	Tumeric	144
Sweet clover	252	Turkey grass	126
Sweet elm	260	Turkey pea	248
Sweet fern	36, 102	Turmeric	226
Sweet ferry	102	Turpentine pine	192
Sweet flag	32	Turtle bloom	84
Sweet flagroot	32	Turtlehead	84

Twinberry	176	White rod	270
Twinleaf	146	White root	70
Two-eyed berry	176	White sassafras	228
Two-eyed chequer berry	176	White tube stargrass	40
		White turtlehead	84
Umbrella plant	198	White walnut	148
Uncum	234	White willow	220
Unicorn plant	40	Wholywort	268
Unicorn root	40	Wild allspice	160
Unicorn's horns	40	Wild arsenic	88
Unstilla	240	Wild ashe	238
Upland sumach	214	Wild beet	44
		Wild black cherry	210
Vanilla leaf	254	Wild cherry	210
Vanilla plant	254	Wild cotton	52, 68
Vanilla trilisa	254	Wild cranesbill	134
Vegetable antimony	118	Wild geranium	134
Vegetable calomel	198	Wild ginger	66
Vegetable mercury	198	Wild hydrangea	142
Velvet dock	264	Wild hyssop	266
Velvet plant	264	Wild indigo	72
Venus hair fern	34	Wild ipecac	50
Verbain	266	Wild Isaac	118
Vinegar tree	214	Wild jalap	198
Vine maple	170	Wild jasmine	130
Virginia bugleweed	166	Wild lemon	198
Virginia cedar	154	Wild lettuce	156
Virginia poke	190	Wild licorice	54
Virginia prune bark	210	Wild mandrake	198
Virginian sarsaparilla	54	Wild opium	156
Virginia snakeroot	64	Wild orange	278
Virginia strawberry	122	Wild sage	118
Virginia tephrosia	248	Wild snowball	80
Vomitwort	164	Wild sarsaparilla	54
		Wild strawberry	122
Wahoo	116	Wild tobacco	164
Wake robin	62, 256	Wild turmeric	144
Walnut	150	Wild turnip	62
Wandering milkweed	50	Wild valerian	234
Water bugle	166	Wild wormseed	86
Watercress	182	Wild yam	110
Water eryngo	114	Willow	222
Water horehound	166	Wind root	70
Water pepper	204	Wind weed	70
Water smartweed	204	Wine tree	70, 238
Wax berry	180	Winterberry	128
Wax cluster	128	Winterbloom	136
Wax flower	90	Winter clover	176
Wax myrtle	180	Wintergreen	88, 90, 128
Waxweed	234	Witch Hazel	136
Weeping spruce	258	Witchwood	238
Western wallflower	50	Wolf foot	166
Weymouth pine	194	Wood betony	166
Whicky cherry	210	Woodbine	130
White ash	124	Wood lily	256
White bird's eye	242	Wood sour	74
White colicroot	40	Wood tobacco	136
White fringe	92	Wormgrass	240
White fringe tree	92	Wormseed	86
White hazel	136	Wormseed goosefoot	86
White hellebore	262		
White hoarhound	168	Yam	110
White horehound	168	Yarrow	30
White oak	212	Yaw root	244
White pine	194	Yellowberry	198
White puccoon	226	Yellow broom	72

Yellow dock	218	Yellow parilla	170
Yellow eye-wright	144	Yellow pine	192
Yellow ginseng	78, 96	Yellow puccoon	144
Yellow Indian shoe	106	Yellow sarsaparilla	170
Yellow jasmine root	130	Yellowroot	74, 144, 146, 274
Yellow jessamine	130	Yellow wild indigo	72
Yellow lady's slipper	106	Yellow wood	276
Yellow moccasin	106	Yellowwort	144
Yellow paintroot	144		

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